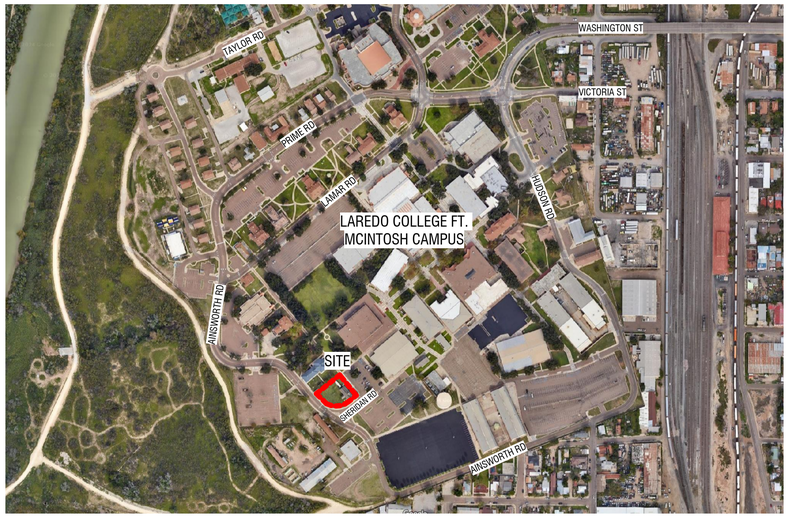
LOCATION MAP

NORTH



Veterans Services Center

Laredo College
Sheridan Rd, Laredo, TX 78040

CONSTRUCTION DOCUMENTS

BOARD MEMBERS

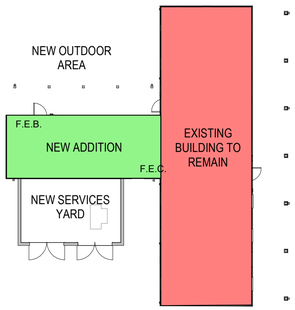
Lupita Zepeda, Board President
Jorge "JD" Delgado, Board Vice President
Jackie Leven-Ramos, Board Secretary
Erica Benavides Garcia, Trustee
Cindy Liendo, Trustee
Mercurio Martinez, Jr., Trustee
Esteban Rangel, Trustee
Karina "Kari" Elizondo, Trustee
Ernestina "Tita" C. Vela, Trustee
Dr. Maria Minerva "Minita" Ramirez, Laredo College President

PROJECT INFORMATION

PROJECT DESCRIPTION:

- The project consists of renovating an existing guard house building at the Laredo College Fort McIntosh Campus. The building will be converted to a Veterans Services Center. The project includes demolishing an addition to the rear of the building and reconstructing a similar structure in its place. The new building will contain offices, a multipurpose area and computer lab, a break room, restroom, and associated support spaces.

KEYPLAN



APPLICABLE BUILDING CODES:

2021 INTERNATIONAL BUILDING CODE
2021 INTERNATIONAL MECHANICAL CODE
2021 INTERNATIONAL RESIDENTIAL CODE
2021 INTERNATIONAL PROPERTY MAINTENANCE CODE
2021 INTERNATIONAL ENERGY CONSERVATION CODE
2021 INTERNATIONAL EXISTING BUILDING CODE
2012 TEXAS ACCESSIBILITY STANDARDS
2020 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION
2021 INTERNATIONAL FIRE CODE
2021 INTERNATIONAL SWIMMING POOL & SPA CODE
2021 INTERNATIONAL PLUMBING ELECTRICAL CODE
2021 INTERNATIONAL FUEL GAS CODE
2021 INTERNATIONAL PRIVATE SEWAGE DISPOSAL CODE

SHEET LIST - GENERAL

SHEET NUMBER	SHEET NAME
G-000	TITLE SHEET
G-001	DRAWING INDEX & CONVENTIONS
G-002	ACCESSIBILITY STANDARDS
G-003	ACCESSIBILITY STANDARDS
G-004	ACCESSIBILITY STANDARDS
G-005	ACCESSIBILITY STANDARDS
G-006	TAS FLOOR PLAN

Grand total: 7

SHEET LIST - LIFE SAFETY

SHEET NUMBER	SHEET NAME
LS-1.0	LIFE SAFETY PLAN

Grand total: 1

SHEET LIST - CIVIL

SHEET NUMBER	SHEET NAME
C-1	GENERAL NOTES & CONTROL POINTS PLAN
C-2	EXISTING SITE PLAN
C-3	DEMOLITION PLAN
C-4	PROPOSED SITE & DIMENSIONAL PLAN
C-5	GRADING PLAN
C-6	UTILITIES PLAN
C-7	STORM WATER POLLUTION PREVENTION PLAN
C-8	GENERAL DETAILS

Grand total: 8

SHEET LIST - ARCHITECTURAL

SHEET NUMBER	SHEET NAME
AEX-100	EXISTING SITE PLAN
AEX-101	EXISTING FLOOR PLANS
AEX-102	EXISTING ELEVATIONS
AEX-103	EXISTING CONDITIONS EXTERIOR PHOTOS
AEX-104	EXISTING CONDITIONS INTERIOR PHOTOS
AEX-105	EXISTING SECTIONS
AD-101	SITE PLAN DEMOLITION
AD-102	DEMOLITION FLOOR PLAN, ROOF & RCP
AD-103	DEMOLITION ROOF & ELEVATIONS
A-001	SITE PLAN
A-002	ENLARGED SITE PLANS
A-003	SITE DETAILS
A-005	LANDSCAPE PLAN
A-101	1st FLOOR PLAN
A-103	1st FLOOR EQUIPMENT & SIGNS PLAN
A-110	ROOF PLAN

SHEET LIST - ARCHITECTURAL

SHEET NUMBER	SHEET NAME
A-120	1st FLOOR RCP
A-201	BUILDING ELEVATIONS
A-202	BUILDING ELEVATIONS
A-301	BUILDING SECTIONS
A-302	BUILDING SECTIONS
A-303	BUILDING SECTIONS
A-401	ENLARGED PLANS
A-420	RR PLANS & ELEVATIONS
A-430	WALL SECTIONS
A-431	WALL SECTIONS
A-501	PLAN DETAILS
A-601	ROOM FINISH SCHEDULE
A-610	WALL TYPES
A-620	DOOR SCHEDULES, ELEVATIONS & DETAILS
A-630	WINDOWS SCHEDULES, ELEVATIONS & DETAILS
A-701	MILLWORK ELEVS & DETAILS

Grand total: 32

SHEET LIST - ROOF & ENCLOSURE

SHEET NUMBER	SHEET NAME
R-301	MASONRY AND WINDOW DETAILS
R-302	ROOF DETAILS
R-303	ROOF DETAILS

Grand total: 3

SHEET LIST - STRUCTURAL

Sheet Number	Sheet Name
S001	GENERAL NOTES
S002	TYP FND. DETAILS
S003	TYPICAL CMU WALL DETAILS
S004	TYPICAL METAL STUD WALL DETAILS
S101	FOUNDATION PLAN
S201	ROOF FRAMING PLAN
SD101	FOUNDATION DETAILS
SD201	FRAMING DETAILS

SHEET LIST - MECHANICAL

Sheet Number	Sheet Name
MG-101	MECHANICAL NOTES & LEGENDS
MP-101	MECHANICAL FLOOR PLAN
MS-101	MECHANICAL SCHEDULES
MC-101	MECHANICAL CONTROLS
MC-102	MECHANICAL CONTROLS
MD-101	MECHANICAL DETAILS

SHEET LIST - ELECTRICAL

SHEET NUMBER	SHEET NAME
EG-101	ELECTRICAL LEGEND
ES-101	ELECTRICAL SITE LIGHTING PLAN
EDP-101	ELECTRICAL DEMOLITION PLAN
EL-101	ELECTRICAL LIGHTING FLOOR PLAN
EP-101	ELECTRICAL POWER FLOOR PLAN
ER-101	ELECTRICAL RISER DIAGRAM
ED-101	ELECTRICAL DETAILS

Grand total: 7

SHEET LIST - PLUMBING

Sheet Number	Sheet Name
PG-101	PLUMBING LEGEND
P-100	PLUMBING DEMOLITION
P-101	PLUMBING SEWER & VENT FLOOR PLAN
P-201	PLUMBING DOMESTIC WATER FLOOR PLAN
PD-101	PLUMBING DETAILS

SHEET LIST - TECHNOLOGY

SHEET NUMBER	SHEET NAME
T000	TECHNOLOGY SYMBOLS & LEGEND
T001	TECHNOLOGY STE PLAN
T100	TECHNOLOGY DEMO FLOOR PLAN
T101	TECHNOLOGY 1st FLOOR PLAN
T301	TECHNOLOGY ENLARGED VIEWS
T401	TECHNOLOGY TYPICAL DETAILS
T402	TECHNOLOGY TYPICAL DETAILS
TA000	AUDIOVISUAL SYMBOLS & LEGEND
TA101	AUDIOVISUAL 1st FLOOR PLAN
TA601	AUDIOVISUAL TYPICAL DETAILS
TS000	SECURITY SYMBOLS & LEGEND
TS001	SECURITY PLAN
TS100	SECURITY DEMO FLOOR PLAN
TS101	SECURITY 1st FLOOR PLAN
TS401	SECURITY TYPICAL DETAILS
TS501	SECURITY SCHEDULES

Grand total: 16

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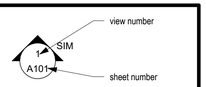
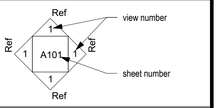
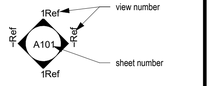
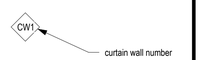
Combs Consulting Group
17806 IH-10 W, Northwest Side, Suite 300
San Antonio, TX 78257
(P)(210) 698 7887
eric.porto@combs-group.com

Project number	23-15
Date	10/25/24

SYMBOL LEGEND

BUILDING SECTION MARKER	
EXTERIOR ELEVATION MARKER	
INTERIOR ELEVATION MARKER	
ROOM TAG	
DOOR TAG	
WINDOW TAG	
SPECIALTY EQUIP. TAG	
CURTAIN WALL/STOREFRONT TAG	
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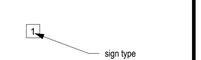
SIGNAGE TAG	
CLASSROOM EQUIPMENT TAG	
FIRE EXTINGUISHER BRACKET	
FIRE EXTINGUISHER CABINET	

ABBREVIATIONS

@	AT
A/C	AIR CONDITIONING
ABV	ABOVE
ACOUS	ACOUSTIC(AL)
AD	AREA DRAIN
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
AP	ACCESS PANEL
APPROX	APPROXIMATE
AVC	AUDIO VISUAL CONSOLE
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BRG	BEARING
BRJ	BRICK RELIEF JOINT
BRZ	BRONZE
BYO	BY OWNER
CAB	CABINET
CB	CATCH BASIN
CEM	CEMENT
CER	CERAMIC
CHBD	CHALKBOARD
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLO	CLOSET
CMU	CONCRET MASONRY UNIT
CO	CASED OPENING
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CONTR	CONCTRACT(OR)
CPT	CARPET
CT	CARPET TILE
DET	DEATIL
DF	DRYWALL FURRING
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DP	DRYWALL PARTITION
DR	DOOR
DS	DOWNSPOUT
DWG	DRAWING
EA	EACH
EAV	ELECTRICAL-AUDIO/VISUAL
EDF	ELECTRIC DRINKING FOUNTAIN
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR OR ELEVATION
EP	ELECTRICAL PANEL
EQ	EQUAL
EQUIP	EQUIPMENT
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FD	FLOOR DRAIN
FEB	FIRE EXTINGUISHER W/BRACKET
FEC	FIRE EXTINGUISHER CABINET
FHC	FIRE HOSE CABINET
FIN	FINISH(ED)
FL	FLOOR
FM	FLOOR MAT
FR	FRAME
FTVM	FUTURE TV MONITOR
FURR	FURRED
FV	FIELD VERIFY
GA	GAGE/GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GL	GLASS
GR BOX	GROUND ROD ACCESS
GST	GALZED CERAMIC TILE
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HC	HANDICAP
HDW	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HIGH POINT
HT	HEIGHT
ID	INSIDE DIMENSION
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
JAN	JANITOR
JOC	JOB ORDER CONTRACTOR
JT	JOINT
LAM	LAMINATED
LAV	LAVATORY
LP	LOW POINT
MAX	MAXIMUM
MB	MARKER BOARD
MECH	MECHANICAL
MFGR	MANUFACTURE/MANUFACTURER
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELANEOUS
ML	MODULE LINE/METHAL LATH
MO	MASONRY OPENING
MOD	MODULE/MODULAR
MONO	MONOLITHIC
MP	MASONRY PARTITION
MT	METAL THRESHOLD
MTL	METAL
MWP	MEMBRANE WATERPROOFING
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O/	ON TO OF, OVER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPNG	OPENING
OPP	OPPOSITE
OV	OVERHEAD
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLAYWOOD
PS	PROJECTION SCREEN
PTD	PAINTED
PTN	PARTITION
R	RISER
R/A	RETURN AIR
RD	ROOF DRAIN
RE,	REF REFERENCE
REINF	REINFORCE(MENT)
REQD	REQUIRED
RM	ROOM
RTU	ROOFTOP UNIT
SCHED	SCHEDULE(D)
SF	SAND FINISH
SHLVS	SHELVES
SHT	SHEET
SIM	SIMILAR
SK	SINK
SM	SMOOTH
SPEC	SPECIFICATIONS/SPECIFICATIONS
ED	SQUARE
SQ	SERVICE SINK
SS	STAINLESS STEEL
ST STL	STANDARD
STD	STEEL
STL	STORAGE
STOR	STRUCTURE/STRUCTURAL
STRUCT	SUSPENDED
SUSP	TOILET ACCESSORY
TA	TACKBOARD
TB	TOP OF CURB
TC	TEMPERED
TEMP	THICK
THK	TACKBOARD
TKBD	TRANSPARENT
TRANS	TV MONITOR
TVM	TV PROJECTOR
TVP	TYPICAL
TYP	URINAL
U	UNLESS NOTED OTHERWISE
U.N.O.	UNFINISHED
UNFIN	UNDERFLOOR VENT
UV	VALVE CABINET
VC	VERTICAL
VERT	VINYL
VIN	VISION PANEL
VP	WITH
W/	WITHOUT
W/O	WATER CLOSET
WC	WOOD
WD	WINDOW
WDW	WORK OUT ON JOB
WOOJ	WATERPROOFING
WP	WELDED WIRE FABRIC
WWF	

GENERAL ARCHITECTURAL NOTES

1. DO NOT SCALE THE DRAWINGS.
2. GENERAL CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO COMMENCEMENT OF EACH PORTION OF THE WORK.
3. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY:WHAT IS REQUIRED BY ONE IS AS BINDING AS IF REQUIRED BY ALL. THE CONTRACTOR SHALL COORDINATE ALL PORTIONS OF THE WORK AS DESCRIBED IN THE CONTRACT DOCUMENTS. NOTIFY THE ARCHITECT FOR RESOLUTION OF ALL DISCREPANCIES PRIOR TO CONSTRUCTION.
4. UNLESS OTHERWISE INDICATED, PLAN DIMENSIONS ARE TO COLUMN GRID ON CENTERLINES, NOMINAL SURFACE OF MASONRY, FACE OF STUDS AND FACE OF CONCRETE WALLS.
5. "FLOOR LINE" REFERS TO TOP OF CONCRETE SLABS. FINISH FLOORING IS INSTALLED ABOVE THE FLOOR LINE. FOR DEPRESSED FLOORS AND CURBS, SEE STRUCTURAL DRAWINGS.
6. REPETITIVE FEATURES ARE NOT DRAWN IN THEIR ENTIRETY AND SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL.
7. WHERE A DOOR IS LOCATED NEAR CORNER OF ROOM AND IS NOT LOCATED BY DIMENSION ON PLAN OR DETAILS, DIMENSION SHALL BE 3" FROM FACE OF STUD (WALL) TO FACE OF ROUGH OPENING. DIMENSION SHALL BE 6" FROM FACE OF WALL TO EDGE OF ROUGH OPENING AT CONCRETE WALLS.
8. AT SECURITY WALLS, FULL HEIGHT PARTITIONS SHALL BE SEALED BOTH SIDES WITH ACOUSTIC SEALANT, TOP, BOTTOM, INTERSECTION, DOOR FRAMES, GLAZED OPENING FRAMES, AND ALL OTHER PENETRATIONS.
9. LINE OF EXISTING GRADES, AS SHOWN ON THE BUILDING ELEVATIONS AND SECTIONS ARE APPROXIMATE.
10. VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS CONTRACT, OR BY OTHERS.
11. REFER TO ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND OTHER CATEGORIES OR DRAWINGS FOR ADDITIONAL NOTES.
12. VERIFY SIZE/LOCATION/FINISH/FIRE-RATING, ETC, AND PROVIDE COMPLETE ALL REQUIRED OPENINGS THROUGH FLOORS AND WALLS, ACCESS DOORS, FURRING, CURBS, ANCHORS AND INSERTS. PROVIDE ALL BASES AND BLOCKING REQUIRED FOR ACCESSORIES, MECHANICAL, ELECTRICAL AND OTHER EQUIPMENT.
13. ALL PENETRATIONS AND OPENINGS SHALL MEET WALL ASSEMBLY FIRE RATINGS.
14. BOXES LOCATED ON OPPOSITE SIDE OF FIRE RATED WALLS & SECURITY WALLS SHALL BE SEPARATED BY A MIN. HORIZONTAL DISTANCE OF 36".
15. REFER TO FINISH-SCHEDULES AND COLOR LISTS FOR WALL FINISH DESIGNATIONS.
16. REFER TO GENERAL STRUCTURAL NOTES & PROJECT SPECIFICATIONS.
17. SEE STRUCTURAL GENERAL NOTES FOR MINIMUM STUD DEPTH, THICKNESS, FLANGE WIDTH AND SPACING.
18. REFER TO STRUCTURAL DRAWINGS FOR ALL REINFORCING INFORMATION.
19. AT ALL PENETRATIONS AND INTERSECTIONS OF FIRE-RATED PARTITIONS, PROVIDE FIRE SEALANT AND/OR FIRESTOPPING TO MAINTAIN CONTINUITY OF PARTITION RATING.
20. MAXIMUM SPACING BETWEEN VERTICAL BRICK VENEER CONTROL JOINTS TO BE 20'-0" O.C. @ EXTERIOR WALLS & 20'-0" @ O.C. INTERIOR WALLS, TYPICAL UNLESS NOTED OTHERWISE.
21. PRIOR TO BEGINNING METAL STUD PARTITIONS, LOCATE WALLS WITH CHALK-LINES. IF QUESTIONS OR CONCERNS ARISE, BRING TO ARCHITECTS ATTENTION.
22. WHEN FINISH OR COLOR IS DESIGNATED "COLOR BY ARCHITECT", COLOR SHALL BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF COLORS.

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Veterans Services Center

Laredo College
Sheridan Rd, Laredo, TX 78040

CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS JR.
20150
STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

DRAWING INDEX & CONVENTIONS

Drawn by:	JJM
Checked by:	Checker
Project number:	23-15
Project Issue Date:	10/25/24

G-001

Scale: As indicated

Autodesk Docs://LC Veterans Center/LC Veterans Center R25.rvt

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604.5 Grab Bars. Grab bars for water closets shall comply with 609. Grab bars shall be provided on the side wall closest to the water closet and on the rear wall.

EXCEPTIONS:
1. Grab bars shall not be required to be installed in a toilet room for a single occupant accessed only through a private office and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 604.5.
2. In residential dwelling units, grab bars shall not be required to be installed in toilet or bathrooms provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 604.5.
3. In detention or correction facilities, grab bars shall not be required to be installed in housing or holding cells that are specially designed without protrusions for purposes of suicide prevention.

Advisory 604.5 Grab Bars Exception 2. Reinforcement must be sufficient to permit the installation of rear and side wall grab bars that fully meet all accessibility requirements including, but not limited to, required length, installation height, and structural strength.

604.5.1 Side Wall. The side wall grab bar shall be 42 inches (1065 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1370 mm) minimum from the rear wall.

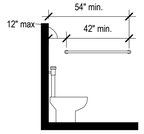

Figure 604.5.1 Side Wall Grab Bar at Water Closets

604.5.2 Rear Wall. The rear wall grab bar shall be 36 inches (915 mm) long minimum and extend from the centerline of the water closet 12 inches (305 mm) minimum on one side and 24 inches (610 mm) minimum on the other side.

EXCEPTIONS:
1. The rear grab bar shall be permitted to be 24 inches (610 mm) long minimum, centered on the water closet, where wall space does not permit a length of 36 inches (915 mm) minimum due to the location of a recessed fixture adjacent to the water closet.
2. Where an administrative authority requires flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, then the rear grab bar shall be permitted to be split or shifted to the open side of the toilet area.

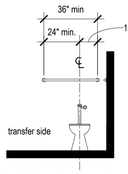

Figure 604.5.2 Rear Wall Grab Bar at Water Closets

604.6 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with 604.8.2.

Advisory 604.6 Flush Controls. If plumbing valves are located directly behind the toilet seat, flush valves and related plumbing can cause injury or imbalance when a person leans back against them. To prevent causing injury or imbalance, the plumbing can be located behind walls or to the side of the toilet; or if approved by the local authority having jurisdiction, provide a toilet seat lid.

604.7 Dispensers. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 15 inches (380 mm) minimum and 48 inches (1220 mm) maximum above the finish floor and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

Advisory 604.7 Dispensers. If toilet paper dispensers are installed above the side wall grab bar, the outlet of the toilet paper dispenser must be 48 inches (1220 mm) maximum above the finish floor and the top of the gripping surface of the grab bar must be 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the finish floor.

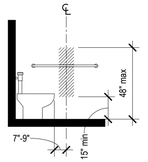

Figure 604.7 Dispenser Outlet Location

604.8 Toilet Compartments. Wheelchair accessible toilet compartments shall meet the requirements of 604.8.1 and 604.8.3. Compartments containing more than one plumbing fixture shall comply with 603. Ambulatory accessible compartments shall comply with 604.8.2 and 604.8.3.

604.8.1 Wheelchair Accessible Compartments. Wheelchair accessible compartments shall comply with 604.8.1.

604.8.1.1 Size. Wheelchair accessible compartments shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 56 inches (1420 mm) deep minimum for wall hung water closets and 59 inches (1500 mm) deep minimum for floor mounted water closets measured perpendicular to the rear wall. Wheelchair accessible compartments for children's use shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 59 inches (1500 mm) deep minimum for wall hung and floor mounted water closets measured perpendicular to the rear wall.

Advisory 604.8.1.1 Size. The minimum space required in toilet compartments is provided so that a person using a wheelchair can maneuver into position at the water closet. This space cannot be obstructed by baby changing tables or other fixtures or conveniences, except as specified at 604.3.2 (Overlap). If toilet compartments are to be used to house fixtures other than those associated with the water closet, they must be designed to exceed the minimum space requirements. Convenience fixtures such as baby changing tables must also be accessible to people with disabilities as well as to other users. Toilet compartments that are designed to meet, and not exceed, the minimum space requirements may not provide adequate space for maneuvering into position at a baby changing table.

604.8.1.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404 except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches (100 mm) maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches (100 mm) maximum from the front partition. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.

604.8.1.3 Approach. Compartments shall be arranged for left-hand or right-hand approach to the water closet.

604.8.1.4 Toe Clearance. The front partition and at least one side partition shall provide a toe clearance of 9 inches (230 mm) minimum above the finish floor and 6 inches (150 mm) deep minimum beyond the compartment-side face of the partition, exclusive of partition support members. Compartments for children's use shall provide a toe clearance of 12 inches (305 mm) minimum above the finish floor.

EXCEPTION: Toe clearance at the front partition is not required in a compartment greater than 62 inches (1575 mm) deep with a wall-hung water closet or 65 inches (1650 mm) deep with a floormounted water closet. Toe clearance at the side partition is not required in a compartment greater than 66 inches (1675 mm) wide. Toe clearance at the front partition is not required in a compartment for children's use that is greater than 65 inches (1650 mm) deep.

604.8.1.5 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided and shall be located on the wall closest to the water closet. In addition, a rear-wall grab bar complying with 604.5.2 shall be provided.

604.8.2 Ambulatory Accessible Compartments. Ambulatory accessible compartments shall comply with 604.8.2.

604.8.2.1 Size. Ambulatory accessible compartments shall have a depth of 60 inches (1525 mm) minimum and a width of 35 inches (890 mm) minimum and 37 inches (940 mm) maximum.

604.8.2.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404, except that if the approach is to the latch side of the compartment door, clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum. The door shall be selfclosing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch.
Toilet compartment doors shall not swing into the minimum required compartment area.

604.8.2.3 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided on both sides of the compartment.

604.8.3 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

604.9 Water Closets and Toilet Compartments for Children's Use. Water closets and toilet compartments for children's use shall comply with 604.9.

604.9.1 Location. The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 12 inches (305 mm) minimum and 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Compartments shall be arranged for left-hand or right-hand approach to the water closet.

604.9.2 Clearance. Clearance around a water closet shall comply with 604.3.

604.9.3 Height. The height of water closets shall be 11 inches (280 mm) minimum and 17 inches (430 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

604.9.4 Grab Bars. Grab bars for water closets shall comply with 604.5.

604.9.5 Flush Controls . Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.2 and 309.4 and shall be installed 36 inches (915 mm) maximum above the finish floor. Flush controls shall be located on the open side of the water closet except in ambulatory accessible compartments complying with 604.8.2.

604.9.6 Dispensers. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 14 inches (355 mm) minimum and 19 inches (485 mm) maximum above the finish floor. There shall be a clearance of 1 1/2 inches (38 mm) minimum below the grab bar. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

604.9.7 Toilet Compartments. Toilet compartments shall comply with 604.8.

605 Urinals

605.1 General. Urinals shall comply with 605.
Advisory 605.1 General. Stall-type urinals provide greater accessibility for a broader range of persons, including people of short stature.

605.2 Height and Depth. Urinals shall be the stall-type or the wall-hung type with the rim 17 inches (430 mm) maximum above the finish floor or ground. Urinals shall be 13 1/2 inches (345 mm) deep minimum measured from the outer face of the urinal rim to the back of the fixture.

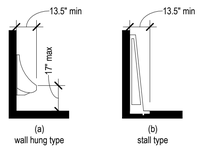

Figure 604.2 Height and Depth of Urinals

605.3 Clear Floor Space. A clear floor or ground space complying with 305 positioned for forward approach shall be provided.

605.4 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.

606 Lavatories and Sinks

606.1 General. Lavatories and sinks shall comply with 606.

Advisory 606.1 General. If soap and towel dispensers are provided, they must be located within the reach ranges specified in 308. Locate soap and towel dispensers so that they are conveniently usable by a person at the accessible lavatory.

606.2 Clear Floor Space. A clear floor space complying with 305, positioned for a forward approach, and knee and toe clearance complying with 306 shall be provided.

EXCEPTIONS:
1. A parallel approach complying with 305 shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided and to wet bars.
2. A lavatory in a toilet room or bathing facility for a single occupant accessed only through a private office and not for common use or public use shall not be required to provide knee and toe clearance complying with 306.
3. In residential dwelling units, cabinetry shall be permitted under lavatories and kitchen sinks provided that all of the following conditions are met:
(a) the cabinetry can be removed without removal or replacement of the fixture;
(b) the finish floor extends under the cabinetry; and
(c) the walls behind and surrounding the cabinetry are finished.
4. A knee clearance of 24 inches (610 mm) minimum above the finish floor or ground shall be permitted at lavatories and sinks used primarily by children 6 through 12 years where the rim or counter surface is 31 inches (785 mm) maximum above the finish floor or ground.
5. A parallel approach complying with 305 shall be permitted to lavatories and sinks used primarily by children 5 years and younger.
6. The dip of the overflow shall not be considered in determining knee and toe clearances.
7. No more than one bowl of a multi-bowl sink shall be required to provide knee and toe clearance complying with 306.

606.3 Height. Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches (865 mm) maximum above the finish floor or ground.

EXCEPTIONS:
1. A lavatory in a toilet or bathing facility for a single occupant accessed only through a private office and not for common use or public use shall not be required to comply with 606.3.
2. In residential dwelling unit kitchens, sinks that are adjustable to variable heights, 29 inches (735 mm) minimum and 36 inches (915 mm) maximum, shall be permitted where rough-in plumbing permits connections of supply and drain pipes for sinks mounted at the height of 29 inches (735 mm).

606.4 Faucets. Controls for faucets shall comply with 309. Hand-operated metering faucets shall remain open for 10 seconds minimum.

606.5 Exposed Pipes and Surfaces. Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories and sinks

607 Bathtubs

607.1 General. Bathtubs shall comply with 607.

607.2 Clearance. Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches (760 mm) wide minimum. A lavatory complying with 606 shall be permitted at the control end of the clearance. Where a permanent seat is provided at the head end of the bathtub, the clearance shall extend 12 inches (305 mm) minimum beyond the wall at the head end of the bathtub.

607.3 Seat. A permanent seat at the head end of the bathtub or a removable in-tub seat shall be provided. Seats shall comply with 610.

607.4 Grab Bars. Grab bars for bathtubs shall comply with 609 and shall be provided in accordance with 607.4.1 or 607.4.2.

EXCEPTIONS:
1. Grab bars shall not be required to be installed in a bathtub located in a bathing facility for a single occupant accessed only through a private office and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 607.4.
2. In residential dwelling units, grab bars shall not be required to be installed in bathtubs located in bathing facilities provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 607.4.

607.4.1 Bathtubs With Permanent Seats. For bathtubs with permanent seats, grab bars shall be provided in accordance with 607.4.1.

607.4.1.1 Back Wall. Two grab bars shall be installed on the back wall, one located in accordance with 609.4 and the other located 8 inches (205 mm) minimum and 10 inches (255 mm) maximum above the rim of the bathtub. Each grab bar shall be installed 15 inches (380 mm) maximum from the head end wall and 12 inches (305 mm) maximum from the control end wall.

607.4.1.2 Control End Wall. A grab bar 24 inches (610 mm) long minimum shall be installed on the control end wall at the front edge of the bathtub.

607.4.2 Bathtubs Without Permanent Seats. For bathtubs without permanent seats, grab bars shall comply with 607.4.2.

607.4.2.1 Back Wall. Two grab bars shall be installed on the back wall, one located in accordance with 609.4 and other located 8 inches (205 mm) minimum and 10 inches (255 mm) maximum above the rim of the bathtub. Each grab bar shall be 24 inches (610 mm) long minimum and shall be installed 24 inches (610 mm) maximum from the head end wall and 12 inches (305 mm) maximum from the control end wall.

607.4.2.2 Control End Wall. A grab bar 24 inches (610 mm) long minimum shall be installed on the control end wall at the front edge of the bathtub.

607.4.2.3 Head End Wall. A grab bar 12 inches (305 mm) long minimum shall be installed on the head end wall at the front edge of the bathtub.

607.5 Controls. Controls, other than drain stoppers, shall be located on an end wall. Controls shall be between the bathtub rim and grab bar, and between the open side of the bathtub and the centerline of the width of the bathtub. Controls shall comply with 309.4.

607.6 Shower Spray Unit and Water. A shower spray unit with a hose 59 inches (1500 mm) long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided. The shower spray unit shall have an on/off control with a non-positive shut-off. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Bathtub shower spray units shall deliver water that is 120°F (49°C) maximum.

Advisory 607.6 Shower Spray Unit and Water. Ensure that hand-held shower spray units are capable of delivering water pressure substantially equivalent to fixed shower heads.

607.7 Bathtub Enclosures. Enclosures for bathtubs shall not obstruct controls, faucets, shower and spray units or obstruct transfer from wheelchairs onto bathtub seats or into bathtubs. Enclosures on bathtubs shall not have tracks installed on the rim of the open face of the bathtub.

608 Shower Compartments

608.1 General. Shower compartments shall comply with 608.
Advisory 608.1 General. Shower stalls that are 60 inches (1525 mm) wide and have no curb may increase the usability of a bathroom because the shower area provides additional maneuvering space.

608.2 Size and Clearances for Shower Compartments. Shower compartments shall have sizes and clearances complying with 608.2.

608.2.1 Transfer Type Shower Compartments. Transfer type shower compartments shall be 36 inches (915 mm) by 36 inches (915 mm) clear inside dimensions measured at the center points of opposing sides and shall have a 36 inch (915 mm) wide minimum entry on the face of the shower compartment. Clearance of 36 inches (915 mm) wide minimum by 48 inches (1220 mm) long minimum measured from the control wall shall be provided.

608.2.2 Standard Roll-In Type Shower Compartments. Standard roll-in type shower compartments shall be 30 inches (760 mm) wide minimum by 60 inches (1525 mm) deep minimum clear inside dimensions measured at center points of opposing sides and shall have a 60 inches (1525 mm) wide minimum entry on the face of the shower compartment.

608.2.2.1 Clearance. A 30 inch (760 mm) wide minimum by 60 inch (1525 mm) long minimum clearance shall be provided adjacent to the open face of the shower compartment.

EXCEPTION: A lavatory complying with 606 shall be permitted on one 30 inch (760 mm) wide minimum side of the clearance provided that it is not on the side of the clearance adjacent to the controls or, where provided, not on the side of the clearance adjacent to the shower seat.

608.2.3 Alternate Roll-In Type Shower Compartments. Alternate roll-in type shower compartments shall be 36 inches (915 mm) wide and 60 inches (1525 mm) deep minimum clear inside dimensions measured at center points of opposing sides. A 36 inch (915 mm) wide minimum entry shall be provided at one end of the long side of the compartment.

608.3 Grab Bars. Grab bars shall comply with 609 and shall be provided in accordance with 608.3. Where multiple grab bars are used, required horizontal grab bars shall be installed at the same height above the finish floor.

EXCEPTIONS:
1. Grab bars shall not be required to be installed in a shower located in a bathing facility for a single occupant accessed only through a private office, and not for common use or public use provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 608.3.
2. In residential dwelling units, grab bars shall not be required to be installed in showers located in bathing facilities provided that reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with 608.3.

608.3.1 Transfer Type Shower Compartments. In transfer type compartments, grab bars shall be provided across the control wall and back wall to a point 18 inches (455 mm) from the control wall.

608.3.2 Standard Roll-In Type Shower Compartments. Where a seat is provided in standard roll-in type shower compartments, grab bars shall be provided on the back wall and the side wall opposite the seat. Grab bars shall not be provided above the seat. Where a seat is not provided in standard roll-in type shower compartments, grab bars shall be provided on three walls. Grab bars shall be installed 6 inches (150 mm) maximum from adjacent walls.

608.3.3 Alternate Roll-In Type Shower Compartments. In alternate roll-in type shower compartments, grab bars shall be provided on the back wall and the side wall farthest from the compartment entry. Grab bars shall not be provided above the seat. Grab bars shall be installed 6 inches (150 mm) maximum from adjacent walls.

608.4 Seats. A folding or non-folding seat shall be provided in transfer type shower compartments. A folding seat shall be provided in roll-in type showers required in transient lodging guest rooms with mobility features complying with 806.2. Seats shall comply with 610.

EXCEPTION: In residential dwelling units, seats shall not be required in transfer type shower compartments provided that reinforcement has been installed in walls so as to permit the installation of seats complying with 608.4.

608.5 Controls. Controls, faucets, and shower spray units shall comply with 309.4.

608.5.1 Transfer Type Shower Compartments. In transfer type shower compartments, the controls, faucets, and shower spray unit shall be installed on the side wall opposite the seat 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor and shall be located on the control wall 15 inches (380 mm) maximum from the centerline of the seat toward the shower opening.

608.5.2 Standard Roll-In Type Shower Compartments. In standard roll-in type shower compartments, the controls, faucets, and shower spray unit shall be located above the grab bar, but no higher than 48 inches (1220 mm) above the shower floor. Where a seat is provided, the controls, faucets, and shower spray unit shall be installed on the back wall adjacent to the seat wall and shall be located 27 inches (685 mm) maximum from the seat wall.

Advisory 608.5.2 Standard Roll-in Type Shower Compartments. In standard roll-in type showers without seats, the shower head and operable parts can be located on any of the three walls of the shower without adversely affecting accessibility.

608.5.3 Alternate Roll-In Type Shower Compartments. In alternate roll-in type shower compartments, the controls, faucets, and shower spray unit shall be located above the grab bar, but no higher than 48 inches (1220 mm) above the shower floor. Where a seat is provided, the controls, faucets, and shower spray unit shall be located on the side wall adjacent to the seat 27 inches (685 mm) maximum from the side wall behind the seat or shall be located on the back wall opposite the seat 15 inches (380 mm) maximum, left or right, of the centerline of the seat. Where a seat is not provided, the controls, faucets, and shower spray unit shall be installed on the side wall farthest from the compartment entry.

608.6 Shower Spray Unit and Water . A shower spray unit with a hose 59 inches (1500 mm) long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided. The shower spray unit shall have an on/off control with a non-positive shut-off. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Shower spray units shall deliver water that is 120°F (49°C) maximum.

EXCEPTION: A fixed shower head located at 48 inches (1220 mm) maximum above the shower finish floor shall be permitted instead of a hand-held spray unit in facilities that are not medical care facilities, long-term care facilities, transient lodging guest rooms, or residential dwelling units.

Advisory 608.6 Shower Spray Unit and Water. Ensure that hand-held shower spray units are capable of delivering water pressure substantially equivalent to fixed shower heads.
608.7 Thresholds. Thresholds in roll-in type shower compartments shall be 1/2 inch (13 mm) high maximum in accordance with 303. In transfer type shower compartments, thresholds 1/2 inch (13 mm) high maximum shall be beveled, rounded, or vertical.

EXCEPTION: A threshold 2 inches (51 mm) high maximum shall be permitted in transfer type shower compartments in existing facilities where provision of a 1/2 inch (13 mm) high threshold would disturb the structural reinforcement of the floor slab.

608.8 Shower Enclosures. Enclosures for shower compartments shall not obstruct controls, faucets, and shower spray units or obstruct transfer from wheelchairs onto shower seats.

609 Grab Bars

609.1 General. Grab bars in toilet facilities and bathing facilities shall comply with 609.

609.2 Cross Section. Grab bars shall have a cross section complying with 609.2.1 or 609.2.2.

609.2.1 Circular Cross Section. Grab bars with circular cross sections shall have an outside diameter of 1 1/4 inches (32 mm) minimum and 2 inches (51 mm) maximum.

609.2.2 Non-Circular Cross Section. Grab bars with non-circular cross sections shall have a crosssection dimension of 2 inches (51 mm) maximum and a perimeter dimension of 4 inches (100 mm) minimum and 4.8 inches (120 mm) maximum.

609.3 Spacing. The space between the wall and the grab bar shall be 1 1/2 inches (38 mm). The space between the grab bar and projecting objects below and at the ends shall be 1 1/2 inches (38 mm) minimum. The space between the grab bar and projecting objects above shall be 12 inches (305 mm) minimum.

EXCEPTION: The space between the grab bars and shower controls, shower fittings, and other grab bars above shall be permitted to be 1 1/2 inches (38 mm) minimum.

609.4 Position of Grab Bars. Grab bars shall be installed in a horizontal position, 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the finish floor measured to the top of the gripping surface, except that at water closets for children's use complying with 604.9, grab bars shall be installed in a horizontal position 18 inches (455 mm) minimum and 27 inches (685 mm) maximum above the finish floor measured to the top of the gripping surface. The height of the lower grab bar on the back wall of a bathtub shall comply with 607.4.1.1 or 607.4.2.1.

609.5 Surface Hazards. Grab bars and any wall or other surfaces adjacent to grab bars shall be free of sharp or abrasive elements and shall have rounded edges.

609.6 Fittings. Grab bars shall not rotate within their fittings.

609.7 Installation. Grab bars shall be installed in any manner that provides a gripping surface at the specified locations and that does not obstruct the required clear floor space.

609.8 Structural Strength. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the grab bar, fastener, mounting device, or supporting structure.

610 Seats

610.1 General. Seats in bathtubs and shower compartments shall comply with 610.

610.2 Bathtub Seats. The top of bathtub seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom finish floor. The depth of a removable in-tub seat shall be 15 inches (380 mm) minimum and 16 inches (405 mm) maximum. The seat shall be capable of secure placement. Permanent seats at the head end of the bathtub shall be 15 inches (380 mm) deep minimum and shall extend from the back wall to or beyond the outer edge of the bathtub.

610.3 Shower Compartment Seats. Where a seat is provided in a standard roll-in shower compartment, it shall be a folding type, shall be installed on the side wall adjacent to the controls, and shall extend from the back wall to a point within 3 inches (75 mm) of the compartment entry. Where a seat is provided in an alternate roll-in type shower compartment, it shall be a folding type, shall be installed on the front wall opposite the back wall, and shall extend from the adjacent side wall to a point within 3 inches (75 mm) of the compartment entry. In transfer-type showers, the seat shall extend from the back wall to a point within 3 inches (75 mm) of the compartment entry. The top of the seat shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the bathroom finish floor. Seats shall comply with 610.3.1 or 610.3.2.

610.3.1 Rectangular Seats. The rear edge of a rectangular seat shall be 2 1/2 inches (64 mm) maximum and the front edge 15 inches (380 mm) minimum and 16 inches (405 mm) maximum from the seat wall. The side edge of the seat shall be 1 1/2 inches (38 mm) maximum from the adjacent wall.

610.3.2 L-Shaped Seats. The rear edge of an L-shaped seat shall be 2 1/2 inches (64 mm) maximum and the front edge 15 inches (380 mm) minimum and 16 inches (405 mm) maximum from the seat wall. The rear edge of the "L" portion of the seat shall be 1 1/2 inches (38 mm) maximum from the wall and the front edge shall be 14 inches (355 mm) minimum and 15 inches (380 mm) maximum from the wall. The end of the "L" shall be 22 inches (560 mm) minimum and 23 inches maximum (585 mm) from the main seat wall.

610.4 Structural Strength. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the seat, fastener, mounting device, or supporting structure.

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS, JR.
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STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

ACCESSIBILITY STANDARDS

Drawn by:	JJM
Checked by:	Checker
Project number:	23-15
Project Issue Date:	10/25/24

G-002

Scale: 1/4" = 1'-0"

302 Floor or Ground Surfaces

302.1 General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302.

EXCEPTIONS:
1. Within animal containment areas, floor and ground surfaces shall not be required to be stable, firm, and slip resistant.
2. Areas of sport activity shall not be required to comply with 302.

Advisory 302.1 General. A stable surface is one that remains unchanged by contaminants or applied force, so that when the contaminant or force is removed, the surface returns to its original condition. A firm surface resists deformation by either indentations or particles moving on its surface. A slipresistant surface provides sufficient frictional counterforce to the forces exerted in walking to permit safe ambulation.

302.2 Carpet. Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. Pile height shall be 1/2 inch (13 mm) maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.

Advisory 302.2 Carpet. Carpets and permanently affixed mats can significantly increase the amount of force (roll resistance) needed to propel a wheelchair over a surface. The firmer the carpeting and backing, the lower the roll resistance. A pile thickness up to 1/2 inch (13 mm) (measured to the backing, cushion, or pad) is allowed, although a lower pile provides easier wheelchair maneuvering. If a backing, cushion or pad is used, it must be firm. Preferably, carpet pad should not be used because the soft padding increases roll resistance.

302.3 Openings. Openings in floor or ground surfaces shall not allow passage of a sphere more than 1/2 inch (13 mm) diameter except as allowed in 407.4.3, 409.4.3, 410.4, 810.5.3 and 810.10. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

303 Changes in Level

303.1 General. Where changes in level are permitted in floor or ground surfaces, they shall comply with 303.

EXCEPTIONS:
1. Animal containment areas shall not be required to comply with 303.
2. Areas of sport activity shall not be required to comply with 303.

303.2 Vertical. Changes in level of 1/4 inch (6.4 mm) high maximum shall be permitted to be vertical. Figure 303.2 Vertical Change in Level

303.3 Beveled. Changes in level between 1/4 inch (6.4 mm) high minimum and 1/2 inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2.

Advisory 303.3 Beveled. A change in level of 1/2 inch (13 mm) is permitted to be 1/4 inch (6.4 mm) vertical plus 1/4 inch (6.4 mm) beveled. However, in no case may the combined change in level exceed 1/2 inch (13 mm). Changes in level exceeding 1/2 inch (13 mm) must comply with 405 (Ramps) or 406 (Curb Ramps).

303.4 Ramps. Changes in level greater than 1/2 inch (13 mm) high shall be ramped, and shall comply with 405 or 406.

401 General

401.1 Scope. The provisions of Chapter 4 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

402 Accessible Routes

402.1 General. Accessible routes shall comply with 402.

402.2 Components. Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.

Advisory 402.2 Components. Walking surfaces must have running slopes not steeper than 1:20, see 403.3. Other components of accessible routes, such as ramps (405) and curb ramps (406), are permitted to be more steeply sloped.

403 Walking Surfaces

403.1 General. Walking surfaces that are a part of an accessible route shall comply with 403.

403.2 Floor or Ground Surface. Floor or ground surfaces shall comply with 302.

403.3 Slope. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.

403.4 Changes in Level. Changes in level shall comply with 303.

403.5 Clearances. Walking surfaces shall provide clearances complying with 403.5.

EXCEPTION: Within employee work areas, clearances on common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

403.5.1 Clear Width. Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches (915 mm) minimum.

EXCEPTION: The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.

403.5.2 Clear Width at Turn. Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn.

EXCEPTION: Where the clear width at the turn is 60 inches (1525 mm) minimum compliance with 403.5.2 shall not be required.

403.5.3 Passing Spaces. An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum. Passing spaces shall be either: a space 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum; or, an intersection of two walking surfaces providing a T-shaped space complying with 304.3.2 where the base and arms of the T-shaped space extend 48 inches (1220 mm) minimum beyond the intersection.

403.6 Handrails. Where handrails are provided along walking surfaces with running slopes not steeper than 1:20 they shall comply with 505.

Advisory 403.6 Handrails. Handrails provided in elevator cabs and platform lifts are not required to comply with the requirements for handrails on walking surfaces.

404 Doors, Doorways, and Gates

404.1 General. Doors, doorways, and gates that are part of an accessible route shall comply with 404.

EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with 404.2.7, 404.2.8, 404.2.9, 404.3.2 and 404.3.4 through 404.3.7.

Advisory 404.1 General Exception. Security personnel must have sole control of doors that are eligible for the Exception at 404.1. It would not be acceptable for security personnel to operate the doors for people with disabilities while allowing others to have independent access.

404.2 Manual Doors, Doorways, and Manual Gates . Manual doors and doorways and manual gates intended for user passage shall comply with 404.2.

404.2.1 Revolving Doors, Gates, and Turnstiles. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

404.2.2 Double-Leaf Doors and Gates. At least one of the active leaves of doorways with two leaves shall comply with 404.2.3 and 404.2.4.

404.2.3 Clear Width. Door openings shall provide a clear width of 32 inches (815 mm) minimum. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) deep shall provide a clear opening of 36 inches (915 mm) minimum. There shall be no projections into the required clear opening width lower than 34 inches (865 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the finish floor or ground shall not exceed 4 inches (100 mm).

EXCEPTIONS:
1. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear width shall be permitted for the latch side stop.
2. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.

404.2.4 Maneuvering Clearances. Minimum maneuvering clearances at doors and gates shall comply with 404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance.

EXCEPTION: Entry doors to hospital patient rooms shall not be required to provide the clearance beyond the latch side of the door.

404.2.4.1 Swinging Doors and Gates. Swinging doors and gates shall have maneuvering clearances complying with Table 404.2.4.1.

TABLE 404.2.4.1 Manuevering Clearances at Manual Swinging Doors & Gates

Type of Use		Minimum Maneuvering Clearance	
APPROACH DIRECTION	DOOR OR GATE SIDE	PERPENDICULAR TO DOORWAY	PARALLEL TO DOORWAY (BEYOND LATCH SIDE UNLESS NOTED)
From front	Pull	60 inches	18 inches
From front	Push	48 inches	0 inches[1]
From hinge side	Pull	60 inches	36 inches
From hinge side	Pull	54 inches	42 inches
From hinge side	Push	42 inches[1]	22 inches[1]
From latch side	Pull	48 inches[4]	24 inches
From latch side	Push	42 inches[2]	24 inches

Table 404.2.4.1 Maneuvering Clearances at Manual Swinging Doors and Gates

1. Add 12 inches (305 mm) if closer and latch are provided.
2. Add 6 inches (150 mm) if closer and latch are provided.
3. Beyond hinge side.
4. Add 6 inches (150 mm) if closer is provided.

404.2.4.2 Doorways without Doors or Gates, Sliding Doors, and Folding Doors. Doorways less than 36 inches (915 mm) wide without doors or gates, sliding doors, or folding doors shall have maneuvering clearances complying with Table 404.2.4.2.

TABLE 404.2.4.2 Maneuvering Clearances at Doorways without Doors or Gates, Manual Sliding Doors, and Manual Folding Doors

	Minimum Maneuvering Clearance	
APPROACH DIRECTION	PERPENDICULAR TO DOORWAY	PARALLEL TO DOORWAY (BEYOND LATCH SIDE UNLESS NOTED)
From front	48 inches	0 inches
From side[1]	42 inches	0 inches
From pocket/hinge side	42 inches	22 inches[2]
From stop/latch door	42 inches	24 inches

1. Doorway with no door only.
2. Beyond pocket/hinge side.

404.2.4.3 Recessed Doors and Gates. Maneuvering clearances for forward approach shall be provided when any obstruction within 18 inches (455 mm) of the latch side of a doorway projects more than 8 inches (205 mm) beyond the face of the door, measured perpendicular to the face of the door or gate.

Advisory 404.2.4.3 Recessed Doors and Gates. A door can be recessed due to wall thickness or because of the placement of casework and other fixed elements adjacent to the doorway. This provision must be applied wherever doors are recessed.

404.2.4.4 Floor or Ground Surface. Floor or ground surface within required maneuvering clearances shall comply with 302. Changes in level are not permitted.

EXCEPTIONS:
1. Slopes not steeper than 1:48 shall be permitted.
2. Changes in level at thresholds complying with 404.2.5 shall be permitted.
404.2.5 Thresholds. Thresholds, if provided at doorways, shall be 1/2 inch (13 mm) high maximum. Raised thresholds and changes in level at doorways shall comply with 302 and 303.

EXCEPTION: Existing or altered thresholds 3/4 inch (19 mm) high maximum that have a beveled edge on each side with a slope not steeper than 1:2 shall not be required to comply with 404.2.5.

404.2.6 Doors in Series and Gates in Series. The distance between two hinged or pivoted doors in series and gates in series shall be 48 inches (1220 mm) minimum plus the width of doors or gates swinging into the space.

404.2.7 Door and Gate Hardware. Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with 309.4. Operable parts of such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

EXCEPTIONS:
1. Existing locks shall be permitted in any location at existing glazed doors without stiles, existing overhead rolling doors or grilles, and similar existing doors or grilles that are designed with locks that are activated only at the top or bottom rail.
2. Access gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finish floor or ground provided the self-latching devices are not also selflocking devices and operated by means of a key, electronic opener, or integral combination lock.

Advisory 404.2.7 Door and Gate Hardware. Door hardware that can be operated with a closed fist or a loose grip accommodates the greatest range of users. Hardware that requires simultaneous hand and finger movements require greater dexterity and coordination, and is not recommended.

404.2.8 Closing Speed. Door and gate closing speed shall comply with 404.2.8.

404.2.8.1 Door Closers and Gate Closers. Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.

404.2.8.2 Spring Hinges. Door and gate spring hinges shall be adjusted so that from the open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.

404.2.9 Door and Gate Opening Force. Fire doors shall have a minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open a door or gate other than fire doors shall be as follows:
1. Interior hinged doors and gates: 5 pounds (22.2 N) maximum.
2. Sliding or folding doors: 5 pounds (22.2 N) maximum.
These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.

Advisory 404.2.9 Door and Gate Opening Force. The maximum force pertains to the continuous application of force necessary to fully open a door, not the initial force needed to overcome the inertia of the door. It does not apply to the force required to retract bolts or to disengage other devices used to keep the door in a closed position.

404.2.10 Door and Gate Surfaces. Swinging door and gate surfaces within 10 inches (255 mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Parts creating horizontal or vertical joints in these surfaces shall be within 1/16 inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

EXCEPTIONS:
1. Sliding doors shall not be required to comply with 404.2.10.
2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at 60 degrees minimum from the horizontal shall not be required to meet the 10 inch (255 mm) bottom smooth surface height requirement.
3. Doors and gates that do not extend to within 10 inches (255 mm) of the finish floor or ground shall not be required to comply with 404.2.10.
4. Existing doors and gates without smooth surfaces within 10 inches (255 mm) of the finish floor or ground shall not be required to provide smooth surfaces complying with 404.2.10 provided that if added kick plates are installed, cavities created by such kick plates are capped.

404.2.11 Vision Lights . Doors, gates, and side lights adjacent to doors or gates, containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one glazed panel located 43 inches (1090 mm) maximum above the finish floor.

EXCEPTION: Vision lights with the lowest part more than 66 inches (1675 mm) from the finish floor or ground shall not be required to comply with 404.2.11.

404.3 Automatic and Power-Assisted Doors and Gates . Automatic doors and automatic gates shall comply with 404.3. Full-powered automatic doors shall comply with ANSI/BHMA A156.10 (incorporated by reference, see "Referenced Standards" in Chapter 1). Low-energy and powerassisted doors shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

404.3.1 Clear Width. Doorways shall provide a clear opening of 32 inches (815 mm) minimum in power-on and power-off mode. The minimum clear width for automatic door systems in a doorway shall be based on the clear opening provided by all leaves in the open position.

404.3.2 Maneuvering Clearance. Clearances at power-assisted doors and gates shall comply with 404.2.4. Clearances at automatic doors and gates without standby power and serving an accessible means of egress shall comply with 404.2.4.

EXCEPTION: Where automatic doors and gates remain open in the power-off condition, compliance with 404.2.4 shall not be required.

404.3.3 Thresholds. Thresholds and changes in level at doorways shall comply with 404.2.5.

404.3.4 Doors in Series and Gates in Series. Doors in series and gates in series shall comply with 404.2.6.

404.3.5 Controls. Manually operated controls shall comply with 309. The clear floor space adjacent to the control shall be located beyond the arc of the door swing.

404.3.6 Break Out Opening. Where doors and gates without standby power are a part of a means of egress, the clear break out opening at swinging or sliding doors and gates shall be 32 inches (815 mm) minimum when operated in emergency mode.

EXCEPTION: Where manual swinging doors and gates comply with 404.2 and serve the same means of egress compliance with 404.3.6 shall not be required.

404.3.7 Revolving Doors, Revolving Gates, and Turnstiles. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

405 Ramps

405.1 General. Ramps on accessible routes shall comply with 405.

EXCEPTION: In assembly areas, aisle ramps adjacent to seating and not serving elements required to be on an accessible route shall not be required to comply with 405.
405.2 Slope. Ramp runs shall have a running slope not steeper than 1:12.

EXCEPTION: In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to space limitations.

TABLE 405.2 Maximum Ramp Slope and Rise for Existing Sites, Buildings, and Facilities

Slope[1]	Max. Rise
Steeper than 1:10 but not steeper than 1:8	3 inches
Steeper than 1:12 but not steeper than 1:10	6 inches

1. A slope steeper than 1:8 is prohibited.

Advisory 405.2 Slope. To accommodate the widest range of users, provide ramps with the least possible running slope and, wherever possible, accompany ramps with stairs for use by those individuals for whom distance presents a greater barrier than steps, e.g., people with heart disease or limited stamina.

405.3 Cross Slope. Cross slope of ramp runs shall not be steeper than 1:48.

Advisory 405.3 Cross Slope. Cross slope is the slope of the surface perpendicular to the direction of travel. Cross slope is measured the same way as slope is measured (i.e., the rise over the run).

405.4 Floor or Ground Surfaces. Floor or ground surfaces of ramp runs shall comply with 302. Changes in level other than the running slope and cross slope are not permitted on ramp runs.

405.5 Clear Width. The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches (915 mm) minimum.

EXCEPTION: Within employee work areas, the required clear width of ramps that are a part of common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.

405.6 Rise. The rise for any ramp run shall be 30 inches (760 mm) maximum.

405.7 Landings. Ramps shall have landings at the top and the bottom of each ramp run. Landings shall comply with 405.7.

Advisory 405.7 Landings. Ramps that do not have level landings at changes in direction can create a compound slope that will not meet the requirements of this document. Circular or curved ramps continually change direction. Curvilinear ramps with small radii also can create compound cross slopes and cannot, by their nature, meet the requirements for accessible routes. A level landing is needed at the accessible door to permit maneuvering and simultaneously door operation.

Figure 405.7 Ramp Landings

405.7.1 Slope. Landings shall comply with 302. Changes in level are not permitted.
EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

405.7.2 Width. The landing clear width shall be at least as wide as the widest ramp run leading to the landing.

405.7.3 Length. The landing clear length shall be 60 inches (1525 mm) long minimum.

405.7.4 Change in Direction. Ramps that change direction between runs at landings shall have a clear landing 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum.

405.7.5 Doorways. Where doorways are located adjacent to a ramp landing, maneuvering clearances required by 404.2.4 and 404.3.2 shall be permitted to overlap the required landing area.

405.8 Handrails. Ramp runs with a rise greater than 6 inches (150 mm) shall have handrails complying with 505.

EXCEPTION: Within employee work areas, handrails shall not be required where ramps that are part of common use circulation paths are designed to permit the installation of handrails complying with 505. Ramps not subject to the exception to 405.5 shall be designed to maintain a 36 inch (915 mm) minimum clear width when handrails are installed.

405.9 Edge Protection. Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings.

EXCEPTIONS:
1. Edge protection shall not be required on ramps that are not required to have handrails and have sides complying with 406.3.
2. Edge protection shall not be required on the sides of ramp landings serving an adjoining ramp run or stairway.
3. Edge protection shall not be required on the sides of ramp landings having a vertical drop-off of ½ inch (13 mm) maximum within 10 inches (255 mm) horizontally of the minimum landing area specified in 405.7.

405.9.1 Extended Floor or Ground Surface. The floor or ground surface of the ramp run or landing shall extend 12 inches (305 mm) minimum beyond the inside face of a handrail complying with 505.

Advisory 405.9.1 Extended Floor or Ground Surface. The extended surface prevents wheelchair casters and crutch tips from slipping off the ramp surface.

405.9.2 Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.

Figure 405.9.2 Curb or Barrier Edge Protection

405.10 Wet Conditions. Landings subject to wet conditions shall be designed to prevent the accumulation of water.

406 Curb Ramps

406.1 General. Curb ramps on accessible routes shall comply with 406, 405.2 through 405.5, and 405.10.

406.2 Counter Slope. Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.

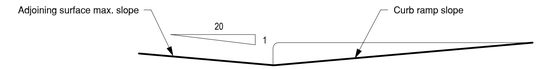

Figure 406.2 Counter Slope of Surfaces Adjacent to Curb Ramps

406.3 Sides of Curb Ramps. Where provided, curb ramp flares shall not be steeper than 1:10.

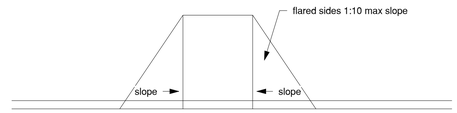

Figure 406.2 Counter Slope of Surfaces Adjacent to Curb Ramps

406.4 Landings. Landings shall be provided at the tops of curb ramps. The landing clear length shall be 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing.

EXCEPTION: In alterations, where there is no landing at the top of curb ramps, curb ramp flares shall be provided and shall not be steeper than 1:12.

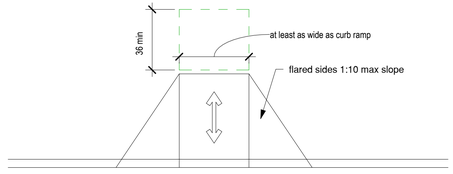

Figure 406.4 Landings at the Top of Curb Ramps

406.5 Location. Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.

406.6 Diagonal Curb Ramps. Diagonal or corner type curb ramps with returned curbs or other welldefined edges shall have the edges parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have a clear space 48 inches (1220 mm) minimum outside active traffic lanes of the roadway. Diagonal curb ramps provided at marked crossings shall provide the 48 inches (1220 mm) minimum clear space within the markings. Diagonal curb ramps with flared sides shall have a segment of curb 24 inches (610 mm) long minimum located on each side of the curb ramp and within the marked crossing.

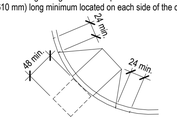

Figure 406.6 Diagonal or Corner Type Curb Ramps

406.7 Islands. Raised islands in crossings shall be cut through level with the street or have curb ramps at both sides. Each curb ramp shall have a level area 48 inches (1220 mm) long minimum by 36 inches (915 mm) wide minimum at the top of the curb ramp in the part of the island intersected by the crossings. Each 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum area shall be oriented so that the 48 inch (1220 mm) minimum length is in the direction of the running slope of the curb ramp it serves. The 48 inch (1220 mm) minimum by 36 inch (915 mm) minimum areas and the accessible route shall be permitted to overlap.

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT ★ GUILLERMO J. CAVAZOS, JR. ★ 20150 ★ STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

ACCESSIBILITY STANDARDS

Drawn by:	JJM
Checked by:	Checker
Project number:	23-15
Project Issue Date:	10/25/24

G-003

Scale:

407 Elevators

407.1 General. Elevators shall comply with 407 and with ASME A17.1 (incorporated by reference, see "Referenced Standards" in Chapter 1). They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic.

Advisory 407.1 General. The ADA and other Federal civil rights laws require that accessible features be maintained in working order so that they are accessible to and usable by those people they are intended to benefit. Building owners should note that the ASME Safety Code for Elevators and Escalators requires routine maintenance and inspections. Isolated or temporary interruptions in service due to maintenance or repairs may be unavoidable; however, failure to take prompt action to effect repairs could constitute a violation of Federal laws and these requirements.

407.2 Elevator Landing Requirements. Elevator landings shall comply with 407.2.

407.2.1 Call Controls. Where elevator call buttons or keypads are provided, they shall comply with 407.2.1 and 309.4. Call buttons shall be raised or flush.

EXCEPTION: Existing elevators shall be permitted to have recessed call buttons.

407.2.1.1 Height. Call buttons and keypads shall be located within one of the reach ranges specified in 308, measured to the centerline of the highest operable part.

EXCEPTION: Existing call buttons and existing keypads shall be permitted to be located at 54 inches (1370 mm) maximum above the finish floor, measured to the centerline of the highest operable part.

407.2.1.2 Size. Call buttons shall be 3/4 inch (19 mm) minimum in the smallest dimension.

EXCEPTION: Existing elevator call buttons shall not be required to comply with 407.2.1.2.

407.2.1.3 Clear Floor or Ground Space . A clear floor or ground space complying with 305 shall be provided at call controls.

Advisory 407.2.1.3 Clear Floor or Ground Space. The clear floor or ground space required at elevator call buttons must remain free of obstructions including ashtrays, plants, and other decorative elements that prevent wheelchair users and others from reaching the call buttons. The height of the clear floor or ground space is considered to be a volume from the floor to 80 inches (2030 mm) above the floor. Recessed ashtrays should not be placed near elevator call buttons so that persons who are blind or visually impaired do not inadvertently contact them or their contents as they reach for the call buttons.

407.2.1.4 Location. The call button that designates the up direction shall be located above the call button that designates the down direction.

EXCEPTION: Destination-oriented elevators shall not be required to comply with 407.2.1.4.

Advisory 407.2.1.4 Location, Exception . A destination-oriented elevator system provides lobby controls enabling passengers to select floor stops, lobby indicators designating which elevator to use, and a car indicator designating the floors at which the car will stop. Responding cars are programmed for maximum efficiency by reducing the number of stops any passenger experiences

407.2.1.5 Signals. Call buttons shall have visible signals to indicate when each call is registered and when each call is answered.

EXCEPTIONS:
1. Destination-oriented elevators shall not be required to comply with 407.2.1.5 provided that visible and audible signals complying with 407.2.2 indicating which elevator car to enter are provided.
2. Existing elevators shall not be required to comply with 407.2.1.5.

407.2.1.6 Keypads. Where keypads are provided, keypads shall be in a standard telephone keypad arrangement and shall comply with 407.4.7.2.

407.2.2 Hall Signals. Hall signals, including in-car signals, shall comply with 407.2.2.

407.2.2.1 Visible and Audible Signals. A visible and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call and the car's direction of travel. Where incar signals are provided, they shall be visible from the floor area adjacent to the hall call buttons.

EXCEPTIONS:
1. Visible and audible signals shall not be required at each destination-oriented elevator where a visible and audible signal complying with 407.2.2 is provided indicating the elevator car designation information.
2. In existing elevators, a signal indicating the direction of car travel shall not be required.

407.2.2.2 Visible Signals. Visible signal fixtures shall be centered at 72 inches (1830 mm) minimum above the finish floor or ground. The visible signal elements shall be 2 1/2 inches (64 mm) minimum measured along the vertical centerline of the element. Signals shall be visible from the floor area adjacent to the hall call button.

EXCEPTIONS:
1. Destination-oriented elevators shall be permitted to have signals visible from the floor area adjacent to the hoistway entrance.
2. Existing elevators shall not be required to comply with 407.2.2.2

407.2.2.3 Audible Signals . Audible signals shall sound once for the up direction and twice for the down direction, or shall have verbal annunciators that indicate the direction of elevator car travel. Audible signals shall have a frequency of 1500 Hz maximum. Verbal annunciators shall have a frequency of 300 Hz minimum and 3000 Hz maximum. The audible signal and verbal annunciator shall be 10 dB minimum above ambient, but shall not exceed 80 dB, measured at the hall call button.

EXCEPTIONS:
1. Destination-oriented elevators shall not be required to comply with 407.2.2.3 provided that the audible tone and verbal announcement is the same as those given at the call button or call button keypad.
2. Existing elevators shall not be required to comply with the requirements for frequency and dB range of audible signals.

407.2.2.4 Differentiation. Each destination-oriented elevator in a bank of elevators shall have audible and visible means for differentiation.

407.2.3 Hoistway Signs. Signs at elevator hoistways shall comply with 407.2.3.

407.2.3.1 Floor Designation. Floor designations complying with 703.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile star shall be provided on both jambs at the main entry level.

Figure 407.2.3.1 Floor Designations on Jambs of Elevator Hoistway Entrances

407.2.3.2 Car Designations. Destination-oriented elevators shall provide tactile car identification complying with 703.2 on both jambs of the hoistway immediately below the floor designation. Car designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum.

407.3 Elevator Door Requirements. Hoistway and car doors shall comply with 407.3.

407.3.1 Type. Elevator doors shall be the horizontal sliding type. Car gates shall be prohibited.

407.3.2 Operation. Elevator hoistway and car doors shall open and close automatically.

EXCEPTION: Existing manually operated hoistway swing doors shall be permitted provided that they comply with 404.2.3 and 404.2.9. Car door closing shall not be initiated until the hoistway door is closed.

407.3.3 Reopening Device . Elevator doors shall be provided with a reopening device complying with 407.3.3 that shall stop and reopen a car door and hoistway door automatically if the door becomes obstructed by an object or person.

EXCEPTION: Existing elevators with manually operated doors shall not be required to comply with 407.3.3.

407.3.3.1 Height. The device shall be activated by sensing an obstruction passing through the opening at 5 inches (125 mm) nominal and 29 inches (735 mm) nominal above the finish floor.

407.3.3.2 Contact. The device shall not require physical contact to be activated, although contact is permitted to occur before the door reverses.

407.3.3.3 Duration. Door reopening devices shall remain effective for 20 seconds minimum.

407.3.4 Door and Signal Timing. The minimum acceptable time from notification that a car is answering a call or notification of the car assigned at the means for the entry of destination information until the doors of that car start to close shall be calculated from the following equation: T = D/(1.5 ft/s) or T = D/(455 mm/s) = 5 seconds minimum where T equals the total time in seconds and D equals the distance (in feet or millimeters) from the point in the lobby or corridor 60 inches (1525 mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door.

EXCEPTIONS:
1. For cars with in-car lanterns, T shall be permitted to begin when the signal is visible from the point 60 inches (1525 mm) directly in front of the farthest hall call button and the audible signal is sounded.
2. Destination-oriented elevators shall not be required to comply with 407.3.4.

407.3.5 Door Delay. Elevator doors shall remain fully open in response to a car call for 3 seconds minimum.

407.3.6 Width. The width of elevator doors shall comply with Table 407.4.1.

EXCEPTION: In existing elevators, a power-operated car door complying with 404.2.3 shall be permitted.

407.4 Elevator Car Requirements. Elevator cars shall comply with 407.4.
407.4.1 Car Dimensions. Inside dimensions of elevator cars and clear width of elevator doors shall comply with Table 407.4.1.

EXCEPTION: Existing elevator car configurations that provide a clear floor area of 16 square feet (1.5 m2) minimum and also provide an inside clear depth 54 inches (1370 mm) minimum and a clear width 36 inches (915 mm) minimum shall be permitted.

Table 407.4.1 Elevator Car Dimensions
Minimum Dimensions

1. A tolerance of minus 5/8 inch (16 mm) is permitted.
2. Other car configurations that provide a turning space complying with 304 with the door closed shall be permitted.

407.4.2 Floor Surfaces. Floor surfaces in elevator cars shall comply with 302 and 303.

407.4.3 Platform to Hoistway Clearance. The clearance between the car platform sill and the edge of any hoistway landing shall be 1 1/4 inch (32 mm) maximum.

407.4.4 Leveling. Each car shall be equipped with a self-leveling feature that will automatically bring and maintain the car at floor landings within a tolerance of 1/2 inch (13 mm) under rated loading to zero loading conditions.

407.4.5 Illumination. The level of illumination at the car controls, platform, car threshold and car landing sill shall be 5 foot candles (54 lux) minimum.

407.4.6 Elevator Car Controls. Where provided, elevator car controls shall comply with 407.4.6 and 309.4.

EXCEPTION: In existing elevators, where a new car operating panel complying with 407.4.6 is provided, existing car operating panels shall not be required to comply with 407.4.6.

407.4.6.1 Location. Controls shall be located within one of the reach ranges specified in 308.

EXCEPTIONS:
1. Where the elevator panel serves more than 16 openings and a parallel approach is provided, buttons with floor designations shall be permitted to be 54 inches (1370 mm) maximum above the finish floor.
2. In existing elevators, car control buttons with floor designations shall be permitted to be located 54 inches (1370 mm) maximum above the finish floor where a parallel approach is provided.

407.4.6.2 Buttons. Car control buttons with floor designations shall comply with 407.4.6.2 and shall be raised or flush.

EXCEPTION: In existing elevators, buttons shall be permitted to be recessed.

407.4.6.2.1 Size. Buttons shall be 3/4 inch (19 mm) minimum in their smallest dimension.

407.4.6.2.2 Arrangement. Buttons shall be arranged with numbers in ascending order. When two or more columns of buttons are provided they shall read from left to right.

407.4.6.3 Keypads. Car control keypads shall be in a standard telephone keypad arrangement and shall comply with 407.4.7.2.

407.4.6.4 Emergency Controls. Emergency controls shall comply with 407.4.6.4.

407.4.6.4.1 Height. Emergency control buttons shall have their centerlines 35 inches (890 mm) minimum above the finish floor.

407.4.6.4.2 Location. Emergency controls, including the emergency alarm, shall be grouped at the bottom of the panel.

407.4.7 Designations and Indicators of Car Controls. Designations and indicators of car controls shall comply with 407.4.7.

EXCEPTION: In existing elevators, where a new car operating panel complying with 407.4.7 is provided, existing car operating panels shall not be required to comply with 407.4.7.

407.4.7.1 Buttons. Car control buttons shall comply with 407.4.7.1.

407.4.7.1.1 Type. Control buttons shall be identified by tactile characters complying with 703.2.

407.4.7.1.2 Location. Raised character and braille designations shall be placed immediately to the left of the control button to which the designations apply.

EXCEPTION: Where space on an existing car operating panel precludes tactile markings to the left of the controls, markings shall be placed as near to the control as possible.

407.4.7.1.3 Symbols. The control button for the emergency stop, alarm, door open, door close, main entry floor, and phone, shall be identified with tactile symbols as shown in Table 407.4.7.1.3.

Table 407.4.7.1.3 Elevator Control Button Identification

407.4.7.1.4 Visible Indicators. Buttons with floor designations shall be provided with visible indicators to show that a call has been registered. The visible indication shall extinguish when the car arrives at the designated floor.

407.4.7.2 Keypads. Keypads shall be identified by characters complying with 703.5 and shall be centered on the corresponding keypad button. The number five key shall have a single raised dot. The dot shall be 0.118 inch (3 mm) to 0.120 inch (3.05 mm) base diameter and in other aspects comply with Table 703.3.1.

407.4.8 Car Position Indicators. Audible and visible car position indicators shall be provided in elevator cars.

407.4.8.1 Visible Indicators. Visible indicators shall comply with 407.4.8.1.

407.4.8.1.1 Size. Characters shall be 1/2 inch (13 mm) high minimum.

407.4.8.1.2 Location. Indicators shall be located above the car control panel or above the door.

407.4.8.1.3 Floor Arrival. As the car passes a floor and when a car stops at a floor served by the elevator, the corresponding character shall illuminate.

EXCEPTION: Destination-oriented elevators shall not be required to comply with 407.4.8.1.3 provided that the visible indicators extinguish when the call has been answered.

407.4.8.1.4 Destination Indicator. In destination-oriented elevators, a display shall be provided in the car with visible indicators to show car destinations.

407.4.8.2 Audible Indicators. Audible indicators shall comply with 407.4.8.2.

407.4.8.2.1 Signal Type. The signal shall be an automatic verbal annunciator which announces the floor at which the car is about to stop.

EXCEPTION: For elevators other than destination-oriented elevators that have a rated speed of 200 feet per minute (1 m/s) or less, a non-verbal audible signal with a frequency of 1500 Hz maximum which sounds as the car passes or is about to stop at a floor served by the elevator shall be permitted.

407.4.8.2.2 Signal Level. The verbal annunciator shall be 10 dB minimum above ambient, but shall not exceed 80 dB, measured at the annunciator.

407.4.8.2.3 Frequency. The verbal annunciator shall have a frequency of 300 Hz minimum to 3000 Hz maximum.

407.4.9 Emergency Communication. Emergency two-way communication systems shall comply with 308. Tactile symbols and characters shall be provided adjacent to the device and shall comply with 703.2.

CHAPTER 6: PLUMBING ELEMENTS AND FACILITIES

601 General

601.1 Scope. The provisions of Chapter 6 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

602 Drinking Fountains

602.1 General. Drinking fountains shall comply with 307 and 602.

602.2 Clear Floor Space. Units shall have a clear floor or ground space complying with 305 positioned for a forward approach and centered on the unit. Knee and toe clearance complying with 306 shall be provided.

EXCEPTION: A parallel approach complying with 305 shall be permitted at units for children's use where the spout is 30 inches (760 mm) maximum above the finish floor or ground and is 3 1/2 inches (90 mm) maximum from the front edge of the unit, including bumpers.

602.3 Operable Parts. Operable parts shall comply with 309.

602.4 Spout Height. Spout outlets shall be 36 inches (915 mm) maximum above the finish floor or ground.

602.5 Spout Location. The spout shall be located 15 inches (380 mm) minimum from the vertical support and 5 inches (125 mm) maximum from the front edge of the unit, including bumpers.

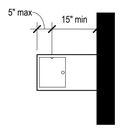


Figure 602.5 Drinking Fountain Spout Location

602.6 Water Flow. The spout shall provide a flow of water 4 inches (100 mm) high minimum and shall be located 5 inches (125 mm) maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than 3 inches (75 mm) of the front of the unit, the angle of the water stream shall be 30 degrees maximum. Where spouts are located between 3 inches (75 mm) and 5 inches (125 mm) maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum

Advisory 602.6 Water Flow. The purpose of requiring the drinking fountain spout to produce a flow of water 4 inches (100 mm) high minimum is so that a cup can be inserted under the flow of water to provide a drink of water for an individual who, because of a disability, would otherwise be incapable of using the drinking fountain.

602.7 Drinking Fountains for Standing Persons. Spout outlets of drinking fountains for standing persons shall be 38 inches (965 mm) minimum and 43 inches (1090 mm) maximum above the finish floor or ground.
5 mm) maximum above the finish floor or ground. Mirrors not
located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches (890 mm) maximum above the finish floor or ground.

Advisory 603.3 Mirrors. A single full-length mirror can accommodate a greater number of people, including children. In order for mirrors to be usable by people who are ambulatory and people who use wheelchairs, the top edge of mirrors should be 74 inches (1880 mm) minimum from the floor or ground.

603.4 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

603 Toilet and Bathing Rooms

603.1 General. Toilet and bathing rooms shall comply with 603.

603.2 Clearances. Clearances shall comply with 603.2.

603.2.1 Turning Space. Turning space complying with 304 shall be provided within the room. 603.2.2 Overlap. Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.

603.2.3 Door Swing. Doors shall not swing into the clear floor space or clearance required for any fixture. Doors shall be permitted to swing into the required turning space.

EXCEPTIONS:
1. Doors to a toilet room or bathing room for a single occupant accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space or clearance provided the swing of the door can be reversed to comply with 603.2.3.
2. Where the toilet room or bathing room is for individual use and a clear floor space complying with 305.3 is provided within the room beyond the arc of the door swing, doors shall be permitted to swing into the clear floor space or clearance required for any fixture.

Advisory 603.2.3 Door Swing Exception 1 . At the time the door is installed, and if the door swing is reversed in the future, the door must meet all the requirements specified in 404. Additionally, the door swing cannot reduce the required width of an accessible route. Also, avoid violating other building or life safety codes when the door swing is reversed.

603.3 Mirrors. Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the finish floor or ground. Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches (890 mm) maximum above the finish floor or ground.

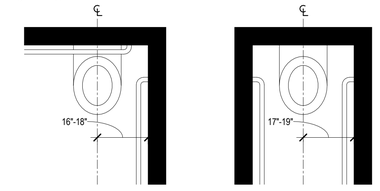
Advisory 603.3 Mirrors. A single full-length mirror can accommodate a greater number of people, including children. In order for mirrors to be usable by people who are ambulatory and people who use wheelchairs, the top edge of mirrors should be 74 inches (1880 mm) minimum from the floor or ground.

603.4 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the finish floor.

604 Water Closets and Toilet Compartments

604.1 General. Water closets and toilet compartments shall comply with 604.2 through 604.8. EXCEPTION: Water closets and toilet compartments for children's use shall be permitted to comply with 604.9.

604.2 Location. The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum to 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach.



(a) wheelchair accessible water closets

(b) ambulatory accessible water closets

Figure 604.2 Water Closet Location

604.3 Clearance. Clearances around water closets and in toilet compartments shall comply with 604.3.

604.3.1 Size. Clearance around a water closet shall be 60 inches (1525 mm) minimum measured perpendicular from the side wall and 56 inches (1420 mm) minimum measured perpendicular from the rear wall.

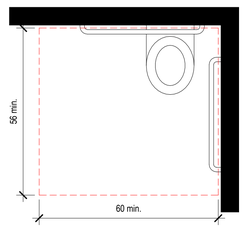


Figure 604.3.1 Size of Clearance at Water Closets

604.3.2 Overlap. The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, shelves, accessible routes, clear floor space and clearances required at other fixtures, and the turning space. No other fixtures or obstructions shall be located within the required water closet clearance.

EXCEPTION: In residential dwelling units, a lavatory complying with 606 shall be permitted on the rear wall 18 inches (455 mm) minimum from the water closet centerline where the clearance at the water closet is 66 inches (1675 mm) minimum measured perpendicular from the rear wall.

Advisory 604.3.2 Overlap. When the door to the toilet room is placed directly in front of the water closet, the water closet cannot overlap the required maneuvering clearance for the door inside the room.

Figure 604.3.2 (Exception) Overlap of Water Closet Clearance in Residential Dwelling Units

604.4 Seats. The seat height of a water closet above the finish floor shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

EXCEPTIONS:
1. A water closet in a toilet room for a single occupant accessed only through a private office and not for common use or public use shall not be required to comply with 604.4.
2. In residential dwelling units, the height of water closets shall be permitted to be 15 inches (380 mm) minimum and 19 inches (485 mm) maximum above the finish floor measured to the top of the seat.

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT ☆ GUILLERMO J. CAVAZOS JR. ☆ 20150 ☆ STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

ACCESSIBILITY STANDARDS

Drawn by:	JJM
Checked by:	Checker
Project number:	23-15
Project Issue Date:	10/25/24

G-004

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

702 Fire Alarm Systems

702.1 General. Fire alarm systems shall have permanently installed audible and visible alarms complying with NFPA 72 (1999 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1), except that the maximum allowable sound level of audible notification appliances complying with section 4-3.2.1 of NFPA 72 (1999 edition) shall have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance. In addition, alarms in guest rooms required to provide communication features shall comply with sections 4-3 and 4-4 of NFPA 72 (1999 edition) or sections 7.4 and 7.5 of NFPA 72 (2002 edition).

EXCEPTION: Fire alarm systems in medical care facilities shall be permitted to be provided in accordance with industry practice.

703 Signs

703.1 General. Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

703.2 Raised Characters. Raised characters shall comply with 703.2 and shall be duplicated in braille complying with 703.3. Raised characters shall be installed in accordance with 703.4. Advisory 703.2 Raised Characters. Signs that are designed to be read by touch should not have sharp or abrasive edges.

703.2.1 Depth. Raised characters shall be 1/32 inch (0.8 mm) minimum above their background.

703.2.2 Case. Characters shall be uppercase.

703.2.3 Style. Characters shall be sans serif. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.2.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

703.2.5 Character Height. Character height measured vertically from the baseline of the character shall be 5/8 inch (16 mm) minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter "I".

EXCEPTION: Where separate raised and visual characters with the same information are provided, raised character height shall be permitted to be 1/2 inch (13 mm) minimum.

703.2.6 Stroke Thickness. Stroke thickness of the uppercase letter "I" shall be 15 percent maximum of the height of the character.

703.2.7 Character Spacing. Character spacing shall be measured between the two closest points of adjacent raised characters within a message, excluding word spaces. Where characters have rectangular cross sections, spacing between individual raised characters shall be 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum. Where characters have other cross sections, spacing between individual raised characters shall be 1/16 inch (1.6 mm) minimum and 4 times the raised character stroke width maximum at the base of the cross sections, and 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum at the top of the cross sections. Characters shall be separated from raised borders and decorative elements 3/8 inch (9.5 mm) minimum.

703.2.8 Line Spacing. Spacing between the baselines of separate lines of raised characters within a message shall be 135 percent minimum and 170 percent maximum of the raised character height.

703.3 Braille. Braille shall be contracted (Grade 2) and shall comply with 703.3 and 703.4.

703.3.1 Dimensions and Capitalization. Braille dots shall have a domed or rounded shape and shall comply with Table 703.3.1. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.

TABLE 703.3.1 Braille Dimensions

Measurement Range	Minimum in Inches to Maximum in Inches
Dot base diameter	0.059 to 0.063
Distance between two dots in the same cell[1]	0.090 to 0.100
Distance between corresponding dots in adjacent cells[1]	0.241 to 0.300
Dot height	0.025 to 0.037
Distance between corresponding dots from one cell directly below[1]	0.395 to 0.400

703.3.2 Position. Braille shall be positioned below the corresponding text. If text is multi-lined, braille shall be placed below the entire text. Braille shall be separated 3/8 inch (9.5 mm) minimum from any other tactile characters and 3/8 inch (9.5 mm) minimum from raised borders and decorative elements.

EXCEPTION: Braille provided on elevator car controls shall be separated 3/16 inch (4.8 mm) minimum and shall be located either directly below or adjacent to the corresponding raised characters or symbols.

703.4 Installation Height and Location. Signs with tactile characters shall comply with 703.4.

703.4.1 Height Above Finish Floor or Ground. Tactile characters on signs shall be located 48 inches (1220 mm) minimum above the finish floor or ground surface, measured from the baseline of the lowest tactile character and 60 inches (1525 mm) maximum above the finish floor or ground surface, measured from the baseline of the highest tactile character.

EXCEPTION: Tactile characters for elevator car controls shall not be required to comply with 703.4.1.

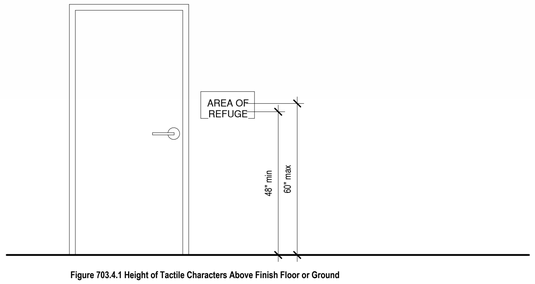

Figure 703.4.1 Height of Tactile Characters Above Finish Floor or Ground

703.4.2 Location. Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leafs, the sign shall be located to the right of the right hand door. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing tactile characters shall be located so that a clear floor space of 18 inches (455 mm) minimum by 18 inches (455 mm) minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

EXCEPTION: Signs with tactile characters shall be permitted on the push side of doors with closers and without hold-open devices.

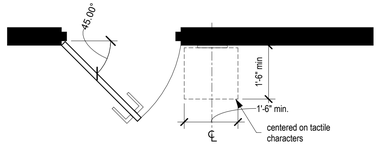

Figure 703.4.2 Location of Tactile Signs at Doors

703.5 Visual Characters. Visual characters shall comply with 703.5.

EXCEPTION: Where visual characters comply with 703.2 and are accompanied by braille complying with 703.3, they shall not be required to comply with 703.5.2 through 703.5.9.

703.5.1 Finish and Contrast. Characters and their background shall have a non-glare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

Advisory 703.5.1 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and its background colors and textures.

703.5.2 Case. Characters shall be uppercase or lowercase or a combination of both.

703.5.3 Style. Characters shall be conventional in form. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.5.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

703.5.5 Character Height. Minimum character height shall comply with Table 703.5.5. Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign. Character height shall be based on the uppercase letter "I".

TABLE 703.5.5. Visual Character Height

Height to Finish Floor or Ground From Baseline of Character	Horizontal Viewing Distance	Minimum Character Height
40 inches to less than or equal to 70 inches	less than 72 inches	5/8 inch
	72 inches and greater	5/8 inch, plus 1/8 inch per foot of viewing distance above 72 inches
Greater than 70 inches to less than or equal to 120 inches	less than 180 inches	2 inches
	180 inches and greater	2 inches, plus 1/8 inch per foot of viewing distance above 180 inches
greater than 120 inches	less than 21 feet	3 inches
	21 feet and greater	3 inches plus 1/8 inch per foot of viewing distance above 21 feet

703.5.6 Height From Finish Floor or Ground. Visual characters shall be 40 inches (1015 mm) minimum above the finish floor or ground.

EXCEPTION: Visual characters indicating elevator car controls shall not be required to comply with 703.5.6.

703.5.7 Stroke Thickness. Stroke thickness of the uppercase letter "I" shall be 10 percent minimum and 30 percent maximum of the height of the character.

703.5.8 Character Spacing. Character spacing shall be measured between the two closest points of adjacent characters, excluding word spaces. Spacing between individual characters shall be 10 percent minimum and 35 percent maximum of character height.

703.5.9 Line Spacing. Spacing between the baselines of separate lines of characters within a message shall be 135 percent minimum and 170 percent maximum of the character height.

703.6 Pictograms. Pictograms shall comply with 703.6.

703.6.1 Pictogram Field. Pictograms shall have a field height of 6 inches (150 mm) minimum. Characters and braille shall not be located in the pictogram field.

703.6.2 Finish and Contrast. Pictograms and their field shall have a non-glare finish. Pictograms shall contrast with their field with either a light pictogram on a dark field or a dark pictogram on a light field.

Advisory 703.6.2 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures.

703.6.3 Text Descriptors. Pictograms shall have text descriptors located directly below the pictogram field. Text descriptors shall comply with 703.2, 703.3 and 703.4.

703.7 Symbols of Accessibility. Symbols of accessibility shall comply with 703.7.

703.7.1 Finish and Contrast. Symbols of accessibility and their background shall have a non-glare finish. Symbols of accessibility shall contrast with their background with either a light symbol on a dark background or a dark symbol on a light background.

Advisory 703.7.1 Finish and Contrast . Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures.

705 Detectable Warnings

705.1 General. Detectable warnings shall consist of a surface of truncated domes and shall comply with 705.

705.1.1 Dome Size. Truncated domes in a detectable warning surface shall have a base diameter of 0.9 inch (23 mm) minimum and 1.4 inches (36 mm) maximum, a top diameter of 50 percent of the base diameter minimum to 65 percent of the base diameter maximum, and a height of 0.2 inch (5.1 mm).

705.1.2 Dome Spacing. Truncated domes in a detectable warning surface shall have a center-tocenter spacing of 1.6 inches (41 mm) minimum and 2.4 inches (61 mm) maximum, and a base-tobase spacing of 0.65 inch (17 mm) minimum, measured between the most adjacent domes on a square grid.

705.1.3 Contrast. Detectable warning surfaces shall contrast visually with adjacent walking surfaces either light-on-dark, or dark-on-light.

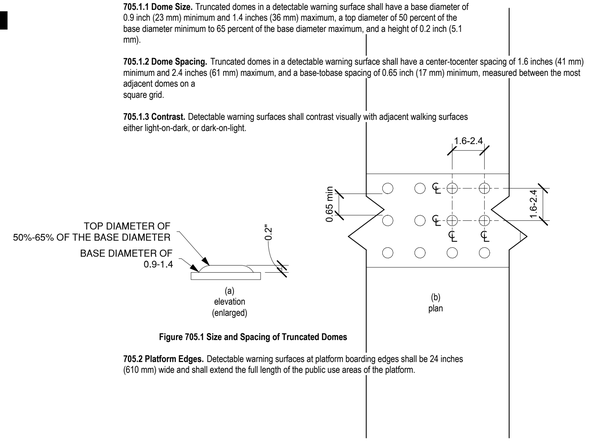

Figure 705.1 Size and Spacing of Truncated Domes

705.2 Platform Edges. Detectable warning surfaces at platform boarding edges shall be 24 inches (610 mm) wide and shall extend the full length of the public use areas of the platform.

208 Parking Spaces

208.1 General. Where parking spaces are provided, parking spaces shall be provided in accordance with 208.

EXCEPTION: Parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles, or vehicular impound shall not be required to comply with 208 provided that lots accessed by the public are provided with a passenger loading zone complying with 503.

208.2 Minimum Number. Parking spaces complying with 502 shall be provided in accordance with Table 208.2 except as required by 208.2.1, 208.2.2, and 208.2.3. Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.

TABLE 208.2 PARKING SPACES

Total Number of Parking Spaces Provided in Parking Facility	Minimum Number of Required Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

Advisory 208.2 Minimum Number. The term "parking facility" is used Section 208.2 instead of the term "parking lot" so that it is clear that both parking lots and parking structures are required to comply with this section. The number of parking spaces required to be accessible is to be calculated separately for each parking facility; the required number is not to be based on the total number of parking spaces provided in all of the parking facilities provided on the site.

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT ☆ GUILLERMO J. CAVAZOS JR. ☆ 20150 ☆ STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

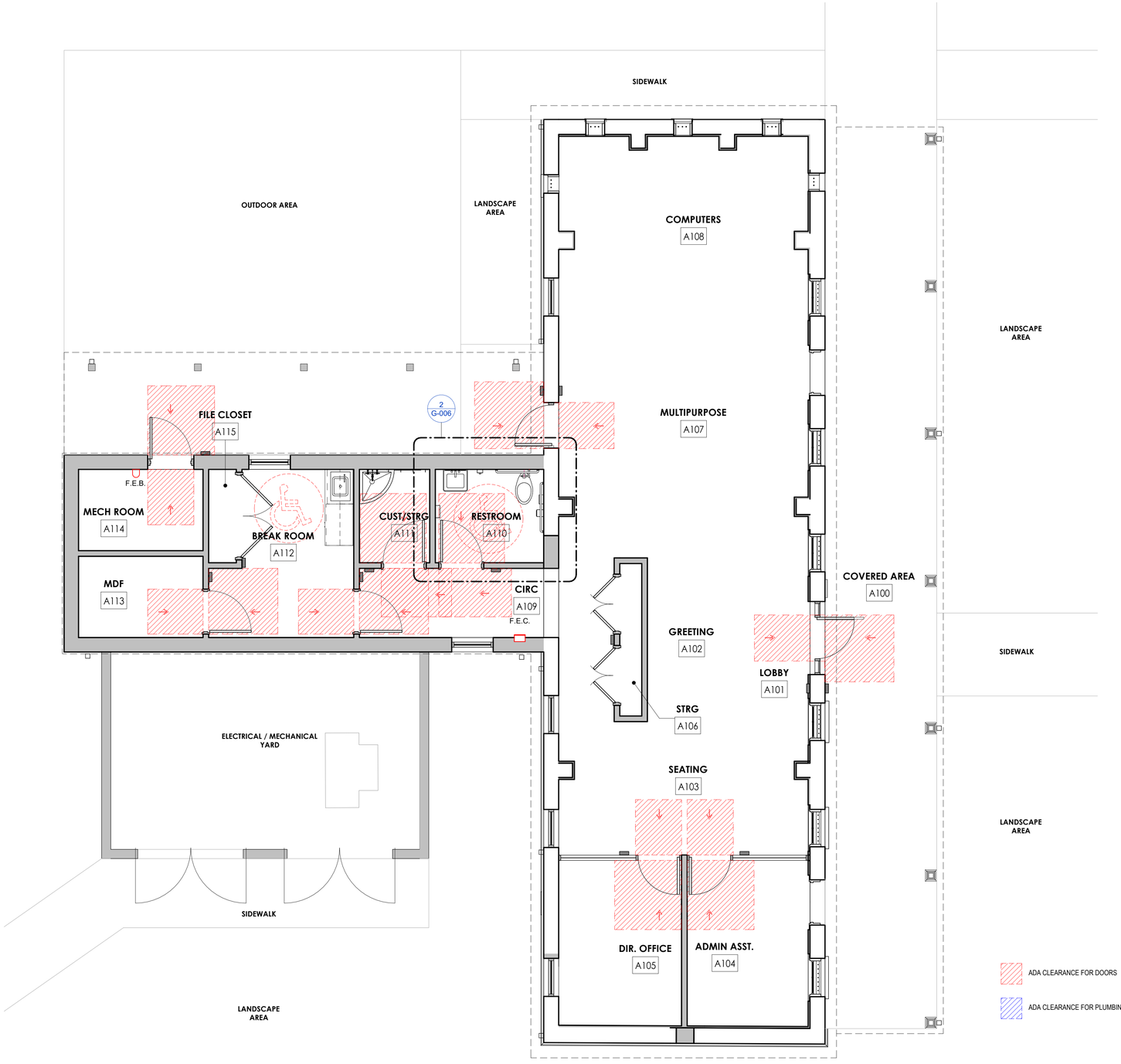
KEY PLAN

ACCESSIBILITY STANDARDS

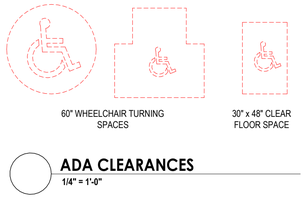
Drawn by:	JJM
Checked by:	Checker
Project number:	23-15
Project Issue Date:	10/25/24

G-005

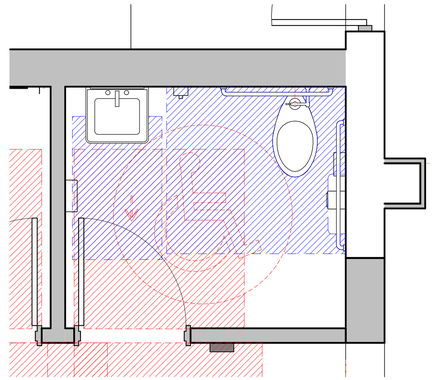
Scale: As indicated



1 **TAS FLOOR PLAN**
1/4" = 1'-0"



ADA CLEARANCES
1/4" = 1'-0"



2 **TAS RESTROOM PLAN**
1/2" = 1'-0"

ADA CLEARANCE FOR DOORS

ADA CLEARANCE FOR PLUMBING FIXTURES

N
PROJECT NORTH

N
TRUE NORTH

CAVAZOS ARCHITECTS
9114 MCPHERSON RD. STE 2501
LAREDO, TX 78045
P: (956) 724-8123
memo@cavazosarch.com

Veterans Services Center
Laredo College
Sheridan Rd, Laredo, TX 78040

CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS, JR.
20150
STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

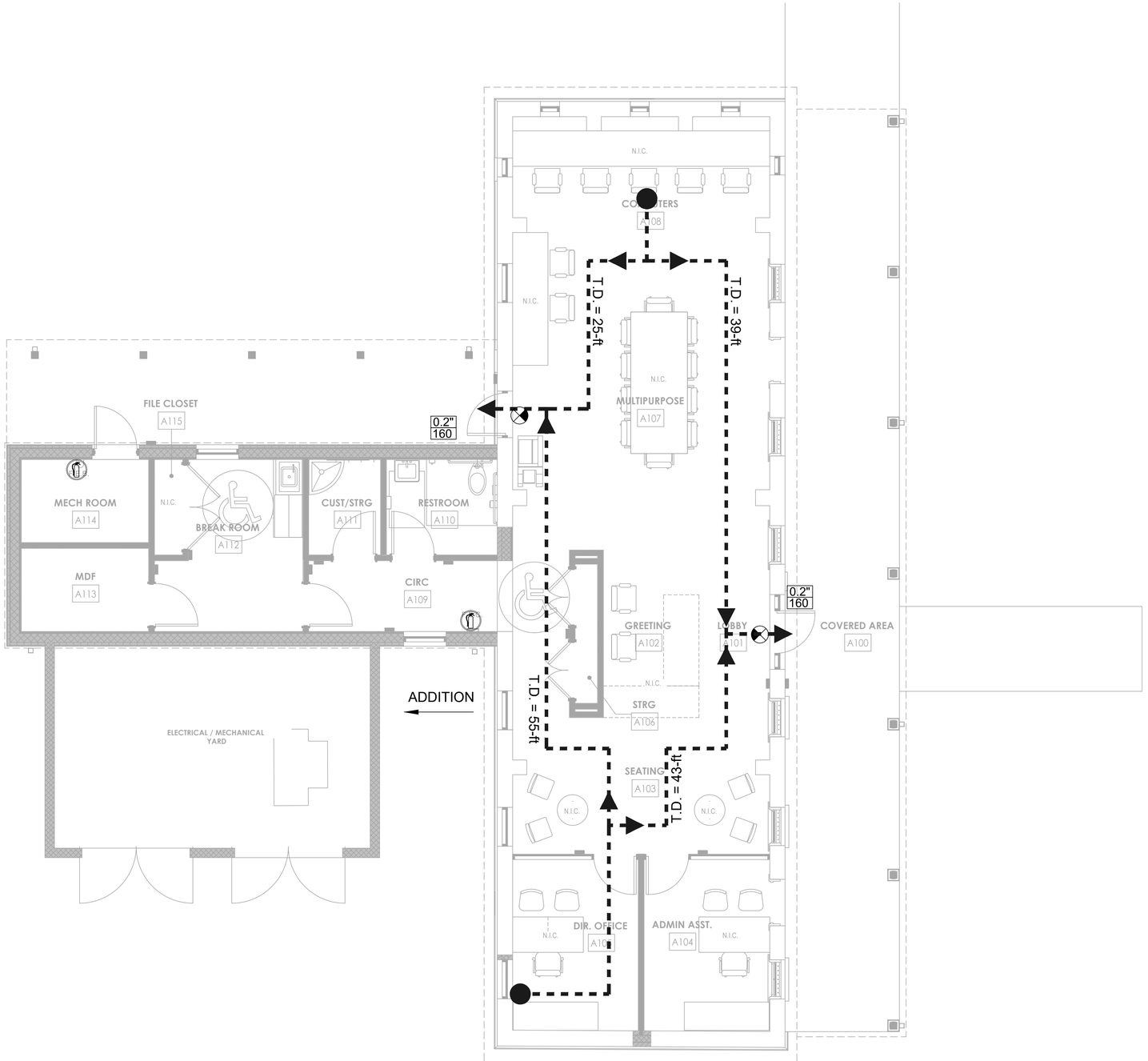
KEY PLAN

TAS FLOOR PLAN

Drawn by:	JJM
Checked by:	Checker
Project number:	23-15
Project Issue Date:	10/25/24

G-006

Scale: As indicated



1 LIFE SAFETY PLAN
SCALE: 1/4" = 1'-0"

N
PROJECT NORTH
TRUE NORTH

APPLICABLE LIFE SAFETY CODES

1. 2018 International Building Code
2. 2018 International Fire Code
3. COL Amendments

BUILDING NOTES

1. Type of Construction: Type VB
2. Height in Stories: 1
3. Building Area: 2,064 sf
4. Primary Occupancy: Group B
5. Fire Protection: None
6. Fire Alarm: None
7. Calculated Occupant Load: 24 occupants

ALLOWABLE HEIGHT & AREA

1. Occupancy: Group B
2. Construction Type: Type VB
3. Allowable Height: 40-ft; 2 stories
4. Frontage Increase: Not needed
5. Sprinkler Increase: No
6. Total Building Allowable Area: 9,000 sf

MEANS OF EGRESS

1. Required Exits: 1
2. Provided Exits: 2
3. Exit Capacity: 320 occupants
4. Allowed Travel Distance: 250-ft
5. Allowed Common Path of Travel: 75-ft
6. Allowed Dead End: 20-ft

SYMBOLS & ABBREVIATIONS

0.2" / 160 — EGRESS FACTOR / EGRESS CAPACITY (# OCCUPANTS)

TRAVEL DISTANCE (T.D.)

EXIT SIGNAGE (Primary exit access doors and exits identified only. See electrical plans/specifications for final #, location, type, & directional indicators)

PORTABLE FIRE EXTINGUISHER (Proposed locations. Coordinate final required # & location with fire code official)

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CONSTRUCTION DOCUMENTS

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No.	Description	Date

KEY PLAN

LIFE SAFETY PLAN

Drawn by:	JJMR
Checked by:	GC
Project number:	23-15
Project Issue Date:	10-24-24

LS-1.0

Scale: 1/4" = 1'

GOVERNING SPECIFICATIONS

CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS MANUAL
- DIVISION D

TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION

GENERAL

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL ENSURE THAT THE NOTICE OF INTENT (NOI) HAS BEEN FILED AND POSTED ONSITE, IF REQUIRED.

CONTRACTOR IS REQUIRED TO VISIT SITE AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PLACING A BID. BID SHALL BE ALL INCLUSIVE OF WORK REQUIRED TO COMPLETE THE PROJECT.

CONTRACTOR SHALL REFER TO THE GEOTECHNICAL ENGINEERING REPORT NO. 24G034 "GEOTECHNICAL ENGINEERING STUDY, LAREDO COLLEGE VETERANS CENTER FORT MCINTOSH CAMPUS WEST END WASHINGTON STREET" LAREDO, TEXAS, BY CASTLE ENGINEERING & TESTING, LLC, 956-727-3530.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION AND THE PROPER REMOVAL/DISPOSAL OF ALL ABOVE GROUND ITEMS INCLUDING BUT NOT LIMITED TO CONCRETE CHANNELS, IRRIGATION PIPES, IRRIGATION APPARATUS, TREES, TRASH, AND MISCELLANEOUS DEBRIS. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO LOCATE THE EXISTING FACILITIES. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING SERVICES VERIFYING UTILITIES ARE SHUT OFF OR DISCONNECTED, AND ALL POSSIBLE SAFETY PRECAUTIONS HAVE BEEN ENACTED TO ENSURE THE SAFEST ENVIRONMENT FOR ALL PERSONNEL. THE CONTRACTOR SHALL ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL THE PERMITTING AUTHORITIES.

THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING FACILITIES FROM DAMAGE AND COST OF REPAIR TO EXISTING FACILITIES AND IMPROVEMENTS AS A RESULT OF THE CONTRACTOR'S WORK. ANY EXISTING PAVEMENT, CURBS, BUILDINGS, SIGNS, SIDEWALKS, WALLS, FENCES, UTILITY INFRASTRUCTURE, TREES, AND ETC. DAMAGED OR REMOVED WILL BE REPAIRED/REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE TO EQUAL OR BETTER CONDITION.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO DEVELOP THE CONTRACTORS PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S PLANS SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH, AS MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS, SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL CONSTRUCTION ACTIVITIES UNDER THE REQUIREMENTS OF THE CITY OF LAREDO. THIS INCLUDES ALL NECESSARY PERMITS FOR CONSTRUCTION BOTH INSIDE AND OUTSIDE OF THE CONSTRUCTION PROPERTY BOUNDARIES. NO CONSTRUCTION ACTIVITIES SHALL COMMENCE UNTIL PROPER CLEARANCE IS PROVIDED BY THE APPROPRIATE CITY OF LAREDO DEPARTMENTS AND/OR TEXAS DEPARTMENT OF TRANSPORTATION.

CONTRACTOR SHALL INCLUDE IN HIS BID ANY AND ALL NECESSARY TESTING PRIOR TO, DURING AND AFTER CONSTRUCTION ACTIVITIES.

CONTRACTOR SHALL INCLUDE IN HIS BID CONSTRUCTION STAKE OUT. CONSTRUCTION STAKING SHALL BE PERFORMED BY CIVIL ENGINEERING CONSULTANTS.

CONTRACTOR SHALL ADHERE TO ALL GEOTECHNICAL RECOMMENDATIONS FOR ROAD SECTIONS, COMPACTION AND TESTING. CONTRACTOR SHALL PROVIDE ADEQUATE BARRICADES WHILE WORKING ONSITE TO ENSURE SAFETY FOR THE PUBLIC.

ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS PROJECT NOT SPECIFICALLY COVERED ON THESE PLANS SHALL CONFORM TO ALL APPLICABLE CITY OF LAREDO STANDARD TECHNICAL SPECIFICATION MANUAL SPECIFICATIONS.

CONTROL / BENCHMARK DATA

THE CONTRACTOR SHALL LAY OUT THE WORK FROM THE OWNER'S ESTABLISHED PROPERTY BOUNDARY CONTROL AND BENCHMARKS, AS INDICATED ON THE CONTROL DATA SHEET. THE CONTRACTOR SHALL COORDINATE ANY ADDITIONAL DIMENSIONS NEEDED WITH THE ENGINEER PRIOR TO CONSTRUCTION ACTIVITIES.

UTILITIES

ALL UTILITIES INSTALLATION SHALL COMPLY WITH THE CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS MANUAL - DIVISION D

AS REQUIRED BY THE "TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT", TEXAS ONE CALL MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS PERFORMED. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM.

LOCATIONS OF UTILITIES SHOWN HEREIN WERE DERIVED FROM BEST AVAILABLE SOURCES AND FIELD SURVEYS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION, DEPTH, AND SIZES OF ALL UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO CONSTRUCTION AND SHALL BE LIABLE FOR ANY DAMAGES OR DOWN TIME CAUSED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES ELECTRICAL, CABLE AND PHONE LINE EXTENSIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PRIMARY AND SECONDARY UTILITY TRENCHING AND CONDUIT INSTALLATIONS AS REQUIRED FOR THE PROJECT. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR FINAL LOCATIONS. UNDERGROUND UTILITY LINES SHOWN ON THE PLANS CONSTITUTE AN ATTEMPT BY THE ENGINEER TO LOCATE THESE UTILITIES FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL FIELD LOCATE ALL UNDERGROUND UTILITY LINES AND MAKE PROVISIONS FOR THEIR PROTECTION. ALL UNDERGROUND ELECTRICAL, TELEPHONE, AND CABLE LINES MAY NOT BE SHOWN ON THESE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO DETERMINE LOCATIONS, DEPTHS, AND LINE SIZES. THE CONTRACTOR SHALL PROVIDE TRENCHING AND BACKFILL FOR THE UTILITY COMPANIES, AS REQUIRED.

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT BOTH OVERHEAD AND UNDERGROUND UTILITIES EXIST IN THE VICINITY OF THE CONSTRUCTION AREA. THE EXACT LOCATION OF UNDERGROUND UTILITIES IS NOT CERTAIN. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE AREA UTILITY COMPANIES FOR EXACT LOCATIONS AT LEAST 48 HOURS PRIOR TO CONSTRUCTION OR COMMENCING ANY WORK SO AS TO PREVENT ANY DAMAGE OR INTERFERENCE WITH PRESENT UTILITIES.

WHEN THE CONTRACTOR IS WORKING NEAR ANY POWER LINES, IT IS HIS/HER RESPONSIBILITY TO COMPLY WITH THE APPROPRIATE SECTIONS OF TEXAS STATE LAW AND FEDERAL REGULATIONS RELATING TO THE TYPE OF WORK INVOLVED.

THE CONTRACTOR SHALL SUBMIT THE UTILITY LOCATE CONFIRMATION NUMBER TO ENGINEER PRIOR COMMENCING CONSTRUCTION ACTIVITIES.

CLEARANCE FROM EACH UTILITY COMPANY SHALL BE OBTAINED PRIOR TO CONSTRUCTION ACTIVITIES.

CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL ANY FIELD CHANGES IN THE UTILITY LINE GRADES TO ACHIEVE THE DESIGN REQUIRED.

ANY OTHER WORK REQUIRED TO ACCOMPLISH THESE CHANGES IN GRADE WILL BE INCLUDED IN THE PRICE OF THE LINE IN PLACE.

ANY DAMAGE TO CITY OR PRIVATE UTILITY LINES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER, THE CITY AND/OR APPROPRIATE UTILITY COMPANY.

REPAIRS TO THESE UTILITY LINES WILL BE AT THE DIRECTION OF THE CITY AND/OR THE UTILITY COMPANY AFFECTED AND WILL BE AT THE CONTRACTORS EXPENSE.

THE CONTRACTOR SHALL REMOVE, REPLACE AND RESTORE TO ORIGINAL CONDITION, ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ACTIVITIES.

THE CONTRACTOR SHALL COORDINATE ANY UTILITY WORK DONE WITHIN CITY R.O.W. INCLUDING BUT NOT LIMITED TO TRENCHING AND CONNECTING TO EXISTING UTILITY INFRASTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING TO EXISTING CONDITION ALL UTILITY DAMAGES. IN THE CASE OF A UTILITY CONNECTION, THE CONTRACTOR SHALL INSTALL ANY CONNECTIONS AS PER THE CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS MANUAL.

IF ANY OVERHEAD OR UNDERGROUND ELECTRICAL LINES NEED TO BE DE-ENERGIZED, THE CONTRACTOR SHALL CALL THE POWER COMPANY TO DO THIS WORK.

CONTRACTOR SHALL INCLUDE IN HIS BID THE REQUIRED ADJUSTMENT OF ALL VALVES, VALVE COVERS, MANHOLE LIDS, FIRE HYDRANTS, CLEANOUTS, TELEPHONE PEDESTALS, AND ANY OTHER MISC. UTILITY ITEM WHETHER SHOWN ON THESE PLANS OR NOT.

ALL UTILITY BACKFILL SHALL CONFORM WITH CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS.

CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS ASSOCIATED WITH EXTENSION OF SERVICES TO THE PROPOSED FACILITY INCLUDING GAS, TELEPHONE, DATA, CABLE, AND ELECTRICAL.

ALL ELECTRICAL UTILITY CONDUIT SHALL BE 4" GREY SCHEDULE 40 PIPE.

WATER AND SEWER UTILITY LINE CROSSINGS SMALLER THAN 6" ARE NOT SHOWN ON PROFILE VIEWS. CONTRACTOR IS RESPONSIBLE TO LOCATE AND ADJUST THESE LINES AS PER CITY OF LAREDO STANDARD SPECIFICATIONS AND TCEQ REQUIREMENTS.

EARTHWORK AND GRADING

ALL PROJECT ELEVATIONS ARE ESTABLISHED BASED ON THE PROVIDED CONTROL ELEVATIONS. THE CONTRACTOR SHALL TAKE INTO CONSIDERATION THE ROADWAY SECTIONS, BUILDING SUBGRADE PREPARATION, AND ANY OTHER ELEVATIONS NOT PART OF THE PROPOSED NATURAL GROUND WHEN MAKING CUT AND FILL CALCULATIONS. ALL GRADING OF PROPOSED NATURAL GROUND SHALL BE GRADED TO DRAIN AND SHALL NOT EXCEED 3:1 SLOPE UNLESS OTHERWISE NOTED ON THE PLANS.

CONTRACTOR SHALL SAW-CUT AND/OR ADJUST EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH AND CONTINUOUS TRANSITION GRADE.

CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE CONDITIONS DURING ALL CONSTRUCTION PHASES OF THE PROJECT UNTIL THE PERMANENT DRAINAGE FACILITIES ARE CONSTRUCTED AND READY TO USE. HANDLE ALL EXCAVATED AND STOCKPILED MATERIAL IN SUCH A WAY THAT IT WILL NOT BLOCK DRAINAGE OR DAMAGE EXISTING ENVIRONMENTAL ITEMS.

THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL REQUIREMENTS SET FORTH BY THE GEOTECHNICAL REPORT. ALL DEWATERING AND ROCK CUTTING MEASURES SHALL BE PART OF BASE BID UNLESS OTHERWISE IDENTIFIED ON THE PLANS.

CONTRACTOR SHALL ENSURE THE SAFETY OF WORKERS DURING EXCAVATION ACTIVITIES. THE CONTRACTOR SHALL INSTALL TRENCH SAFETY MEASURES WHEN TRENCHING MORE THAN 5 FEET OF DEPTH. TRENCHING MORE THAN 20 FEET OF DEPTH REQUIRES A PROTECTIVE SYSTEM DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER OR BASED ON TABULATED DATA PREPARED AND/OR APPROVED BY A REGISTERED PROFESSIONAL ENGINEER IN ACCORDANCE WITH OSHA REGULATION 1926.652(B) AND (C).

WATER DISTRIBUTION SYSTEMS

ALL WATER LINE IMPROVEMENTS SHALL COMPLY WITH THE CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS MANUAL - DIVISION D, SECTION 100 & TCEQ REQUIREMENTS.

THE EXISTING WATER DISTRIBUTION SYSTEM SHOWN ON THE PLANS IS THE ENGINEER'S BEST ATTEMPT AT RECREATING THE EXISTING WATER DISTRIBUTION SYSTEM. THE CONTRACTOR IS RESPONSIBLE OF FIELD VERIFYING THE LOCATION OF ANY WATER LINE COMPONENTS AND REPORTING ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER AND THE CITY OF LAREDO UTILITIES DEPARTMENT. ANY DAMAGES TO THE REMAINING EXISTING WATER DISTRIBUTION COMPONENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPLACED TO EXISTING CONDITION AS DEEMED ADEQUATE BY ENGINEER AND CITY OF LAREDO UTILITIES DEPARTMENT.

ALL GATE VALVES, AND MANHOLES SHALL HAVE A CONCRETE COLLAR AS PER CITY OF LAREDO SPECIFICATIONS.

WET CONNECTIONS MUST BE MADE IN THE PRESENCE OF THE CITY OF LAREDO UTILITIES INSPECTOR. PROVIDE AT LEAST 48 HOUR ADVANCE NOTICE.

ALL MECHANICAL RESTRAINT JOINT FITTINGS AND VALVES SHALL BE MADE IN THE USA AND HAVE 316 SS BOLTS AND NUTS.

CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS AND PAYING ALL FEES REQUIRED FOR THE PROPER INSTALLATION OF THE WATER METER AND BACKFLOW PREVENTERS.

CONTRACTOR SHALL ADJUST ALL EXISTING METER BOXES, VALVES, COVERS, WATER DISTRIBUTION MANHOLES, AIR RELEASE VALVE ASSEMBLIES, ETC. TO PROPOSED GRADES.

CONNECT ALL WATER SERVICES AFTER PRESSURE & BACTERIOLOGICAL TESTS ARE APPROVED.

THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF LAREDO UTILITIES DEPARTMENT ANY VALVE SHUT-OFF LOCATIONS AND SHUT-OFF TIMES.

FOR ALL WATER TIE-IN CONNECTIONS, THE CONTRACTOR SHALL PROVIDE MECHANICAL JOINT RESTRAINED FITTINGS. ALL RESTRAINTS AND CORRESPONDING LENGTHS SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE APPROPRIATE USE AND RESTRAINT LENGTH REQUIREMENTS FROM THE MANUFACTURER. SHALL THERE BE ANY DISCREPANCIES BETWEEN THE RESTRAINT LENGTH CALCULATIONS SHOWN ON THESE PLANS AND THE MANUFACTURER'S RECOMMENDATIONS, THE MANUFACTURER'S RECOMMENDATIONS SHALL GOVERN. THE CONTRACTOR MAY USE MEGALUG RESTRAINTS OR EQUAL. IF OTHER IS USED, CONTRACTOR SHALL PROVIDE CALCULATIONS TO THE ENGINEER DEMONSTRATING EQUIVALENT OR BETTER DESIGN SPECIFICATIONS AND SHALL BE INCLUDED IN A SUBMITTAL FOR APPROVAL.

THE CONTRACTOR SHALL MAINTAIN MINIMUM THE WALL-TO-WALL SEPARATION BETWEEN SEWER AND WATER UTILITIES AS REQUIRED BY TCEQ REGULATIONS. IF ANY DISCREPANCIES BETWEEN THIS NOTE AND TCEQ REGULATIONS EXIST, TCEQ REGULATIONS SHALL GOVERN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL TCEQ REGULATIONS PRIOR TO UTILITY WORK.

PROPOSED FIRE HYDRANTS CALLED OUT ON THESE PLANS IMPLY THE INSTALLATION OF A COMPLETE FIRE HYDRANT ASSEMBLY AS PER THE CITY OF LAREDO STANDARD SPECIFICATION MANUAL. THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF INSTALLING ALL FIRE HYDRANT ASSEMBLIES INCLUDING THE CONNECTION TO THE MAIN LINE.

ALL WATER LINES SHALL BE PRESSURE TESTED AND DISINFECTED AS PER THE CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS MANUAL - DIVISION D, SECTION 116 & SECTION 118. CONNECTIONS TO EXISTING WATER DISTRIBUTION SYSTEMS CAN ONLY OCCUR AFTER THE CITY OF LAREDO UTILITIES DEPARTMENT HAS BEEN NOTIFIED OF PROPOSED CONNECTION, HAS APPROVED TESTING PROCEDURES, AND ALLOWS SUCH CONNECTION BY THE CONTRACTOR.

ALL WATER SERVICES SHALL BE MAINTAINED ACTIVE THROUGH THE DURATION OF THE PROJECT. ANY WORK THAT REQUIRES THE WATER SERVICES TO BE SHUT-OFF SHALL BE COORDINATED WITH THE CITY OF LAREDO UTILITIES DEPARTMENT. ANY SERVICE SHUT-OFFS WILL ONLY BE ALLOWED DURING NIGHT-TIME HOURS FOR A PERIOD OF TIME NO LONGER THAN 4 HOURS. ANY RESIDENTS WHO WILL BE IMPACTED BY THE SERVICE SHUTOFF SHALL BE NOTIFIED NO LESS THAN 24 HOURS IN ADVANCE.

WATER LINE LENGTHS SHOWN ON PLAN-AND-PROFILE SHEETS ARE TAKEN FROM CROSS FITTING TO CROSS FITTING LOCATIONS AT EACH INTERSECTION OR CROSS FITTING TO DEAD END.

THE CONTRACTOR SHALL INSTALL ALL DEAD WATERLINE CAPS WITH A 2" TEMPORARY BLOW-OFF HYDRANT UNLESS OTHERWISE NOTED ON THE PLANS.

SANITARY SEWER SYSTEMS

ALL SANITARY SEWER IMPROVEMENTS SHALL COMPLY WITH THE CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS - DIVISION D, SECTION 200.

THE EXISTING SANITARY SEWER SYSTEM SHOWN ON THE PLANS IS THE ENGINEER'S BEST ATTEMPT AT RECREATING THE EXISTING SANITARY SEWER SYSTEM. THE CONTRACTOR IS RESPONSIBLE OF FIELD VERIFYING THE LOCATION OF ANY SANITARY SEWER COMPONENTS AND REPORTING ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER AND THE CITY OF LAREDO UTILITIES DEPARTMENT. ANY DAMAGES TO EXISTING SANITARY SEWER COMPONENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPLACED TO EXISTING CONDITION AS DEEMED ADEQUATE BY ENGINEER AND CITY OF LAREDO UTILITIES DEPARTMENT.

CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC CONTROL MEASURES WHEN WORKING WITHIN THE R.O.W FOR SEWER LINE EXTENSION. ALL WORK SHALL BE COMPLETED DURING NON PEAK TRAFFIC TIMES. COORDINATE W/ CITY PRIOR TO CONSTRUCTION.

THE CONTRACTOR SHALL MAINTAIN MINIMUM THE WALL-TO-WALL SEPARATION BETWEEN SEWER AND WATER UTILITIES AS REQUIRED BY TCEQ REGULATIONS. IF ANY DISCREPANCIES BETWEEN THIS NOTE AND TCEQ REGULATIONS EXIST, TCEQ REGULATIONS SHALL GOVERN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL TCEQ REGULATIONS PRIOR TO UTILITY WORK.

THE CONTRACTOR WILL BE REQUIRED TO ABANDON, REMOVE, OR REPLACE SANITARY SEWER LINES AND MANHOLES AS SHOWN ON THESE PLANS AND REQUIRED BY EXISTING FIELD CONDITIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE OUTCOME OF EXISTING UTILITIES THAT MUST BE ABANDONED, REMOVED, OR REPLACED.

ABANDONMENT OF LINES AND MANHOLES SHALL COMPLY WITH SECTION 216 OF THE CITY OF LAREDO STANDARD SPECIFICATIONS. IF ABANDONMENT OF AN INLET, CLEANOUT, AND MANHOLE IS REQUIRED, IT SHALL BE REMOVED COMPLETELY TO A DEPTH OF ONE FOOT BELOW THE BOTTOM OF THE TRENCH. IN EACH INSTANCE, THE BOTTOM OF THE TRENCH SHALL BE RESTORED TO GRADE BY BACKFILLING AND COMPACTING BY THE METHODS PROVIDED HEREIN FOR BACKFILL. REFER TO SECTION 102 - EXCAVATION AND BACKFILL FOR UTILITIES.
(THIS NOTE IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE. IF A DISCREPANCY BETWEEN THIS NOTE AND THE CITY OF LAREDO STANDARD SPECIFICATION MANUAL EXISTS, THE CITY OF LAREDO STANDARD SPECIFICATION SHALL GOVERN.)

SANITARY SEWER INVERTS FLOWING INTO MANHOLES WITH AN INVERT-TO-FLOW ELEVATION DIFFERENCE GREATER THAN 2 FEET SHALL HAVE A MANHOLE DROP INSTALLED AS PER CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS MANUAL - STANDARD TYPICAL DETAILS SECTION.

CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLES TO PROPOSED GRADE.

IF SANITARY SEWER SERVICES ARE FOUND THAT ARE NOT SHOWN ON THESE PLANS, THE CONTRACTOR SHALL TIE-IN TO PROPOSED SEWER IN ACCORDANCE WITH THE CITY OF LAREDO SANITARY SEWER SERVICE STANDARD.

ANY SANITARY SEWER PLUGS TO BE INSTALLED BY THE CONTRACTOR SHALL BE APPROVED BY THE CITY OF LAREDO UTILITIES DEPARTMENT. SANITARY SEWER PLUGS SHOWN ON THESE PLANS SHALL BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS.

ALL SANITARY SEWER SERVICES SHALL BE INSTALLED PER CITY OF LAREDO STANDARD DETAILS.

STORM SEWER SYSTEMS

ALL STORM SEWER IMPROVEMENTS SHALL COMPLY WITH THE CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS - DIVISION D, SECTION 300.

THE EXISTING STORM SEWER SYSTEM SHOWN ON THE PLANS IS THE ENGINEER'S BEST ATTEMPT AT RECREATING THE EXISTING STORM SEWER SYSTEM. THE CONTRACTOR IS RESPONSIBLE OF FIELD VERIFYING THE LOCATION OF ANY STORM DRAIN COMPONENTS AND REPORTING ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER AND THE CITY OF LAREDO UTILITIES DEPARTMENT. ANY DAMAGES TO EXISTING STORM SEWER COMPONENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPLACED TO EXISTING CONDITION AS DEEMED ADEQUATE BY ENGINEER AND CITY OF LAREDO UTILITIES DEPARTMENT.

TRAFFIC CONTROL

THE CONTRACTOR SHALL COORDINATE ALL TRAFFIC CONTROL ACTIVITIES WITH LAREDO COLLEGE. CONTRACTOR SHALL EMPLOY ALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE TEXAS MANUAL OF UNIFORM CONTROL DEVICES FOR STREETS AND HIGHWAYS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE BARRICADES, WARNINGS, SIGNS, NOTIFICATION, AND TRAFFIC LIGHTING DEVICES FOR THE SAFETY AND TRAFFIC FLOW WITHIN THE CONSTRUCTION AREAS. ALL TRAFFIC CONTROL ACTIVITIES SHALL BE IN-PLACE PRIOR TO CONSTRUCTION OF THE PROPOSED DRIVEWAY AND SIDEWALK IMPROVEMENTS AND SHALL REMAIN IN-PLACE UNTIL SATISFACTORY COMPLETION OF THE IMPROVEMENTS HAS BEEN ACCOMPLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC CONTROL DEVICES THROUGHOUT HIS ACTIVITIES.

AT EXISTING ROADWAY TIES, THE CONTRACTOR SHALL SCHEDULE WORK SO THAT PLACEMENT OPERATIONS WILL FOLLOW THE SUB GRADE WORK AS CLOSELY AND AS PRACTICAL IN ORDER TO REDUCE HAZARD TO THE TRAVELING PUBLIC AND PREVENT UNDUE PAVEMENT DAMAGE FROM WET WEATHER.

THE CONTRACTOR SHALL FURNISH AND INSTALL STOP SIGNS, STREET SIGNS AND OTHER REGULATORY SIGNS. THE LOCATIONS OF THE SIGNS SHALL BE DETERMINED BY THE ENGINEER AND APPROVED BY THE CITY. CITY OF LAREDO MAY ELECT TO IMPROVE ON APPROPRIATE SIGNAGE--STOP SIGNS, STREET SIGNS, SPEED LIMIT SIGNS; DECISIONS REGARDING SUCH IMPROVEMENTS WILL BE LEFT TO THE DISCRETION OF SAID CITY.

ACCESS TO ALL DRIVES AND SIDE ROADS, BOTH PUBLIC AND PRIVATE, ARE TO BE MAINTAINED AT ALL TIMES.

CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN TO CITY OF LAREDO FOR APPROVAL AND PROVIDE A COPY OF THE APPROVED PLAN TO THE ENGINEER.

STOCKPILED MATERIAL SHALL BE PLACED A MINIMUM OF 30' FROM THE NEAREST TRAVELED ROADWAY IN AN APPROVED LOCATION BY THE ENGINEER OR CITY TRAFFIC DEPARTMENT.

STORM WATER POLLUTION PREVENTION PLAN

CONTRACTOR SHALL INSTALL STORM WATER POLLUTION PREVENTION CONTROLS AND SUBMIT NOTICE OF INTENT PRIOR TO ANY SITE PREPARATION WORK (DEMOLITION, EXCAVATION, GRUBBING, ETC.)

CITY OF LAREDO MAY ELECT TO IMPROVE ON APPROPRIATE SILT FENCING LAYOUT AS SHOWN; DECISIONS REGARDING SUCH IMPROVEMENTS WILL BE LEFT TO THE DISCRETION OF SAID ENTITY. THE CITY SHALL CONSULT WITH ENGINEER PRIOR TO ANY MODIFICATIONS TO THE SILT FENCING LAYOUT.

DUE TO EROSION ISSUES, NO UNPROTECTED SLOPES GREATER THAN 8:1 WILL BE ALLOWED. IF GREATER SLOPES ARE NECESSARY, EITHER EROSION CONTROL BLANKETS IN CONJUNCTION WITH HYDROMULCH OR SOD WILL ALLOW FOR A SLOPE UP TO 3:1.

CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL DUST CONTROL MEASURES FOR PROJECT AT ALL TIMES.

RECONSTRUCTION

ALL SIDEWALK RECONSTRUCTION SHALL COMPLY WITH THE CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS MANUAL.

ALL ASPHALT AND CONCRETE PAVEMENT RECONSTRUCTION SHALL COMPLY WITH THE ASPHALT PAVEMENT SECTION AND CONCRETE PAVEMENT SECTION SHOWN ON THE CORRESPONDING DETAILS SHEET.

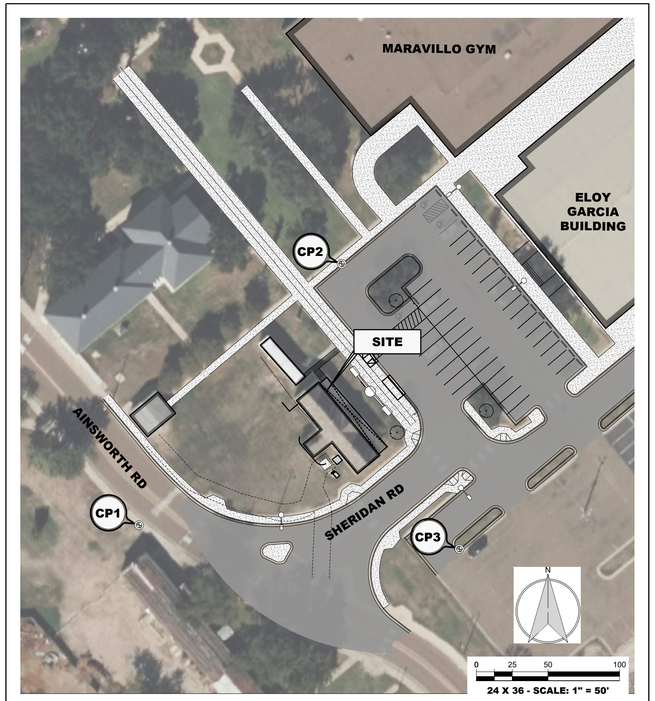
MISCELLANEOUS

DUE TO FEDERAL REGULATION TITLE 49, PART 192.81, CENTER POINT ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS ASSOCIATED WITH RELOCATION AND EXTENSION OF SERVICES WITHIN THE PROJECT AREA.

CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS ASSOCIATED WITH RELOCATION OF IRRIGATION LINES WITHIN PROJECT LIMITS.

CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION CHAINLINK FENCE TO PROTECT PROJECT PERIMETER.



CONTROL POINT DATA			
POINT #	NORTHING	EASTING	DESC.
1	17073394.51	652930.60	X-MARK
2	17073577.11	653072.20	BM 1 X-MARK
3	17073377.82	653154.44	BM 2 X-MARK

GOVERNING SPECIFICATIONS

- CITY OF LAREDO - STANDARD TECHNICAL SPECIFICATIONS MANUAL - LATEST REVISION
- TXDOT - STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES - LATEST REVISION

UTILITY DEPARTMENTS LAREDO, TEXAS

WATER DISTRIBUTION AND SANITARY SEWER
LAREDO WATER UTILITIES DEPARTMENT
(956) 721-2000

ELECTRIC COMPANY
A. E. P.
(956) 721-3040

TELEPHONE COMPANY
ATT
(956) 727-6749

CABLE COMPANY
TIME WARNER CABLE
(956) 721-0600

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KCI TECHNOLOGIES

Veterans Services Center
Laredo College
West End Washington St
Laredo, TX 78040

STATE OF TEXAS
ANDRES A. RUBIO
141366
LICENSED PROFESSIONAL ENGINEER
10-25-24

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

100%

GENERAL NOTES & CONTROL POINTS

Drawn by:	J.J.C.
Checked by:	A.R.
Project number:	23-15
Project Issue Date:	10-25-2024

1

Scale: Refer to plans

S:\data\Proj_2024_#C0170240009S_Site_Civil-LC_Vets_Center_ADA-Cavazos\CADD\Sheets\LC Vets Center ADA - Control, Notes, Basis.dwg

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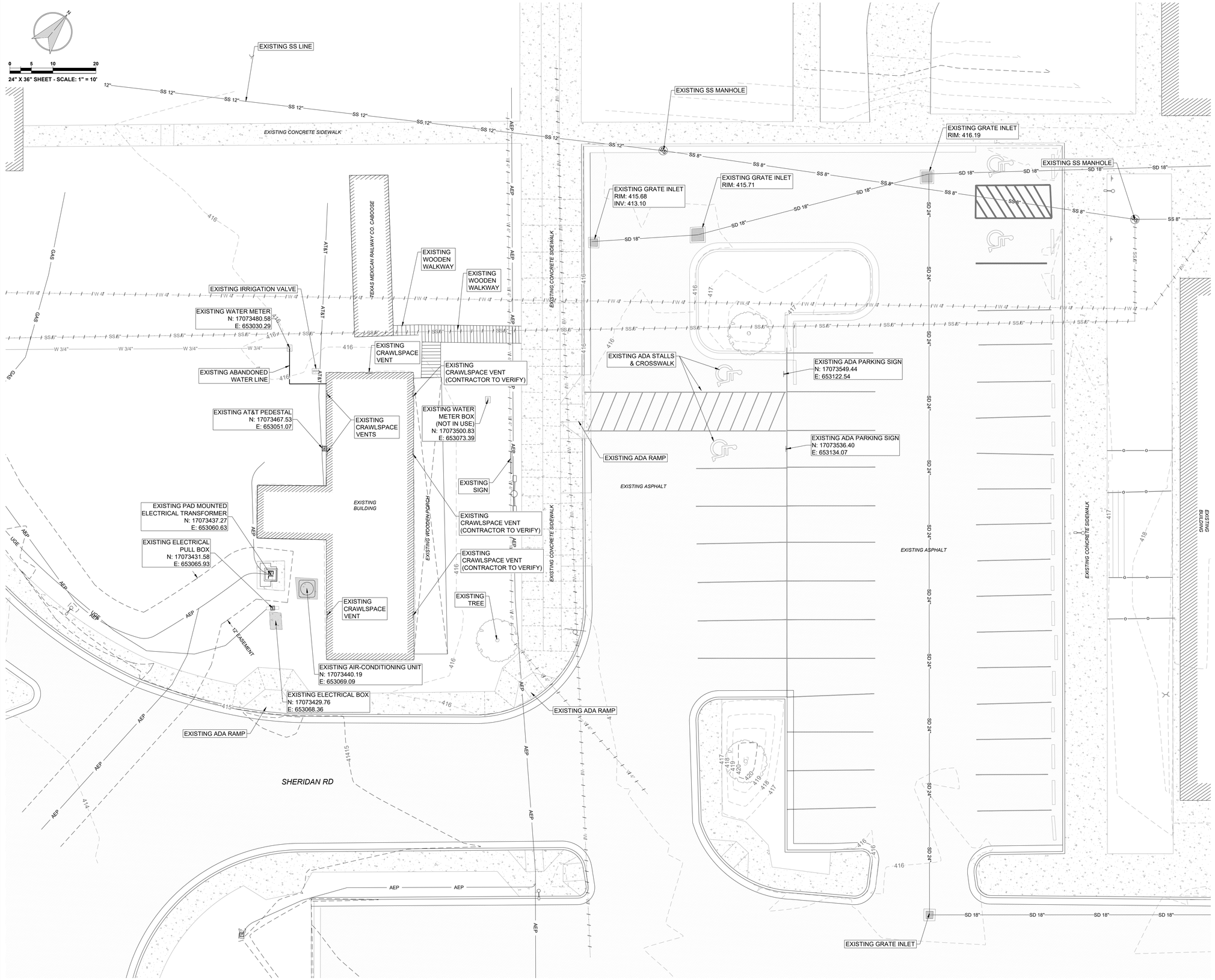

LEGEND

EXISTING PLAT BOUNDARY LINE	
EXISTING RIGHT-OF-WAY	
EXISTING LOT LINE	
EXISTING BUILDING SETBACK	
EXISTING EASEMENT LINE	
EXISTING CENTER LINE	
EXISTING CURB & GUTTER	
EXISTING RIGHT-OF-WAY	
EXISTING LOT LINE	
EXISTING ASPHALT PAVEMENT	
EXISTING CONCRETE PAVEMENT	
EXISTING CONCRETE JOINT	
EXISTING CONTOUR (MAJOR)	610
EXISTING CONTOUR (MINOR)	616
EXISTING WATER LINE	W
EXISTING SANITARY SEWER LINE	SS
EXISTING STORM DRAIN LINE	SD
EXISTING COMMUNICATION LINE	AT&T
EXISTING ELECTRICAL LINE	AEP
EXISTING UNDERGROUND ELECTRICAL LINE	UGE
EXISTING STREET LIGHT	
EXISTING GATE VALVE	
ABANDONED UTILITY LINE	

ABBREVIATIONS:
R.O.W. = RIGHT-OF-WAY
B/B = BACK OF CURB TO BACK OF CURB
B.S. = BUILDING SETBACK
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT

NOTES

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GOVERNING SPECIFICATIONS

- CITY OF LAREDO - STANDARD TECHNICAL SPECIFICATIONS MANUAL - LATEST REVISION
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STATE OF TEXAS
10-25-24

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No.	Description	Date

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EXISTING SITE PLAN

Drawn by:	J.J.C.
Checked by:	A.R.
Project number:	23-15
Project Issue Date:	10-25-2024

2

Scale: Refer to plans

S:\data\Proj_2024_KCI\TX24000095_Site_Civil-LC_Vets_Center_ADA-Cavazos\CAD\Sheets\LC Vets Center ADA - Existing Site Plan.dwg

10/25/2024 4:27 PM

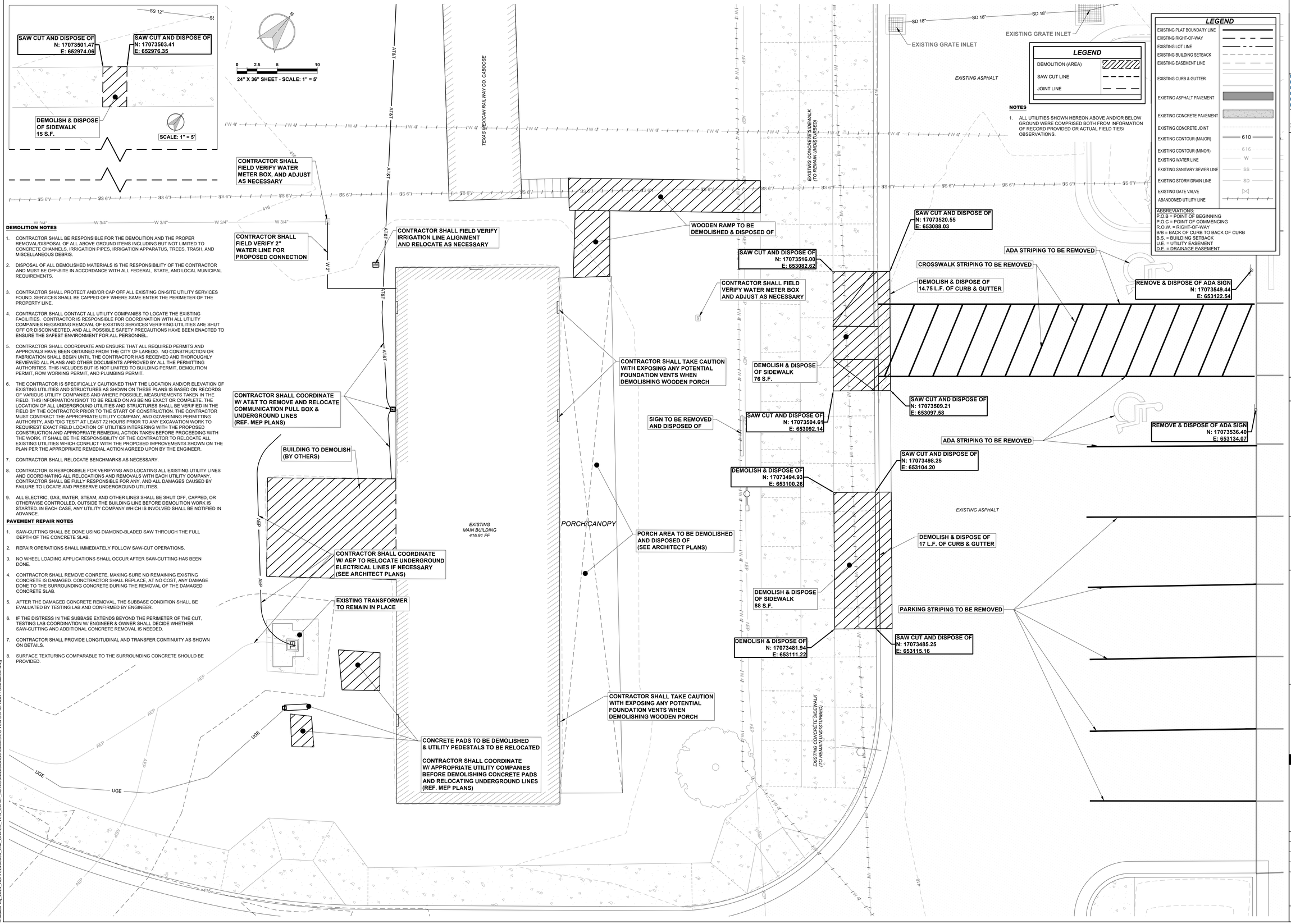
24" X 36" SHEET - SCALE: 1" = 5'

DEMOLITION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION AND THE PROPER REMOVAL/DISPOSAL OF ALL ABOVE GROUND ITEMS INCLUDING BUT NOT LIMITED TO CONCRETE CHANNELS, IRRIGATION PIPES, IRRIGATION APPARATUS, TREES, TRASH, AND MISCELLANEOUS DEBRIS.
2. DISPOSAL OF ALL DEMOLISHED MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL MUNICIPAL REQUIREMENTS.
3. CONTRACTOR SHALL PROTECT AND/OR CAP OFF ALL EXISTING ON-SITE UTILITY SERVICES FOUND. SERVICES SHALL BE CAPPED OFF WHERE SAME ENTER THE PERIMETER OF THE PROPERTY LINE.
4. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO LOCATE THE EXISTING FACILITIES. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING SERVICES VERIFYING UTILITIES ARE SHUT OFF OR DISCONNECTED, AND ALL POSSIBLE SAFETY PRECAUTIONS HAVE BEEN ENACTED TO ENSURE THE SAFEST ENVIRONMENT FOR ALL PERSONNEL.
5. CONTRACTOR SHALL COORDINATE AND ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM THE CITY OF LAREDO. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL THE PERMITTING AUTHORITIES. THIS INCLUDES BUT IS NOT LIMITED TO BUILDING PERMIT, DEMOLITION PERMIT, ROW WORKING PERMIT, AND PLUMBING PERMIT.
6. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION ISNOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTRACT THE APPROPRIATE UTILITY COMPANY, AND GOVERNING PERMITTING AUTHORITY, AND "DIG TEST" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUIREST EXACT FIELD LOCATION OF UTILITIES INTERERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN PER THE APPROPRIATE REMEDIAL ACTION AGREED UPON BY THE ENGINEER.
7. CONTRACTOR SHALL RELOCATE BENCHMARKS AS NECESSARY.
8. CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND LOCATING ALL EXISTING UTILITY LINES AND COORDINATING ALL RELOCATIONS AND REMOVALS WITH EACH UTILITY COMPANY. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY, AND ALL DAMAGES CAUSED BY FAILURE TO LOCATE AND PRESERVE UNDERGROUND UTILITIES.
9. ALL ELECTRIC, GAS, WATER, STEAM, AND OTHER LINES SHALL BE SHUT OFF, CAPPED, OR OTHERWISE CONTROLLED, OUTSIDE THE BUILDING LINE BEFORE DEMOLITION WORK IS STARTED. IN EACH CASE, ANY UTILITY COMPANY WHICH IS INVOLVED SHALL BE NOTIFIED IN ADVANCE.

PAVEMENT REPAIR NOTES

1. SAW-CUTTING SHALL BE DONE USING DIAMOND-BLADED SAW THROUGH THE FULL DEPTH OF THE CONCRETE SLAB.
2. REPAIR OPERATIONS SHALL IMMEDIATELY FOLLOW SAW-CUT OPERATIONS.
3. NO WHEEL LOADING APPLICATIONS SHALL OCCUR AFTER SAW-CUTTING HAS BEEN DONE.
4. CONTRACTOR SHALL REMOVE CONRETE, MAKING SURE NO REMAINING EXISTING CONCRETE IS DAMAGED. CONCTRACTOR SHALL REPLACE, AT NO COST, ANY DAMAGE DONE TO THE SURROUNDING CONCRETE DURING THE REMOVAL OF THE DAMAGED CONCRETE SLAB.
5. AFTER THE DAMAGED CONCRETE REMOVAL, THE SUBBASE CONDITION SHALL BE EVALUATED BY TESTING LAB AND CONFIRMED BY ENGINEER.
6. IF THE DISTRESS IN THE SUBBASE EXTENDS BEYOND THE PERIMETER OF THE CUT, TESTING LAB COORDINATION W/ ENGINEER & OWNER SHALL DECIDE WHETHER SAW-CUTTING AND ADDITIONAL CONCRETE REMOVAL IS NEEDED.
7. CONTRACTOR SHALL PROVIDE LONGITUDINAL AND TRANSFER CONTINUITY AS SHOWN ON DETAILS.
8. SURFACE TEXTURING COMPARABLE TO THE SURROUNDING CONCRETE SHOULD BE PROVIDED.



LEGEND

DEMOLITION (AREA)	
SAW CUT LINE	
JOINT LINE	

NOTES

1. ALL UTILITIES SHOWN HEREON ABOVE AND/OR BELOW GROUND WERE COMPRISED BOTH FROM INFORMATION OF RECORD PROVIDED OR ACTUAL FIELD TIES/ OBSERVATIONS.

LEGEND

EXISTING PLAT BOUNDARY LINE	
EXISTING RIGHT-OF-WAY	
EXISTING LOT LINE	
EXISTING BUILDING SETBACK	
EXISTING EASEMENT LINE	
EXISTING CURB & GUTTER	
EXISTING ASPHALT PAVEMENT	
EXISTING CONCRETE PAVEMENT	
EXISTING CONCRETE JOINT	
EXISTING CONTOUR (MAJOR)	610
EXISTING CONTOUR (MINOR)	616
EXISTING WATER LINE	W
EXISTING SANITARY SEWER LINE	SS
EXISTING STORM DRAIN LINE	SD
EXISTING GATE VALVE	
ABANDONED UTILITY LINE	

ABBREVIATIONS:
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P.O.C = POINT OF COMMENCING
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10-25-24

NOTES:
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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

100%

DEMOLITION PLAN

Drawn by:	J.J.C.
Checked by:	A.R.
Project number:	23-15
Project Issue Date:	10-25-2024

3

Scale: Refer to plans

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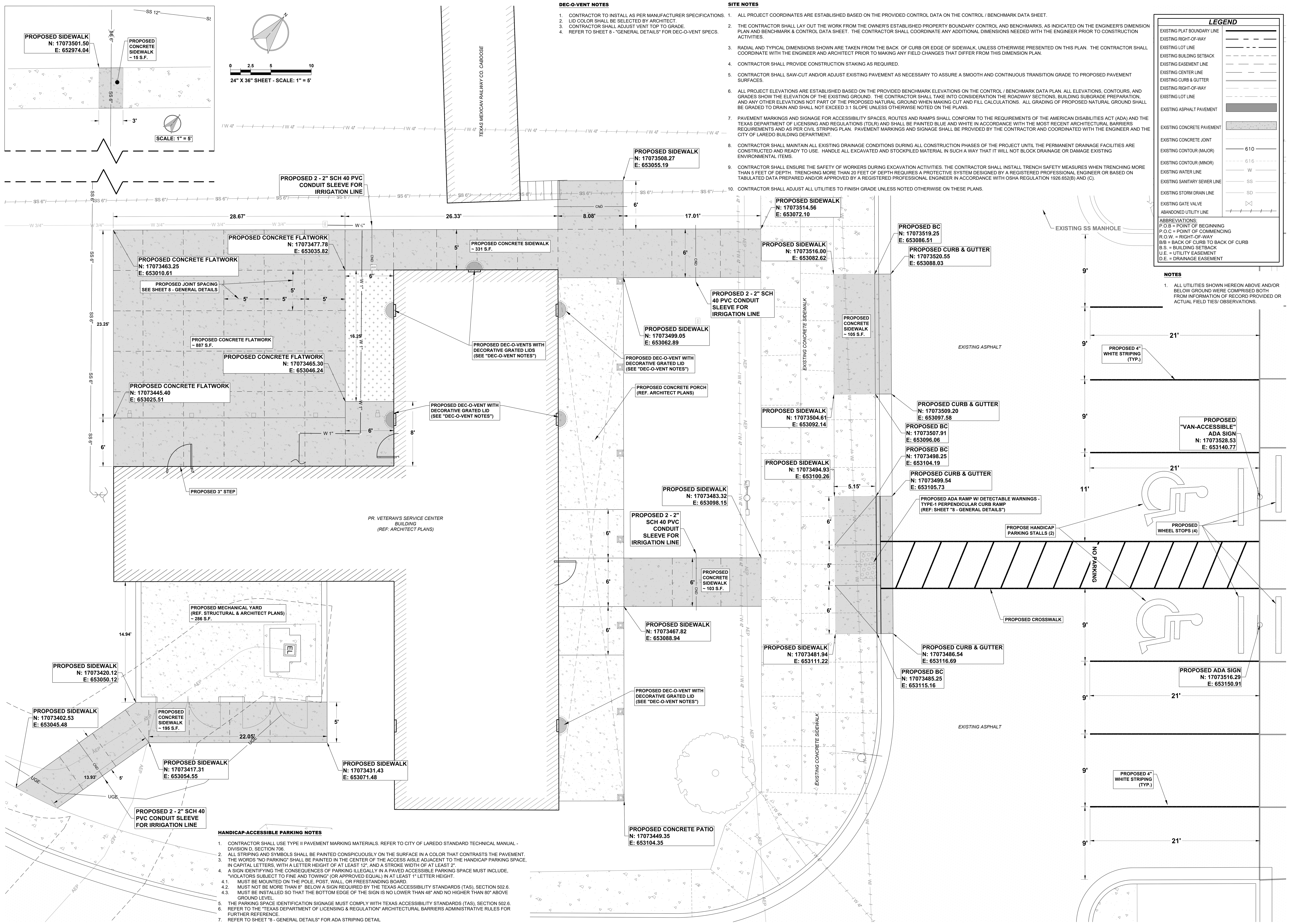

DEC-O-VENT NOTES

1. CONTRACTOR TO INSTALL AS PER MANUFACTURER SPECIFICATIONS.
2. LID COLOR SHALL BE SELECTED BY ARCHITECT.
3. CONTRACTOR SHALL ADJUST VENT TOP TO GRADE.
4. REFER TO SHEET 8 - "GENERAL DETAILS" FOR DEC-O-VENT SPECS.

SITE NOTES

1. ALL PROJECT COORDINATES ARE ESTABLISHED BASED ON THE PROVIDED CONTROL DATA ON THE CONTROL / BENCHMARK DATA SHEET.
2. THE CONTRACTOR SHALL LAY OUT THE WORK FROM THE OWNER'S ESTABLISHED PROPERTY BOUNDARY CONTROL AND BENCHMARKS, AS INDICATED ON THE ENGINEER'S DIMENSION PLAN AND BENCHMARK & CONTROL DATA SHEET. THE CONTRACTOR SHALL COORDINATE ANY ADDITIONAL DIMENSIONS NEEDED WITH THE ENGINEER PRIOR TO CONSTRUCTION ACTIVITIES.
3. RADIAL AND TYPICAL DIMENSIONS SHOWN ARE TAKEN FROM THE BACK OF CURB OR EDGE OF SIDEWALK, UNLESS OTHERWISE PRESENTED ON THIS PLAN. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND ARCHITECT PRIOR TO MAKING ANY FIELD CHANGES THAT DIFFER FROM THIS DIMENSION PLAN.
4. CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING AS REQUIRED.
5. CONTRACTOR SHALL SAW-CUT AND/OR ADJUST EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH AND CONTINUOUS TRANSITION GRADE TO PROPOSED PAVEMENT SURFACES.
6. ALL PROJECT ELEVATIONS ARE ESTABLISHED BASED ON THE PROVIDED BENCHMARK ELEVATIONS ON THE CONTROL / BENCHMARK DATA PLAN. ALL ELEVATIONS, CONTOURS, AND GRADES SHOW THE ELEVATION OF THE EXISTING GROUND. THE CONTRACTOR SHALL TAKE INTO CONSIDERATION THE ROADWAY SECTIONS, BUILDING SUBGRADE PREPARATION, AND ANY OTHER ELEVATIONS NOT PART OF THE PROPOSED NATURAL GROUND WHEN MAKING CUT AND FILL CALCULATIONS. ALL GRADING OF PROPOSED NATURAL GROUND SHALL BE GRADED TO DRAIN AND SHALL NOT EXCEED 3:1 SLOPE UNLESS OTHERWISE NOTED ON THE PLANS.
7. PAVEMENT MARKINGS AND SIGNAGE FOR ACCESSIBILITY SPACES, ROUTES AND RAMPS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (ADA) AND THE TEXAS DEPARTMENT OF LICENSING AND REGULATIONS (TDLR) AND SHALL BE PAINTED BLUE AND WHITE IN ACCORDANCE WITH THE MOST RECENT ARCHITECTURAL BARRIERS REQUIREMENTS AND AS PER CIVIL STRIPING PLAN. PAVEMENT MARKINGS AND SIGNAGE SHALL BE PROVIDED BY THE CONTRACTOR AND COORDINATED WITH THE ENGINEER AND THE CITY OF LAREDO BUILDING DEPARTMENT.
8. CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE CONDITIONS DURING ALL CONSTRUCTION PHASES OF THE PROJECT UNTIL THE PERMANENT DRAINAGE FACILITIES ARE CONSTRUCTED AND READY TO USE. HANDLE ALL EXCAVATED AND STOCKPILED MATERIAL IN SUCH A WAY THAT IT WILL NOT BLOCK DRAINAGE OR DAMAGE EXISTING ENVIRONMENTAL ITEMS.
9. CONTRACTOR SHALL ENSURE THE SAFETY OF WORKERS DURING EXCAVATION ACTIVITIES. THE CONTRACTOR SHALL INSTALL TRENCH SAFETY MEASURES WHEN TRENCHING MORE THAN 5 FEET OF DEPTH. TRENCHING MORE THAN 20 FEET OF DEPTH REQUIRES A PROTECTIVE SYSTEM DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER OR BASED ON TABULATED DATA PREPARED AND/OR APPROVED BY A REGISTERED PROFESSIONAL ENGINEER IN ACCORDANCE WITH OSHA REGULATION 1926.652(B) AND (C).
10. CONTRACTOR SHALL ADJUST ALL UTILITIES TO FINISH GRADE UNLESS NOTED OTHERWISE ON THESE PLANS.

LEGEND

EXISTING PLAT BOUNDARY LINE	
EXISTING RIGHT-OF-WAY	
EXISTING LOT LINE	
EXISTING BUILDING SETBACK	
EXISTING EASEMENT LINE	
EXISTING CENTER LINE	
EXISTING CURB & GUTTER	
EXISTING RIGHT-OF-WAY	
EXISTING LOT LINE	
EXISTING ASPHALT PAVEMENT	
EXISTING CONCRETE PAVEMENT	
EXISTING CONCRETE JOINT	
EXISTING CONTOUR (MAJOR)	610
EXISTING CONTOUR (MINOR)	616
EXISTING WATER LINE	W
EXISTING SANITARY SEWER LINE	SS
EXISTING STORM DRAIN LINE	SD
EXISTING GATE VALVE	
ABANDONED UTILITY LINE	

ABBREVIATIONS:
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NOTES

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HANDICAP-ACCESSIBLE PARKING NOTES

1. CONTRACTOR SHALL USE TYPE II PAVEMENT MARKING MATERIALS. REFER TO CITY OF LAREDO STANDARD TECHNICAL MANUAL - DIVISION D, SECTION 706.
2. ALL STRIPING AND SYMBOLS SHALL BE PAINTED CONSPICUOUSLY ON THE SURFACE IN A COLOR THAT CONTRASTS THE PAVEMENT.
3. THE WORDS "NO PARKING" SHALL BE PAINTED IN THE CENTER OF THE ACCESS AISLE ADJACENT TO THE HANDICAP PARKING SPACE, IN CAPITAL LETTERS, WITH A LETTER HEIGHT OF AT LEAST 12", AND A STROKE WIDTH OF AT LEAST 2".
4. A SIGN IDENTIFYING THE CONSEQUENCES OF PARKING ILLEGALLY IN A PAVED ACCESSIBLE PARKING SPACE MUST INCLUDE, "VIOLATORS SUBJECT TO FINE AND TOWING" (OR APPROVED EQUAL) IN AT LEAST 1" LETTER HEIGHT.
   4.1. MUST BE MOUNTED ON THE POLE, POST, WALL, OR FREESTANDING BOARD.
   4.2. MUST NOT BE MORE THAN 8" BELOW A SIGN REQUIRED BY THE TEXAS ACCESSIBILITY STANDARDS (TAS), SECTION 502.6.
   4.3. MUST BE INSTALLED SO THAT THE BOTTOM EDGE OF THE SIGN IS NO LOWER THAN 48" AND NO HIGHER THAN 80" ABOVE GROUND LEVEL.
5. THE PARKING SPACE IDENTIFICATION SIGNAGE MUST COMPLY WITH TEXAS ACCESSIBILITY STANDARDS (TAS), SECTION 502.6.
6. REFER TO THE "TEXAS DEPARTMENT OF LICENSING & REGULATION" ARCHITECTURAL BARRIERS ADMINISTRATIVE RULES FOR FURTHER REFERENCE.
7. REFER TO SHEET "8 - GENERAL DETAILS" FOR ADA STRIPING DETAIL

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No.	Description	Date

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PROPOSED SITE & DIMENSIONAL PLAN

Drawn by:	J.J.C.
Checked by:	A.R.
Project number:	23-15
Project Issue Date:	10-25-2024

4

Scale: Refer to plans

10/31/2024 4:15 PM

CONTRACTOR SHALL DOWEL INTO CONCRETE SIDEWALK & INSTALL EXPANSION JOINT

SCALE: 1" = 5'

0 2.5 5 10

24" X 36" SHEET - SCALE: 1" = 5'

NOTES

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LEGEND

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EXISTING LOT LINE	
EXISTING BUILDING SETBACK	
EXISTING EASEMENT LINE	
EXISTING CENTER LINE	
EXISTING CURB & GUTTER	
EXISTING RIGHT-OF-WAY	
EXISTING LOT LINE	
EXISTING ASPHALT PAVEMENT	
EXISTING CONCRETE PAVEMENT	
EXISTING CONCRETE JOINT	
EXISTING CONTOUR (MAJOR)	610
EXISTING CONTOUR (MINOR)	616
EXISTING WATER LINE	W
CONTOUR (MAJOR)	450
CONTOUR (MINOR)	448
ABANDONED UTILITY LINE	
GRADE	2.0%
SPOT ELEVATION	×450.00 SW

ABBREVIATIONS:
MA = MATCH ELEVATION
TC = TOP OF CONCRETE
SW = SIDEWALK
GR = GRADING

TEXAS MEXICAN RAILWAY CO. CABOOSE

EXISTING CONCRETE SIDEWALK

EXISTING ASPHALT

EXISTING BUILDING FF 416.91

DOWEL INTO FOUNDATION

CONTRACTOR SHALL DOWEL INTO CONCRETE PATIO & INSTALL EXPANSION JOINT

BACKFILL AREA AND GRADE TOWARDS PROPOSED CONCRETE FLATWORK REF. TO ARCHITECT LANDSCAPE PLAN

CONTRACTOR SHALL ADJUST WATER METER BOX TO PROPOSED GRADE

BACKFILL AREA AND GRADE TOWARDS EXISTING CONCRETE SIDEWALK REF. TO ARCHITECT LANDSCAPE PLAN

DOWEL INTO EXISTING SIDEWALK MATCH EXISTING ELEVATION

DOWEL INTO FOUNDATION & INSTALL EXPANSION JOINT

3" STEP

DOWEL INTO FOUNDATION & INSTALL EXPANSION JOINT

CONTRACTOR SHALL DOWEL INTO CONCRETE SIDEWALK & INSTALL EXPANSION JOINT

PROPOSED ADA ENTRANCE

CONTRACTOR SHALL DOWEL INTO CONCRETE SIDEWALK & INSTALL EXPANSION JOINT

PROPOSED ADA RAMP AND LANDING (8.3% MAX RUNNING SLOPE, 2% MAX CROSS-SLOPE) REF: SHEET 8 - GENERAL DETAILS "ADA STRIPING DETAIL"

INSTALL EXPANSION JOINT

PROPOSED SWALE

CONTRACTOR SHALL DOWEL INTO CONCRETE PATIO & INSTALL EXPANSION JOINT

CONTRACTOR SHALL DOWEL INTO CONCRETE SIDEWALK & INSTALL EXPANSION JOINT

CONTRACTOR SHALL DOWEL INTO CONCRETE SIDEWALK & INSTALL EXPANSION JOINT

BACKFILL AREA AND GRADE TOWARDS EXISTING CONCRETE SIDEWALK REF. TO ARCHITECT LANDSCAPE PLAN

BACKFILL AREA AND GRADE TOWARDS EXISTING CONCRETE SIDEWALK REF. TO ARCHITECT LANDSCAPE PLAN

NO PARKING

EXISTING ASPHALT

EXISTING ASPHALT

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No.	Description	Date

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GRADING PLAN

Drawn by:	J.J.C.
Checked by:	A.R.
Project number:	23-15
Project Issue Date:	10-25-2024

5

Scale: Refer to plans

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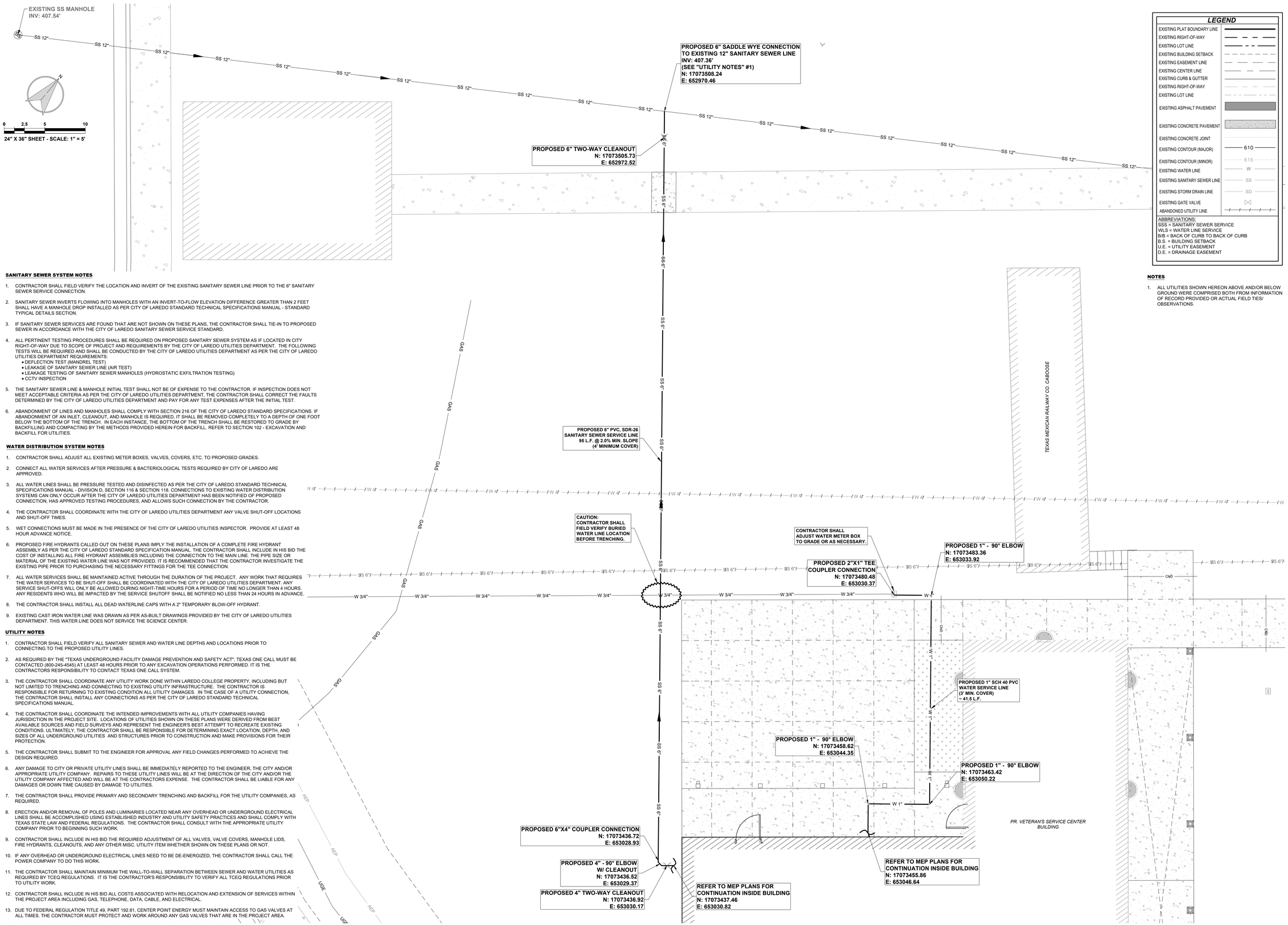

SANITARY SEWER SYSTEM NOTES

1. CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND INVERT OF THE EXISTING SANITARY SEWER LINE PRIOR TO THE 6" SANITARY SEWER SERVICE CONNECTION.
2. SANITARY SEWER INVERTS FLOWING INTO MANHOLES WITH AN INVERT-TO-FLOW ELEVATION DIFFERENCE GREATER THAN 2 FEET SHALL HAVE A MANHOLE DROP INSTALLED AS PER CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS MANUAL - STANDARD TYPICAL DETAILS SECTION.
3. IF SANITARY SEWER SERVICES ARE FOUND THAT ARE NOT SHOWN ON THESE PLANS, THE CONTRACTOR SHALL TIE-IN TO PROPOSED SEWER IN ACCORDANCE WITH THE CITY OF LAREDO SANITARY SEWER SERVICE STANDARD.
4. ALL PERTINENT TESTING PROCEDURES SHALL BE REQUIRED ON PROPOSED SANITARY SEWER SYSTEM AS IF LOCATED IN CITY RIGHT-OF-WAY DUE TO SCOPE OF PROJECT AND REQUIREMENTS BY THE CITY OF LAREDO UTILITIES DEPARTMENT. THE FOLLOWING TESTS WILL BE REQUIRED AND SHALL BE CONDUCTED BY THE CITY OF LAREDO UTILITIES DEPARTMENT AS PER THE CITY OF LAREDO UTILITIES DEPARTMENT REQUIREMENTS:
   - DEFLECTION TEST (MANDREL TEST)
   - LEAKAGE OF SANITARY SEWER LINE (AIR TEST)
   - LEAKAGE TESTING OF SANITARY SEWER MANHOLES (HYDROSTATIC EXFILTRATION TESTING)
   - CCTV INSPECTION
5. THE SANITARY SEWER LINE & MANHOLE INITIAL TEST SHALL NOT BE OF EXPENSE TO THE CONTRACTOR. IF INSPECTION DOES NOT MEET ACCEPTABLE CRITERIA AS PER THE CITY OF LAREDO UTILITIES DEPARTMENT, THE CONTRACTOR SHALL CORRECT THE FAULTS DETERMINED BY THE CITY OF LAREDO UTILITIES DEPARTMENT AND PAY FOR ANY TEST EXPENSES AFTER THE INITIAL TEST.
6. ABANDONMENT OF LINES AND MANHOLES SHALL COMPLY WITH SECTION 216 OF THE CITY OF LAREDO STANDARD SPECIFICATIONS. IF ABANDONMENT OF AN INLET, CLEANOUT, AND MANHOLE IS REQUIRED, IT SHALL BE REMOVED COMPLETELY TO A DEPTH OF ONE FOOT BELOW THE BOTTOM OF THE TRENCH. IN EACH INSTANCE, THE BOTTOM OF THE TRENCH SHALL BE RESTORED TO GRADE BY BACKFILLING AND COMPACTING BY THE METHODS PROVIDED HEREIN FOR BACKFILL. REFER TO SECTION 102 - EXCAVATION AND BACKFILL FOR UTILITIES.

WATER DISTRIBUTION SYSTEM NOTES

1. CONTRACTOR SHALL ADJUST ALL EXISTING METER BOXES, VALVES, COVERS, ETC. TO PROPOSED GRADES.
2. CONNECT ALL WATER SERVICES AFTER PRESSURE & BACTERIOLOGICAL TESTS REQUIRED BY CITY OF LAREDO ARE APPROVED.
3. ALL WATER LINES SHALL BE PRESSURE TESTED AND DISINFECTED AS PER THE CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS MANUAL - DIVISION D, SECTION 116 & SECTION 118. CONNECTIONS TO EXISTING WATER DISTRIBUTION SYSTEMS CAN ONLY OCCUR AFTER THE CITY OF LAREDO UTILITIES DEPARTMENT HAS BEEN NOTIFIED OF PROPOSED CONNECTION, HAS APPROVED TESTING PROCEDURES, AND ALLOWS SUCH CONNECTION BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF LAREDO UTILITIES DEPARTMENT ANY VALVE SHUT-OFF LOCATIONS AND SHUT-OFF TIMES.
5. WET CONNECTIONS MUST BE MADE IN THE PRESENCE OF THE CITY OF LAREDO UTILITIES INSPECTOR. PROVIDE AT LEAST 48 HOUR ADVANCE NOTICE.
6. PROPOSED FIRE HYDRANTS CALLED OUT ON THESE PLANS IMPLY THE INSTALLATION OF A COMPLETE FIRE HYDRANT ASSEMBLY AS PER THE CITY OF LAREDO STANDARD SPECIFICATION MANUAL. THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF INSTALLING ALL FIRE HYDRANT ASSEMBLIES INCLUDING THE CONNECTION TO THE MAIN LINE. THE PIPE SIZE OR MATERIAL OF THE EXISTING WATER LINE WAS NOT PROVIDED. IT IS RECOMMENDED THAT THE CONTRACTOR INVESTIGATE THE EXISTING PIPE PRIOR TO PURCHASING THE NECESSARY FITTINGS FOR THE TEE CONNECTION.
7. ALL WATER SERVICES SHALL BE MAINTAINED ACTIVE THROUGH THE DURATION OF THE PROJECT. ANY WORK THAT REQUIRES THE WATER SERVICES TO BE SHUT-OFF SHALL BE COORDINATED WITH THE CITY OF LAREDO UTILITIES DEPARTMENT. ANY SERVICE SHUT-OFFS WILL ONLY BE ALLOWED DURING NIGHT-TIME HOURS FOR A PERIOD OF TIME NO LONGER THAN 4 HOURS. ANY RESIDENTS WHO WILL BE IMPACTED BY THE SERVICE SHUTOFF SHALL BE NOTIFIED NO LESS THAN 24 HOURS IN ADVANCE.
8. THE CONTRACTOR SHALL INSTALL ALL DEAD WATERLINE CAPS WITH A 2" TEMPORARY BLOW-OFF HYDRANT.
9. EXISTING CAST IRON WATER LINE WAS DRAWN AS PER AS-BUILT DRAWINGS PROVIDED BY THE CITY OF LAREDO UTILITIES DEPARTMENT. THIS WATER LINE DOES NOT SERVICE THE SCIENCE CENTER.

UTILITY NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL SANITARY SEWER AND WATER LINE DEPTHS AND LOCATIONS PRIOR TO CONNECTING TO THE PROPOSED UTILITY LINES.
2. AS REQUIRED BY THE "TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT", TEXAS ONE CALL MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS PERFORMED. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM.
3. THE CONTRACTOR SHALL COORDINATE ANY UTILITY WORK DONE WITHIN LAREDO COLLEGE PROPERTY, INCLUDING BUT NOT LIMITED TO TRENCHING AND CONNECTING TO EXISTING UTILITY INFRASTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING TO EXISTING CONDITION ALL UTILITY DAMAGES. IN THE CASE OF A UTILITY CONNECTION, THE CONTRACTOR SHALL INSTALL ANY CONNECTIONS AS PER THE CITY OF LAREDO STANDARD TECHNICAL SPECIFICATIONS MANUAL.
4. THE CONTRACTOR SHALL COORDINATE THE INTENDED IMPROVEMENTS WITH ALL UTILITY COMPANIES HAVING JURISDICTION IN THE PROJECT SITE. LOCATIONS OF UTILITIES SHOWN ON THESE PLANS WERE DERIVED FROM BEST AVAILABLE SOURCES AND FIELD SURVEYS AND REPRESENT THE ENGINEER'S BEST ATTEMPT TO RECREATE EXISTING CONDITIONS. ULTIMATELY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION, DEPTH, AND SIZES OF ALL UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO CONSTRUCTION AND MAKE PROVISIONS FOR THEIR PROTECTION.
5. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL ANY FIELD CHANGES PERFORMED TO ACHIEVE THE DESIGN REQUIRED.
6. ANY DAMAGE TO CITY OR PRIVATE UTILITY LINES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER, THE CITY AND/OR APPROPRIATE UTILITY COMPANY. REPAIRS TO THESE UTILITY LINES WILL BE AT THE DIRECTION OF THE CITY AND/OR THE UTILITY COMPANY AFFECTED AND WILL BE AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGES OR DOWN TIME CAUSED BY DAMAGE TO UTILITIES.
7. THE CONTRACTOR SHALL PROVIDE PRIMARY AND SECONDARY TRENCHING AND BACKFILL FOR THE UTILITY COMPANIES, AS REQUIRED.
8. ERECTION AND/OR REMOVAL OF POLES AND LUMINARIES LOCATED NEAR ANY OVERHEAD OR UNDERGROUND ELECTRICAL LINES SHALL BE ACCOMPLISHED USING ESTABLISHED INDUSTRY AND UTILITY SAFETY PRACTICES AND SHALL COMPLY WITH TEXAS STATE LAW AND FEDERAL REGULATIONS. THE CONTRACTOR SHALL CONSULT WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING SUCH WORK.
9. CONTRACTOR SHALL INCLUDE IN HIS BID THE REQUIRED ADJUSTMENT OF ALL VALVES, VALVE COVERS, MANHOLE LIDS, FIRE HYDRANTS, CLEANOUTS, AND ANY OTHER MISC. UTILITY ITEM WHETHER SHOWN ON THESE PLANS OR NOT.
10. IF ANY OVERHEAD OR UNDERGROUND ELECTRICAL LINES NEED TO BE DE-ENERGIZED, THE CONTRACTOR SHALL CALL THE POWER COMPANY TO DO THIS WORK.
11. THE CONTRACTOR SHALL MAINTAIN MINIMUM THE WALL-TO-WALL SEPARATION BETWEEN SEWER AND WATER UTILITIES AS REQUIRED BY TCEQ REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL TCEQ REGULATIONS PRIOR TO UTILITY WORK.
12. CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS ASSOCIATED WITH RELOCATION AND EXTENSION OF SERVICES WITHIN THE PROJECT AREA INCLUDING GAS, TELEPHONE, DATA, CABLE, AND ELECTRICAL.
13. DUE TO FEDERAL REGULATION TITLE 49, PART 192.81, CENTER POINT ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

LEGEND

EXISTING PLAT BOUNDARY LINE	
EXISTING RIGHT-OF-WAY	
EXISTING LOT LINE	
EXISTING BUILDING SETBACK	
EXISTING EASEMENT LINE	
EXISTING CENTER LINE	
EXISTING CURB & GUTTER	
EXISTING RIGHT-OF-WAY	
EXISTING LOT LINE	
EXISTING ASPHALT PAVEMENT	
EXISTING CONCRETE PAVEMENT	
EXISTING CONCRETE JOINT	
EXISTING CONTOUR (MAJOR)	610
EXISTING CONTOUR (MINOR)	616
EXISTING WATER LINE	W
EXISTING SANITARY SEWER LINE	SS
EXISTING STORM DRAIN LINE	SD
EXISTING GATE VALVE	
ABANDONED UTILITY LINE	

ABBREVIATIONS:
SSS = SANITARY SEWER SERVICE
WLS = WATER LINE SERVICE
B/B = BACK OF CURB TO BACK OF CURB
B.S. = BUILDING SETBACK
U.E. = UTILITY EASEMENT
D.E. = DRAINAGE EASEMENT

NOTES

1. ALL UTILITIES SHOWN HEREON ABOVE AND/OR BELOW GROUND WERE COMPRISED BOTH FROM INFORMATION OF RECORD PROVIDED OR ACTUAL FIELD TIES/ OBSERVATIONS.

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KCI TECHNOLOGIES

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STATE OF TEXAS
ANDRES A. RUBIO
141366
LICENSED PROFESSIONAL ENGINEER
10-25-24

NOTES:
DO NOT SCALE DRAWINGS.
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No.	Description	Date

100%

UITLITIES PLAN

Drawn by:	J.J.C.
Checked by:	A.R.
Project number:	23-15
Project Issue Date:	10-25-2024

6

Scale: Refer to plans

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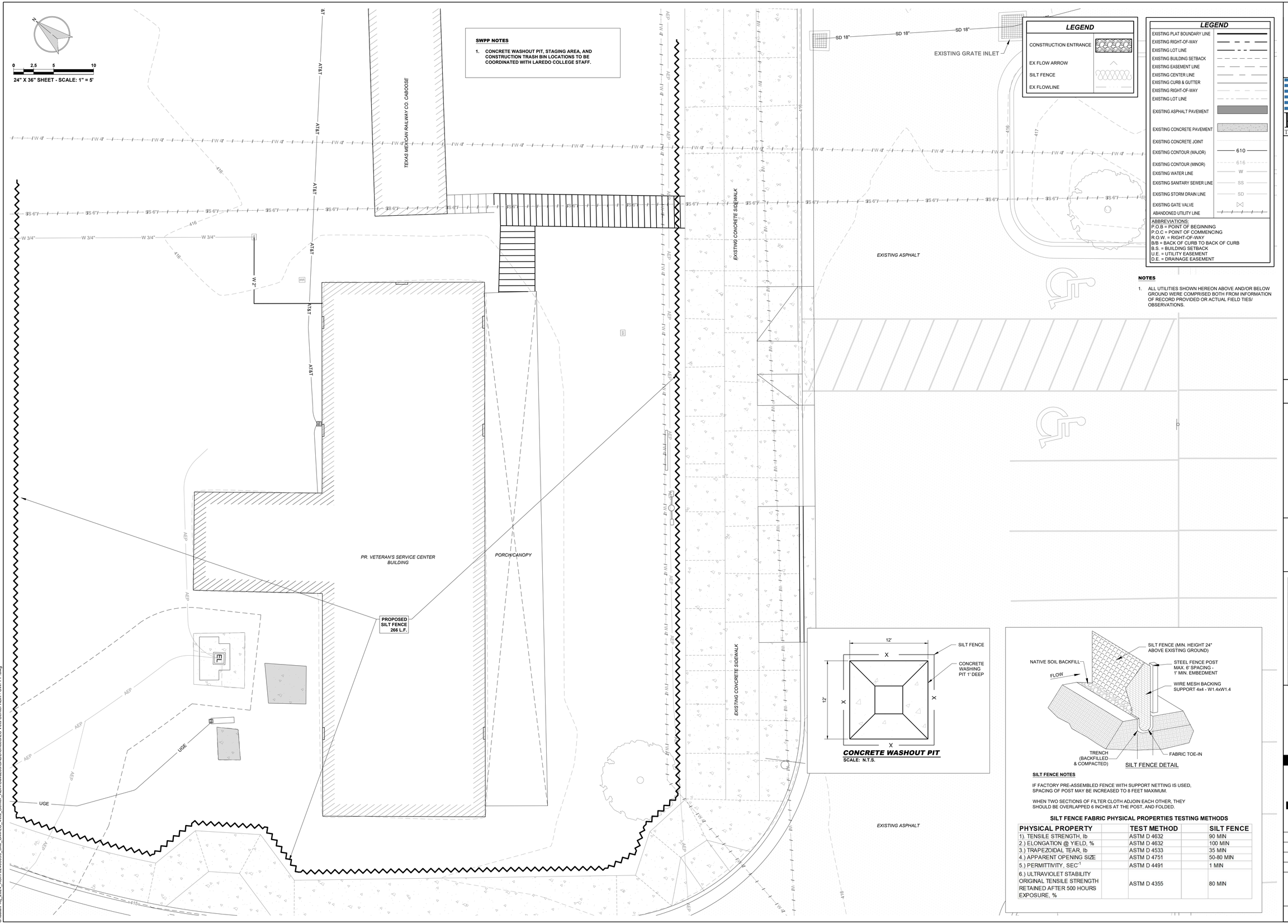

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10-25-24

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No.	Description	Date

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STORM WATER POLLUTION PREVENTION PLAN

Drawn by:	J.J.C.
Checked by:	A.R.
Project number:	23-15
Project Issue Date:	10-25-2024

7

Scale: Refer to plans

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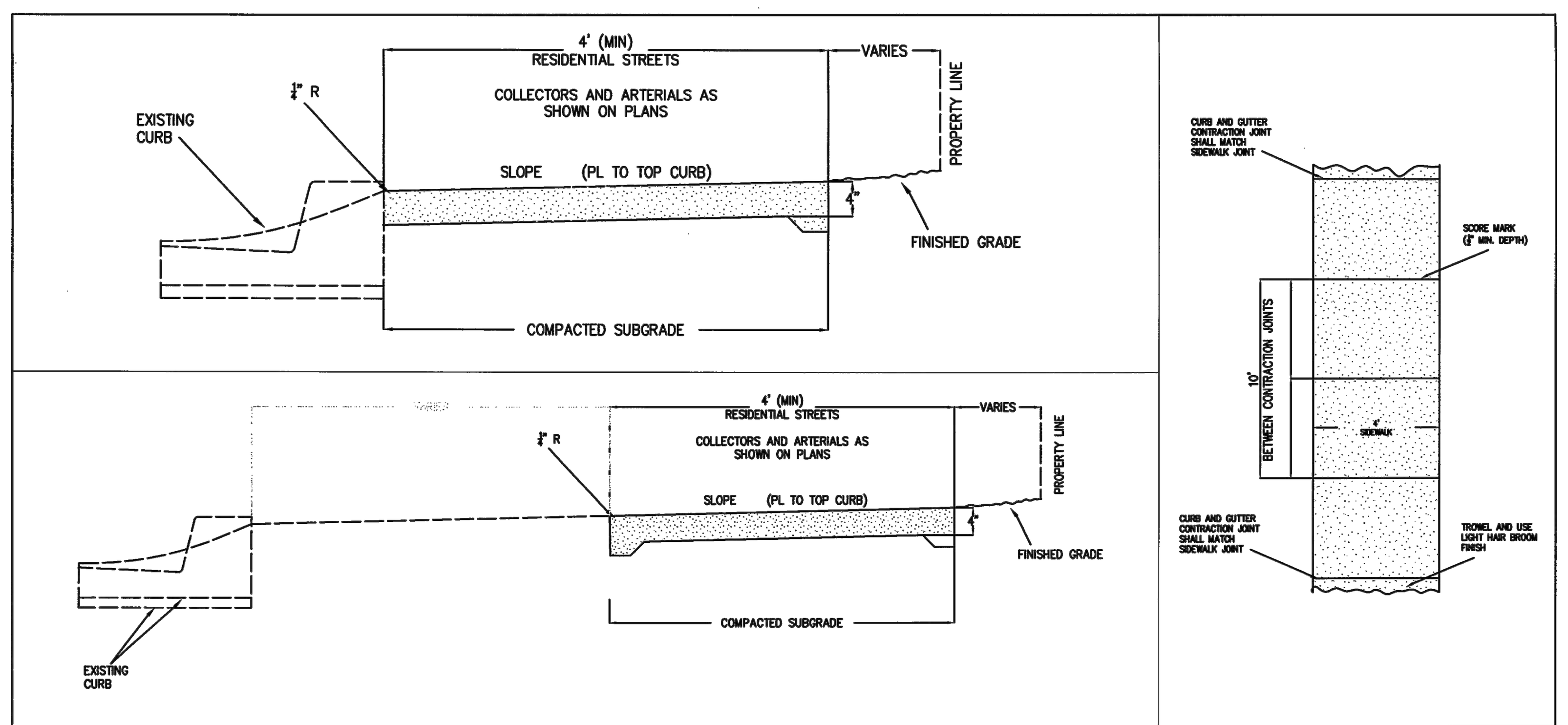
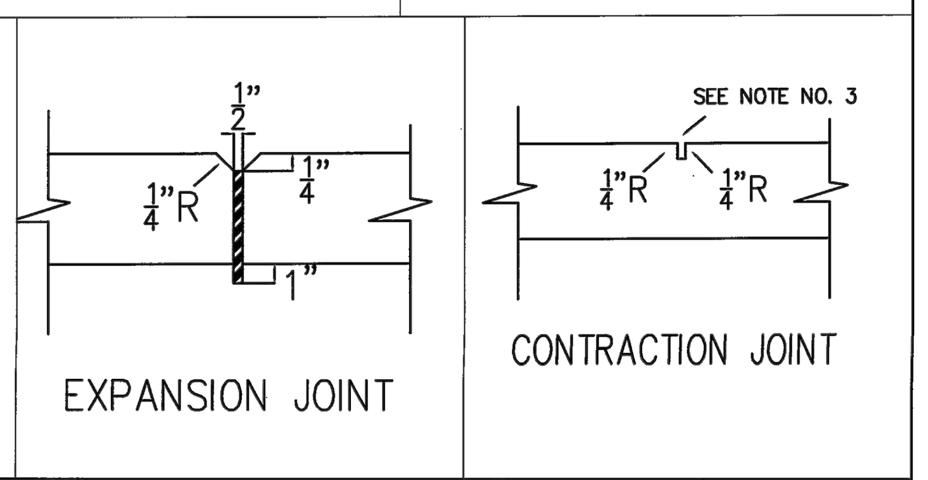
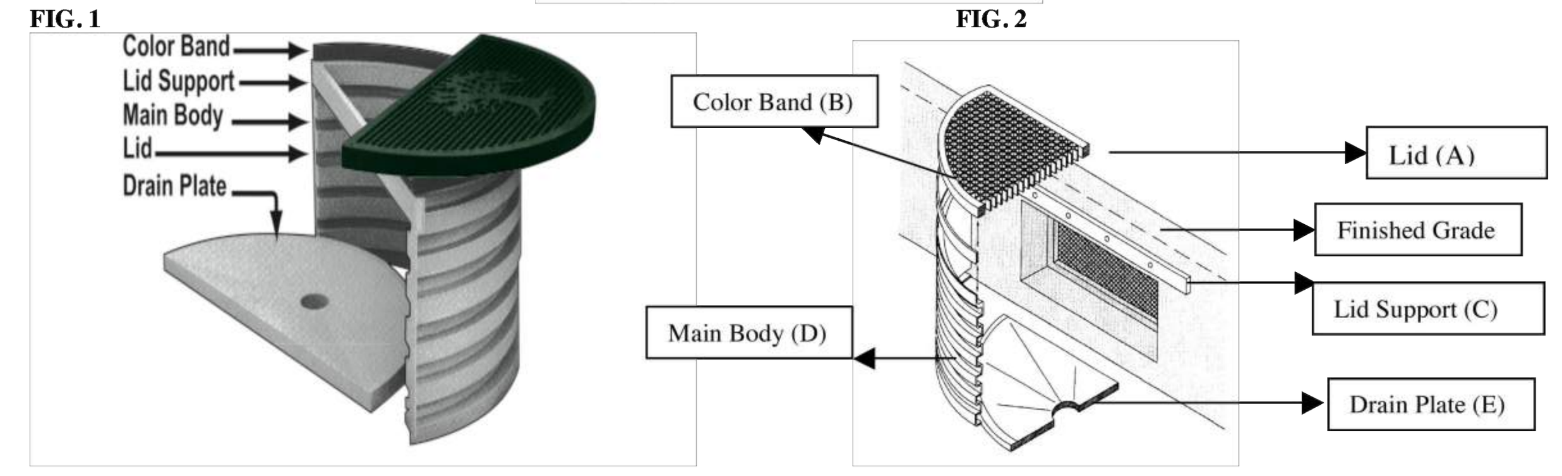


NOTES ON SIDEWALK CONSTRUCTION:
1. CONCRETE SHALL BE 3000 P.S.I.
2. ONE HALF ING (1/2) THICK MINIMUM PREFORMED BITUMINOUS EXPANSION JOINT MATERIAL SET THREE-FOURTHS (3/4) INCH BELOW FINISH SURFACE SHALL BE INSTALLED AT EXPANSION JONITS.
3. DOWELS SHALL BE PLAIN BARS AND SHALL HAVE ONE HALF (1/2) THE BAR WRAPPED WITH 2 LAYERS OF ROOFING FELT OR PLASTIC TUBE
4. 6" X 6", W2.9xW2.9 SHALL BE USED AS REINFORCEMENT
5. THE FINISH SHALL BE SEMISMOOTH WITH STIFF BROOM OR BRUSH FINISH
6. CONTROL JOINTS SHALL BE SCORED AT SPACING EQUAL TO WIDTH OF SIDEWALK
7. EXPANSION JOINTS AT MAXIMUM 80 FEET WITH SMOOTH 18" LONG DOWELS @ 16" C.C. AND 1/2" MINIMUM PREFORMED BITUMINOUS EXPANSIONS JOINT MATERIAL
8. FORM FOR SIDEWALKS SHALL BE FULL DEPTH FOR DIMENSION SPECIFIED



430-1	CITY OF LAREDO STADARD TECHNICAL SPECIFICATION	SIDEWALKS	DETAIL NO. 430-1



Dec-O-Vent Unit™ **INSTALLATION DIAGRAM**

Required Tools
Shovel
Drill *(if attaching Main Body to foundation)*
2"PVC pipe with 90° fitting & nipple *(if attaching drainpipe to main body)*
Six #12 x 1-1/2" stainless steel screws *(if bolting Main Body to foundation)*
Four #12 x 1-1/2" stainless steel screws with plastic anchors *(if bolting lid to foundation)*
Gravel for under drain plate if using as a dry well

Installation Instructions

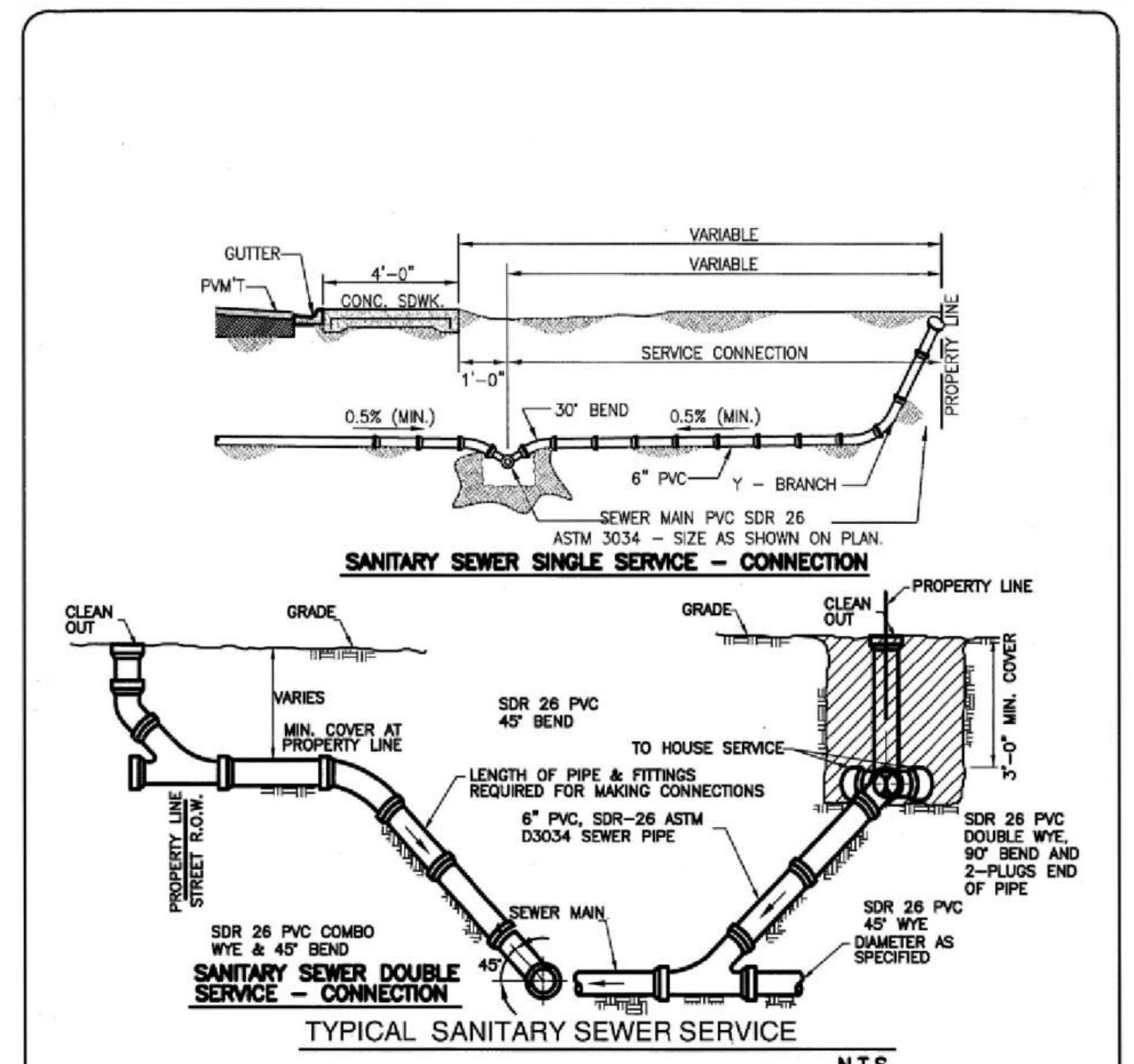
Directions:
1. Remove earth and any material around foundation vent, leaving enough space to place Dec-O-Vent™ unit next to foundation NOTE: this is to include a hole with a depth of at least 18" deep, allowing for proper fill and compaction.
2. Establish height of finished grade
3. Divide vent space at center. Mark center vertically on foundation wall. NOTE: Centering Dec-O-Vent™ on existing foundation vent opening is very important for proper airflow.
4. Measure 1" down from finished grade height. Mark horizontally on foundation wall. NOTE: be sure the line is level.
5. If you are going to install plumbing to allow drainage away from vent well you will need to locate the beginning point of the drainpipe at the center of hole. NOTE: for best fit it is recommended that the drainpipe have a 2" PVC 90° fitting at the end in order for a nipple to properly fit into the drainpipe.
6. NOTE: In most cases the Dec-O-Vent™ can be backfilled into place. If the back fill doesn't cover the Main Body (D) it is recommended that you bolt the unit to the foundation using six #12 x 1-1/2" stainless steel screws. If bolting unit to foundation proceed to step # 7. If using back fill take the complete unit, and assemble the parts together. Hold the unit up against the foundation with the lid centered on foundation mark and hold unit level on foundation. Back fill the unit up against the foundation.
7. Use drill bit and make 4 holes, evenly spaced between the holes on the lid support bar, for the screws. Line up the top of lid support (A) with the mark you made in step #4. Line up center of lid support with centerline mark on foundation wall. Hold up lid support along the horizontal line, that you marked on foundation wall in step #4. Mark the location of the four screw holes within lid support onto the foundation wall.
8. Drill a 1/4" diameter hole at the four points marked on the wall. Install four plastic anchors into the holes. Hold up lid support (A) and install four #12 x1-1/2" stainless steel screws into lid support. This will attach the lid support (A) to the foundation.
9. Slide Drain Plate (E) into the Main Body (the drain plate installs at the bottom or in the middle of Main Body). Push the ends of the Main Body (D) onto the lid support bar. There are two plastic studs (one on each side of main body) and they slide into lid support bar. Hold Main Body (D) against foundation and mark location of three holes on each side of the Main Body (D) located within the flange. After making marks, assure that unit is lined up with drain and anchors in foundation, as well as lid support, pull unit away. Bury drainpipe with 3/4" crushed rock or gravel. Secure the unit to the foundation by using six #12 x 1-1/2 " stainless steel screws.
10. Level grade material around unit for proper drainage away from house and vent.

LIMITED WARRANTY. Every Dec-O-Vent™ is warranteed to be free of defects from workmanship and materials for a period of one year from date of original purchase. If inspection by Decovent, LLC shows the trouble to be the result of defective workmanship or material Decovent, LLC will replace the defective part at our option, without charge. THIS WARRANTY DOES NOT APPLY WHERE:
- Repairs have been made or attempted by others.
- Replacement is required by improper installation
- The Dec-O-Vent™ unit has been abused, or improperly maintained.
- Alterations have been made to the unit.

In no event shall Decovent, LLC be liable for any direct, incidental, or consequential damages from the sale or use of the product (Dec-O-Vent™ unit). This disclaimer applies both during and after the term of this warranty, and is all-inclusive regarding any and all possible scenarios as allowed by a particular State or Country where this product is sold.

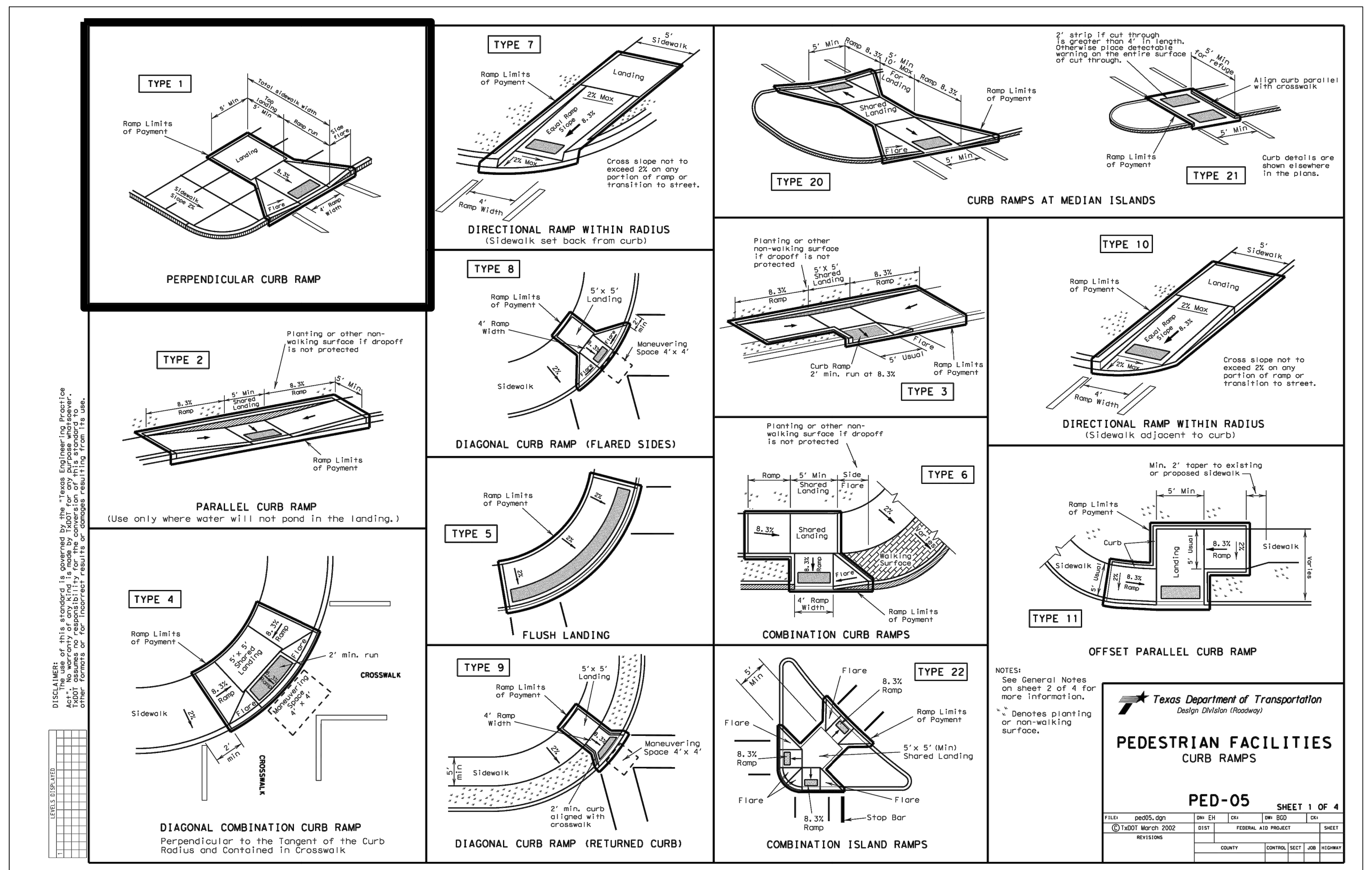
Dec-O-Vent™ , model number 2000-001, UL listed and manufactured by Decovent, LLC, Pleasant Hill, Oregon.

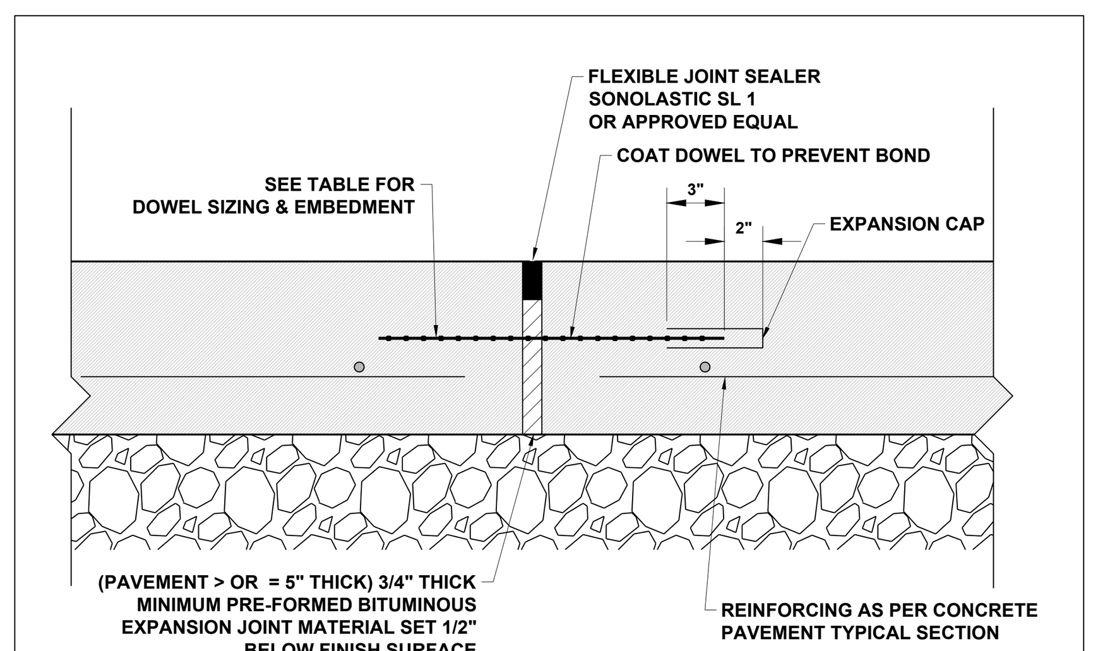
http://decovent.net



TYPICAL SANITARY SEWER SERVICE
N.T.S

TYPICAL SANITARY SEWER SERVICE





EXPANSION JOINT
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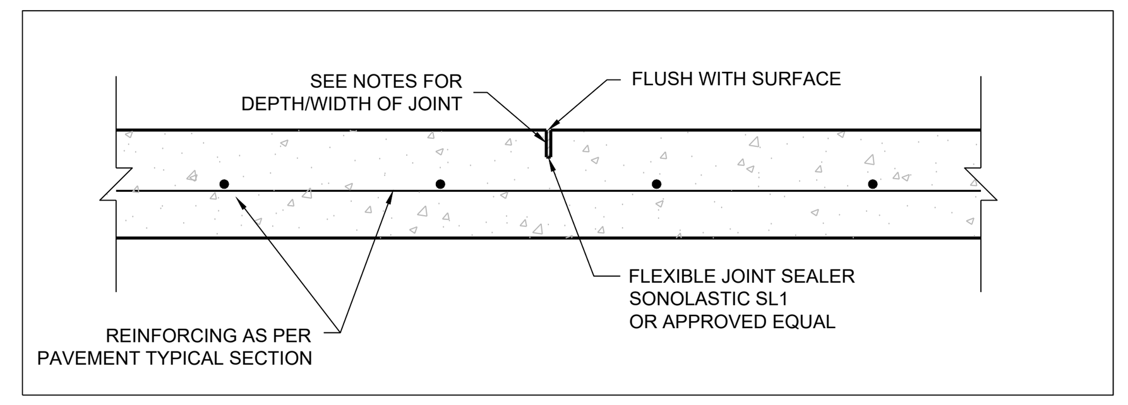
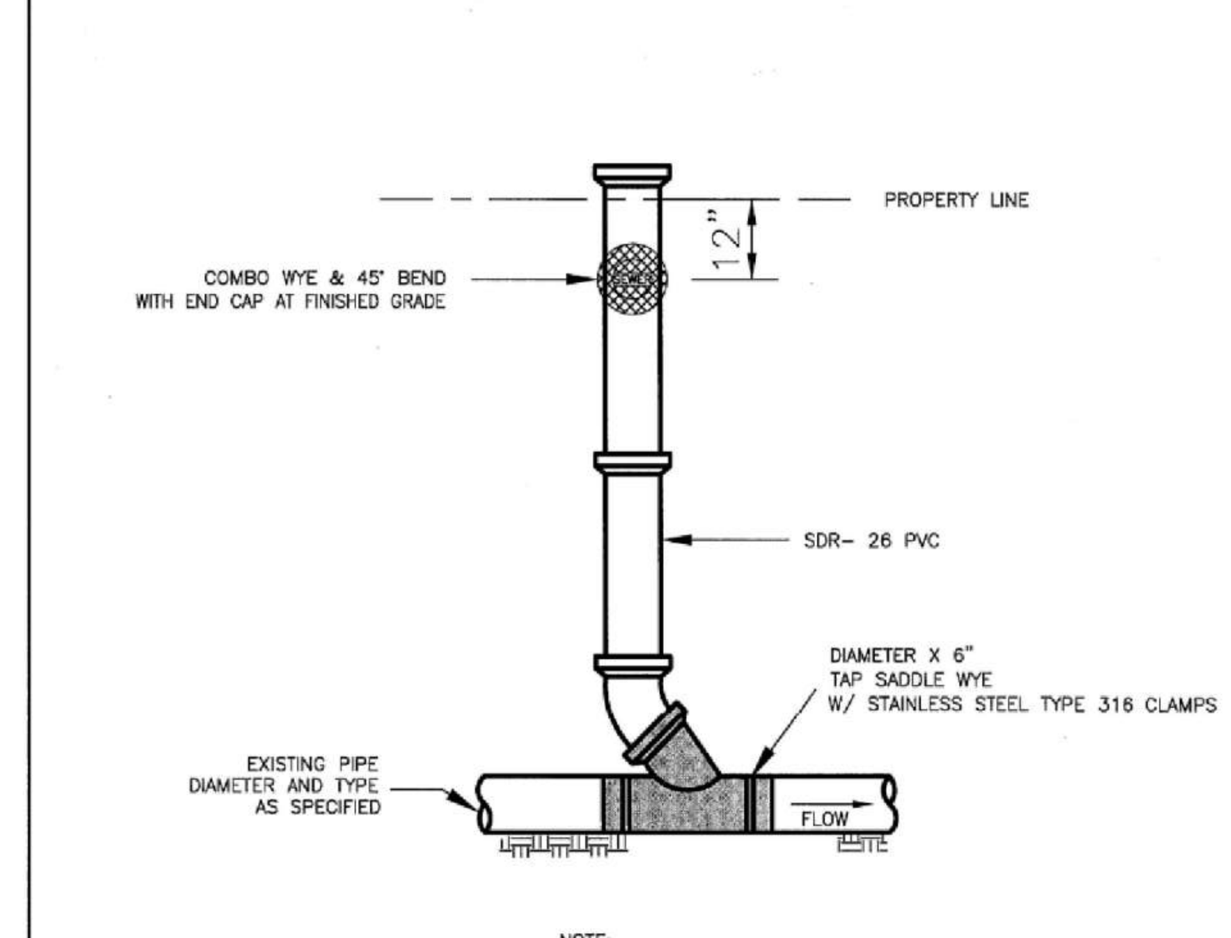
NOTES

1. **SAW CUT CONTROL JOINTS SHOULD BE CUT WITHIN 6 TO 12 HOURS OF CONCRETE PLACEMENT.**
2. **CONTRACTION JOINT DEPTH SHALL BE AT LEAST ONE-FOURTH (1/4) OF PAVEMENT THICKNESS.**
3. **CONTRACTION JOINT WIDTH SHALL BE ONE-FOURTH (1/4) INCH OR AS REQUIRED BY JOINT SEALANT MANUFACTURE.**
4. **ALL JOINTS SHOULD BE SEALED. IF ALL JOINTS, INCLUDING SAWCUTS, ARE NOT SEALED THEN EXPANSION JOINTS SHOULD BE INSTALLED.**



CONTRACTION/DUMMY JOINT SECTION
SCALE: N.T.S.



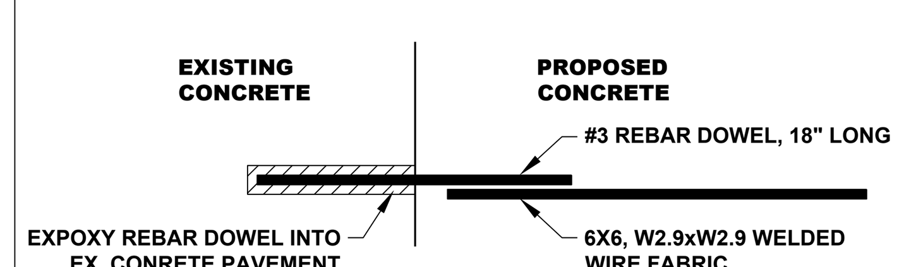
NOTE:
A) FOR EXISTING SDR-26 PVC PIPE USE SDR-26 PVC TAP SADDLE WYE W/ STAINLESS STEEL TYPE 316 CLAMPS
B) FOR EXISTING CLAY PIPE USE FLEXIBLE PVC TAP SADDLE WYE W/ STAINLESS STEEL TYPE 316 CLAMPS

EXISTING SEWER SERVICE CONNECTION
PLAN VIEW N.T.S

EXISTING SEWER SERVICE CONNECTION

CONCRETE PAVEMENT DOWELING, JOINTING AND SEALERS GENERAL NOTES

1. 3/4" DIAMETER, 18" LONG SMOOTH DOWELS SHALL BE PLACED IN LINE WITH THE EXISTING EXPANSION JOINTS AS NOTED IN THE TYPICAL CONCRETE PAVEMENT DOWEL PLAN. THE SMOOTH DOWELS SHALL BE PLACED AT THE REBAR SPACING.
2. THE SMOOTH DOWELS SHALL BE PLACED USING A REBAR BREAK JOINT OR THE OTHER METHOD APPROVED BY THE OWNER.
3. AT THE LOCATION OF CONSTRUCTION JOINTS, A #4 REBAR, 18" LONG SHALL BE DOWELED INTO EXISTING CONCRETE IN LINE WITH THE REBAR SPACING. THE REBAR DOWEL SHALL BE TIED TO THE CONCRETE PAVEMENT REBAR. THE REBAR DOWEL SHALL BE EPOXIED INTO EXISTING CONCRETE USING ***HILTI HIT-RE100*** ADHESIVE, OR OTHER TYPE III, CLASS C EPOXY AND ADHESIVE FROM TX DOT'S PRE-QUALIFIED PRODUCERS LIST AS APPROVED BY THE OWNER.
4. THE CONTRACTOR SHALL GROUT ANY VOIDS OR HOLES USING ***MAPEI PLAINCROUT 755*** OR OTHER APPROVED EQUAL AS APPROVED BY THE OWNER. THE GROUT SHALL FOLLOW THE MIXING AND APPLICATION INSTRUCTIONS FOR THE DRY-PACK METHOD AS NOTED BY THE MANUFACTURER.
5. THE CONCRETE FINISH SHALL BE SEMI-SMOOTH WITH A STIFF BROOM OR BRUSH FINISH. TINE (RAKE) FINISH IS ALSO ALLOWED.



DOWEL DETAIL
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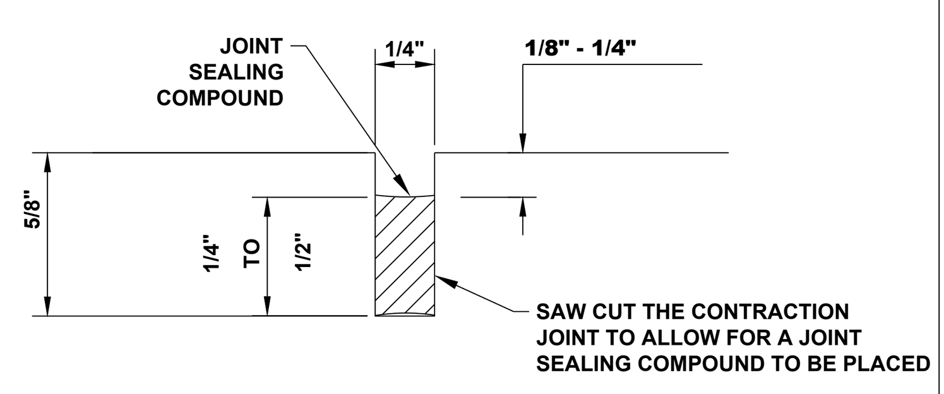
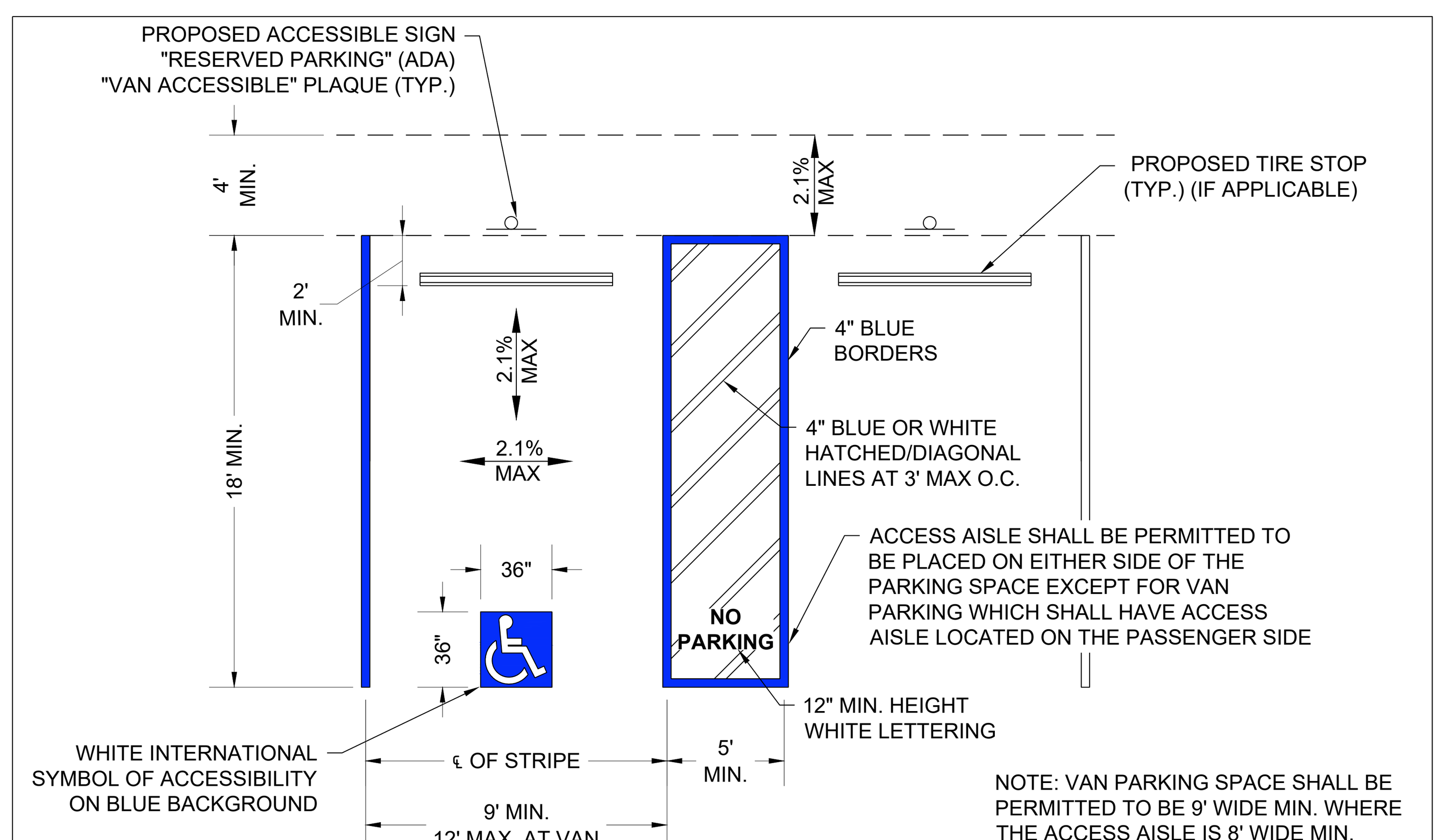


CONTRACTION JOINT SEALING DETAIL
SCALE: N.T.S.

CONCRETE PAVEMENT DOWEL AND SEALERS DETAIL
SCALE: N.T.S.



ADA STRIPING DETAIL
SCALE: N.T.S.

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STATE OF TEXAS
ANDRES A. RUBIO
141366
LICENSED PROFESSIONAL ENGINEER
10-25-24

NOTES:
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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

100%

GENERAL DETAILS

Drawn by:	J.J.C.
Checked by:	A.R.
Project number:	23-15
Project Issue Date:	10-25-2024

8

Scale: Refer to plans

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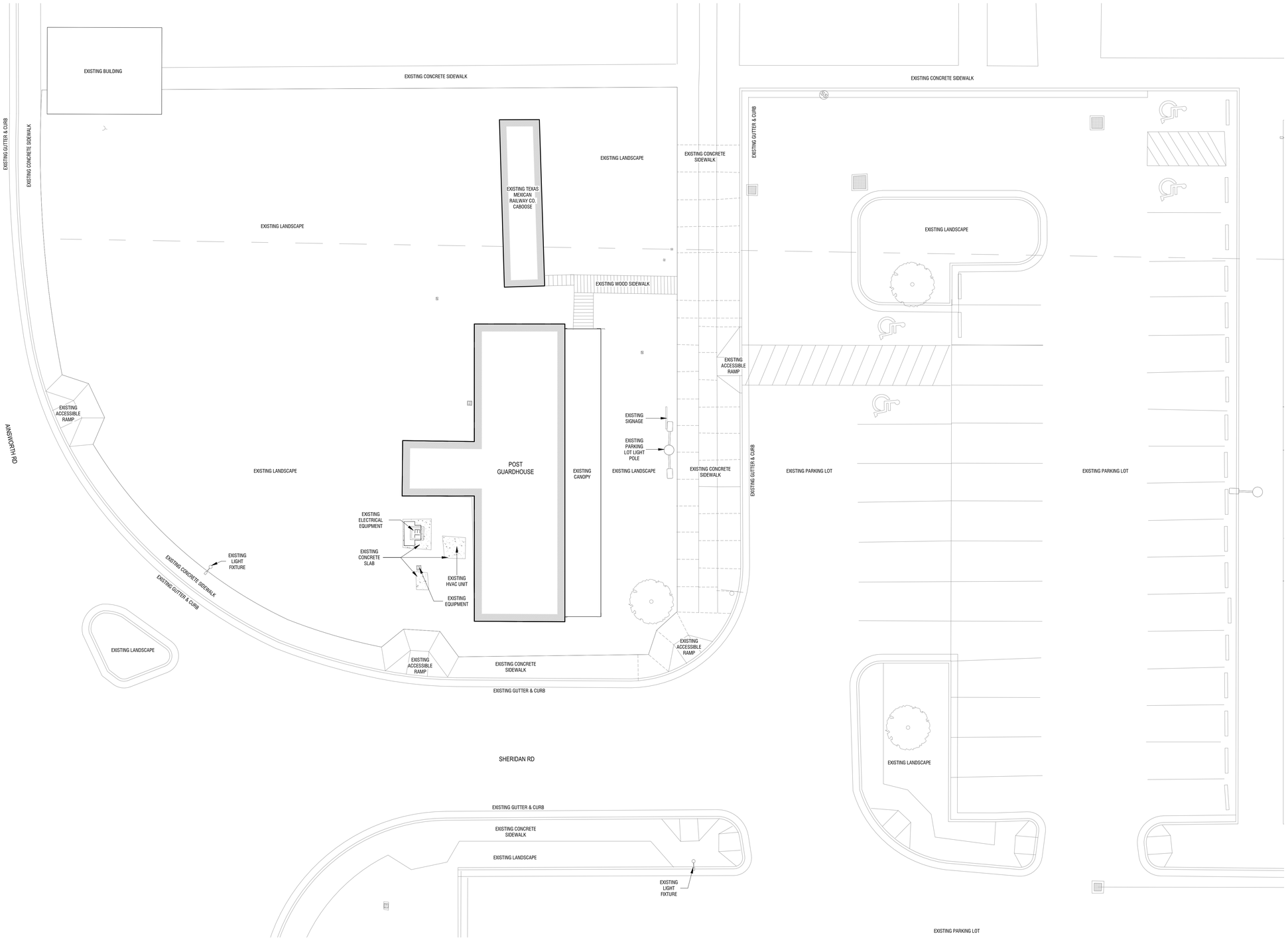

1 **EXISTING SITE PLAN**
3/32" = 1'-0"

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Veterans Services Center

Laredo College
Sheridan Rd, Laredo, TX 78040

CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS, JR.
20150
STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

EXISTING SITE PLAN

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

AEX-100

Scale: 3/32" = 1'-0"

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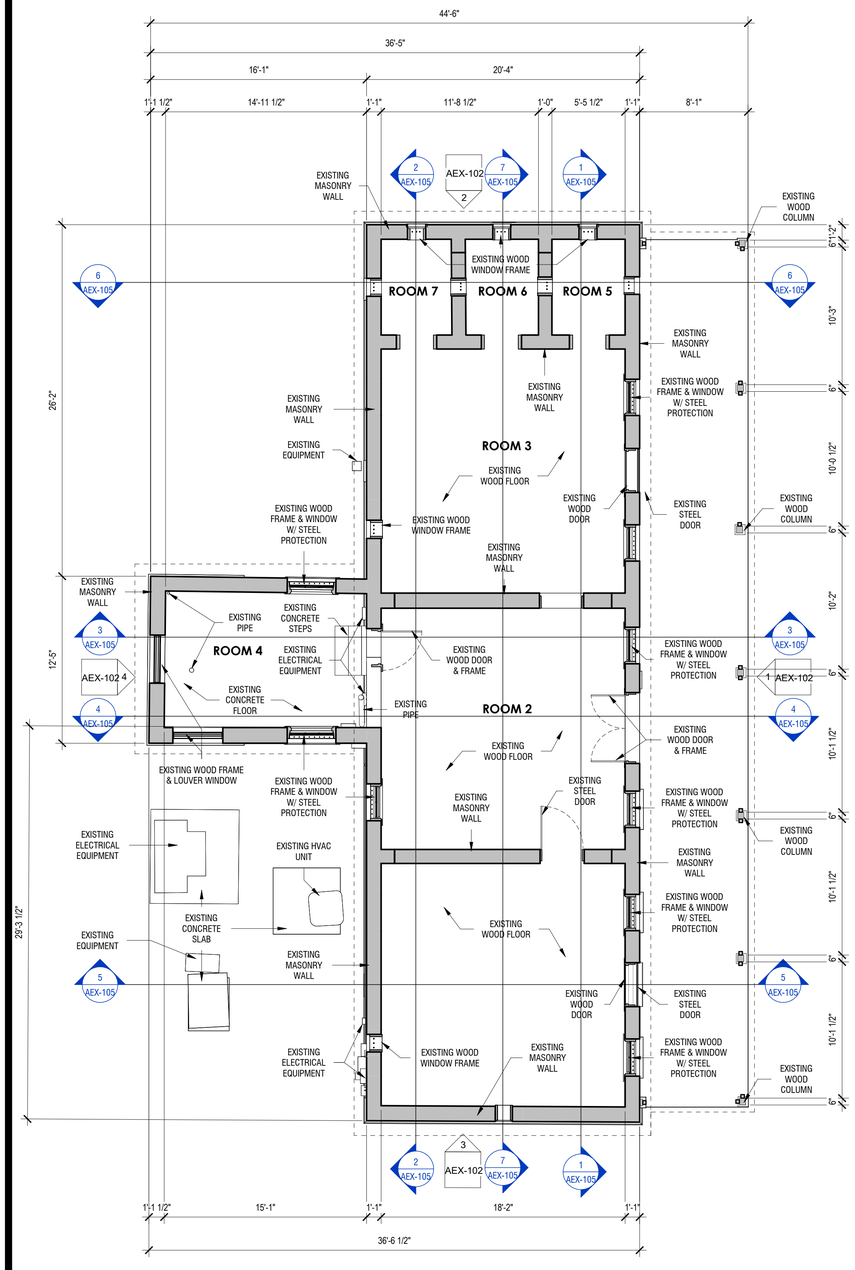
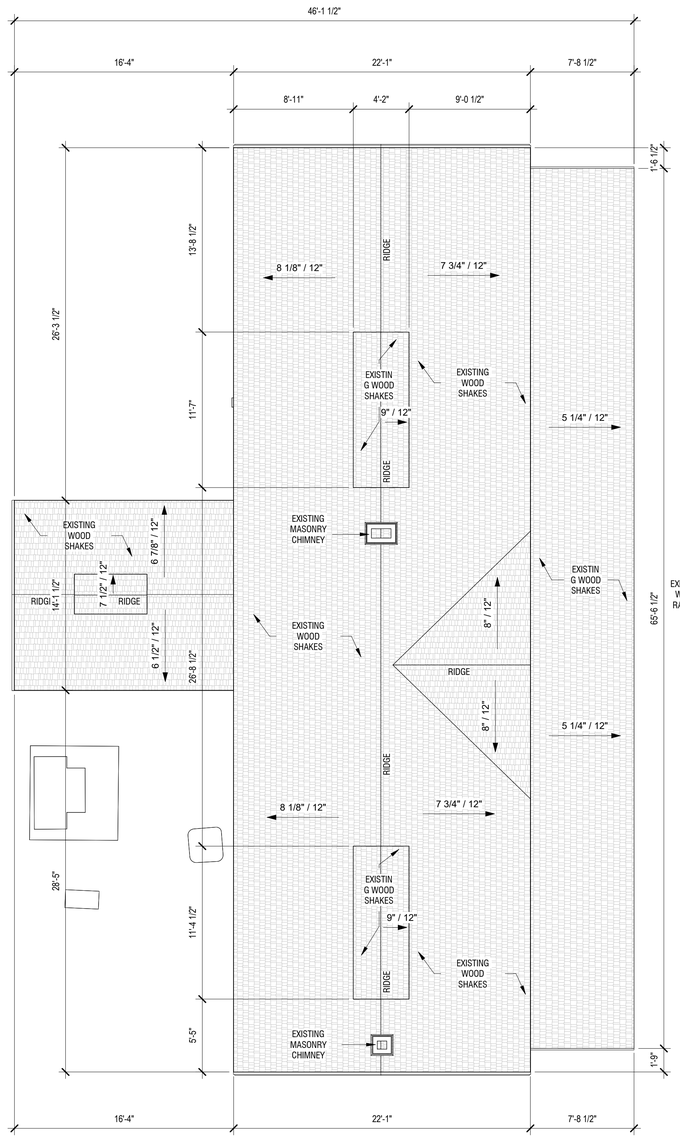
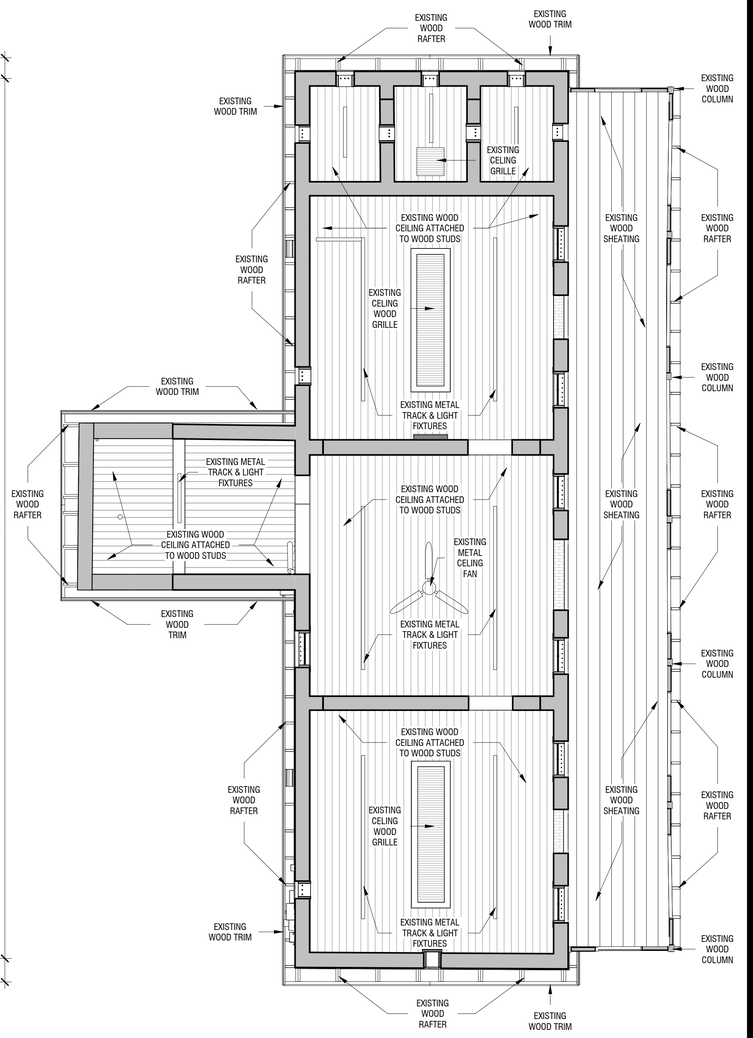


1 **EXISTING FLOOR PLAN**
3/16" = 1'-0"



3 **EXISTING ROOF PLAN**
3/16" = 1'-0"



2 **EXISTING RCP**
3/16" = 1'-0"

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
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20150
STATE OF TEXAS

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No.	Description	Date

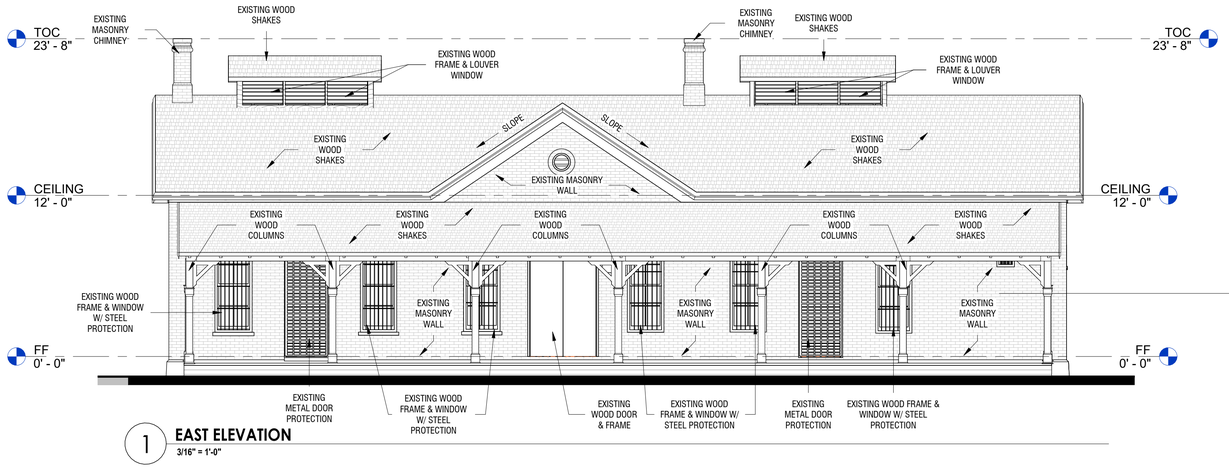
KEY PLAN

EXISTING FLOOR PLANS

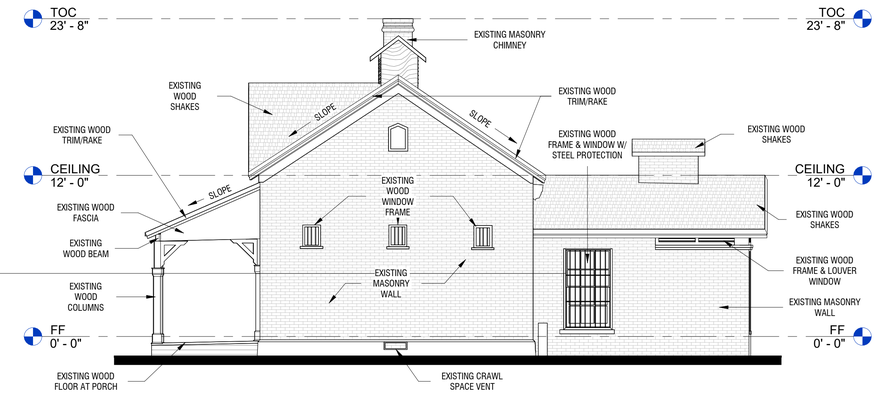
Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

AEX-101

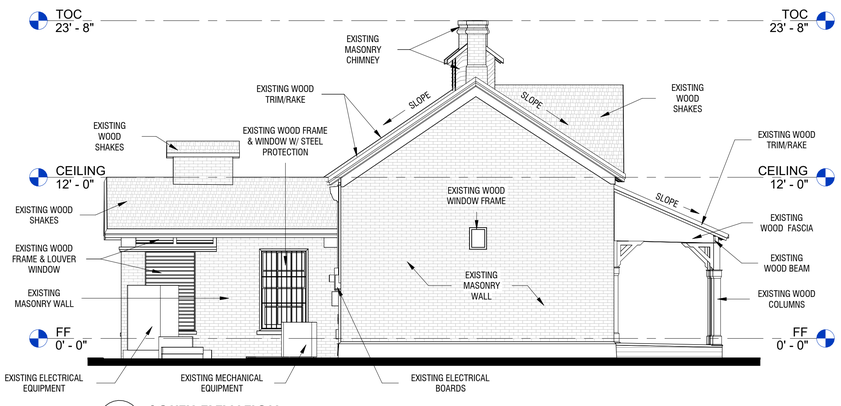
Scale: 3/16" = 1'-0"



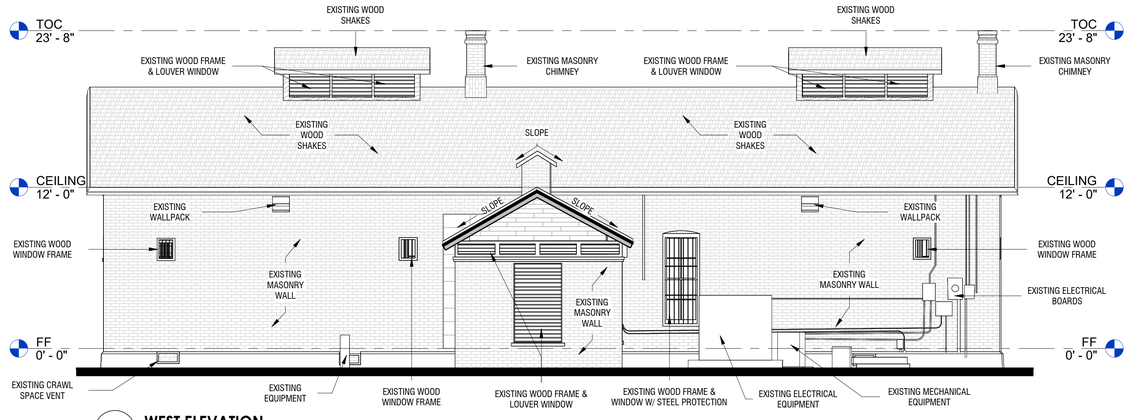
1 **EAST ELEVATION**
3/16" = 1'-0"



2 **NORTH ELEVATION**
3/16" = 1'-0"



3 **SOUTH ELEVATION**
3/16" = 1'-0"



4 **WEST ELEVATION**
3/16" = 1'-0"

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Sheridan Rd, Laredo, TX 78040

CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS, JR.
20150
STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

EXISTING ELEVATIONS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

AEX-102

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

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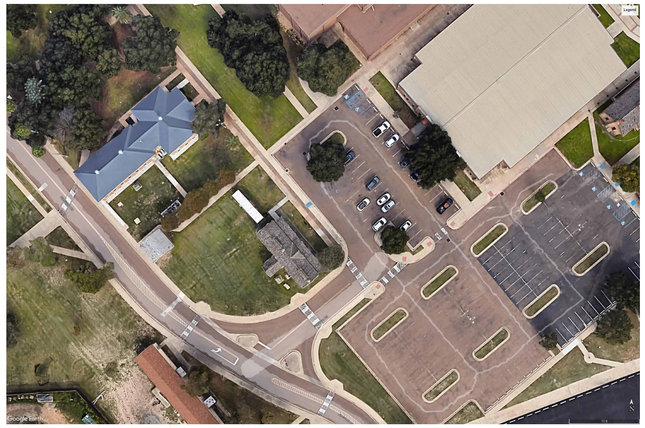

AERIAL SITE PHOTO

BIRD EYE GENERAL VIEW

FRONT FACADE VIEW

BACK FACADE GENERAL VIEW

FRONT PORCH VIEW

BACK FACADE VIEW

EXISTING CONDITIONS BACK FACADE PHOTO

FRONT PORCH VIEW

FRONT FACADE WINDOW DETAIL VIEW

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No.	Description	Date

EXISTING CONDITIONS EXTERIOR PHOTOS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

AEX-103

Scale:

INTERIOR MAIN ENTRANCE VIEW

INTERIOR MAIN ENTRANCE VIEW

INTERIOR NORTH ROOM VIEW

INTERIOR CELL VIEW

INTERIOR BACK ROOM VIEW

EXTERIOR WINDOW DETAIL

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No.	Description	Date

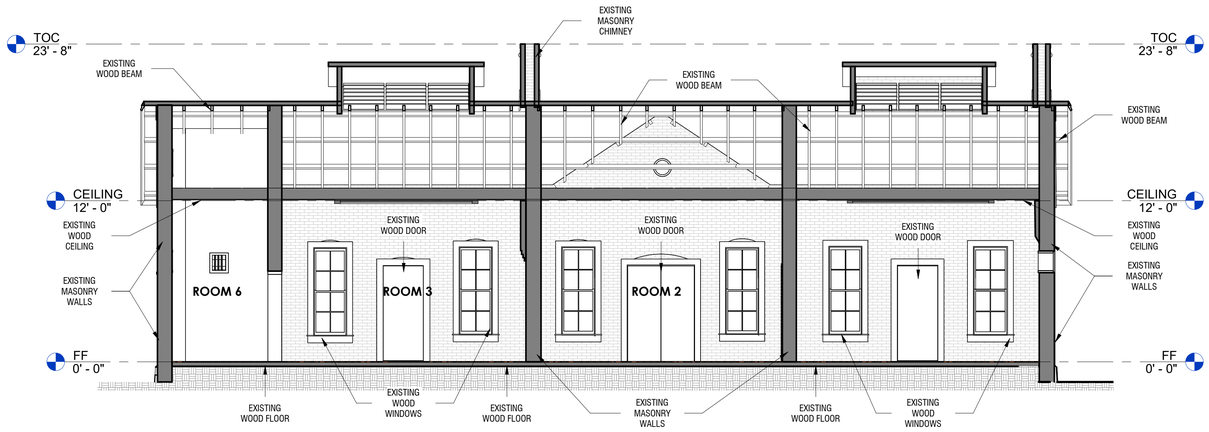
KEY PLAN

EXISTING CONDITIONS INTERIOR PHOTOS

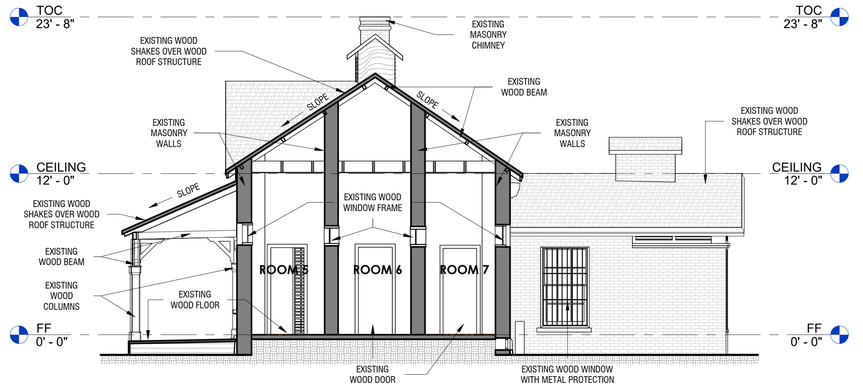
Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

AEX-104

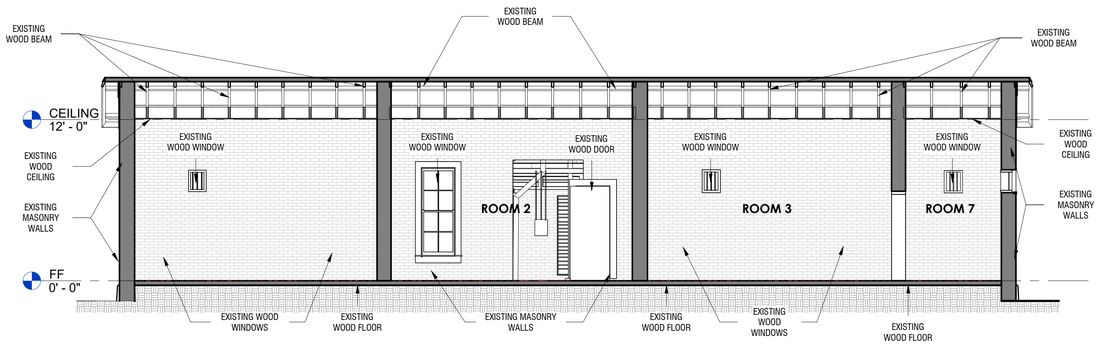
Scale:



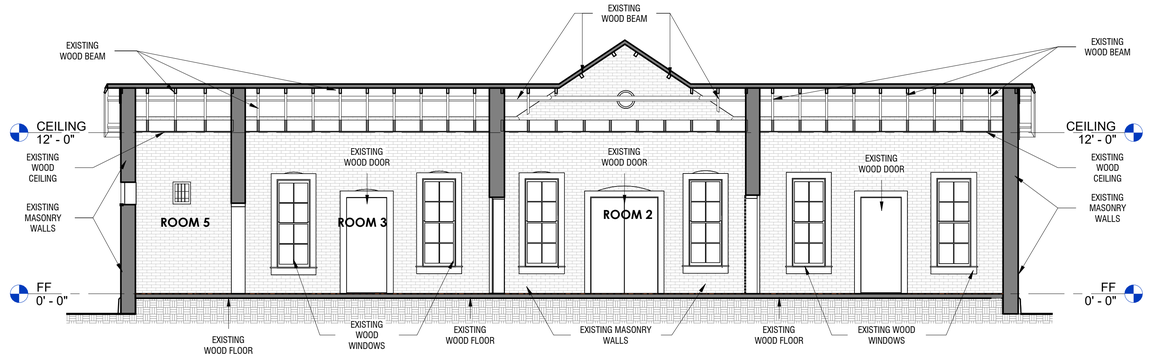
7 **SECTION 1**
3/16" = 1'-0"



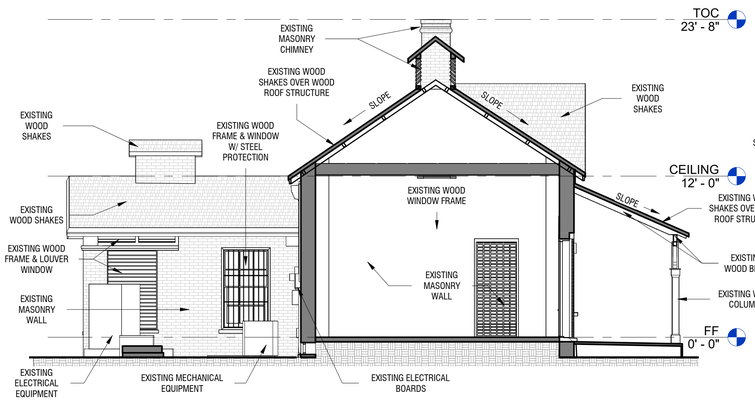
6 **EXT BUILDING SECTION 2**
3/16" = 1'-0"



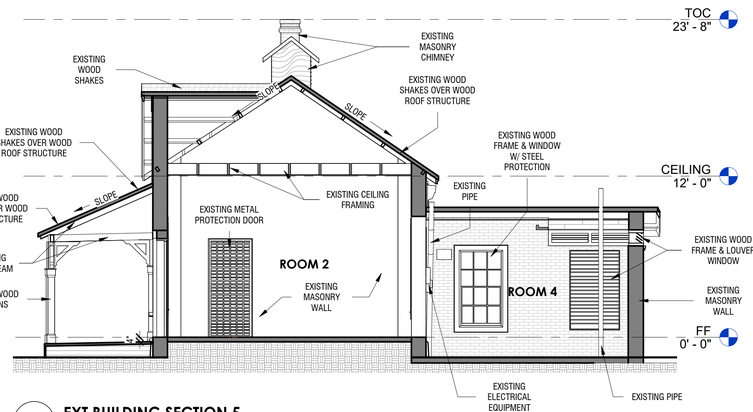
2 **EXT BUILDING SECTION 3**
3/16" = 1'-0"



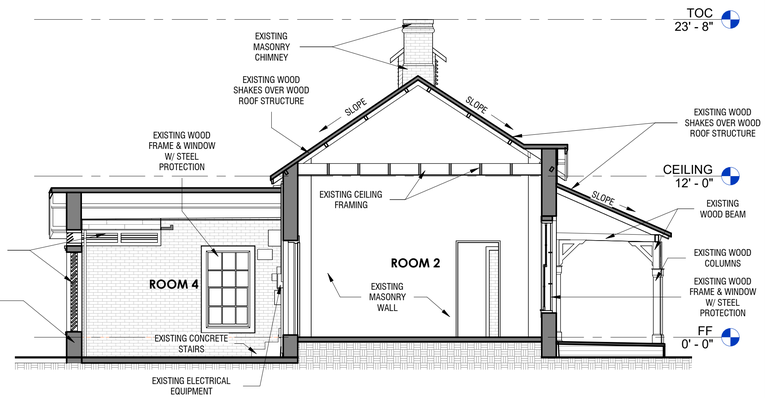
1 **EXT BUILDING SECTION 1**
3/16" = 1'-0"



5 **EXT BUILDING SECTION 6**
3/16" = 1'-0"



4 **EXT BUILDING SECTION 5**
3/16" = 1'-0"



3 **EXT BUILDING SECTION 4**
3/16" = 1'-0"

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20150
STATE OF TEXAS

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No.	Description	Date

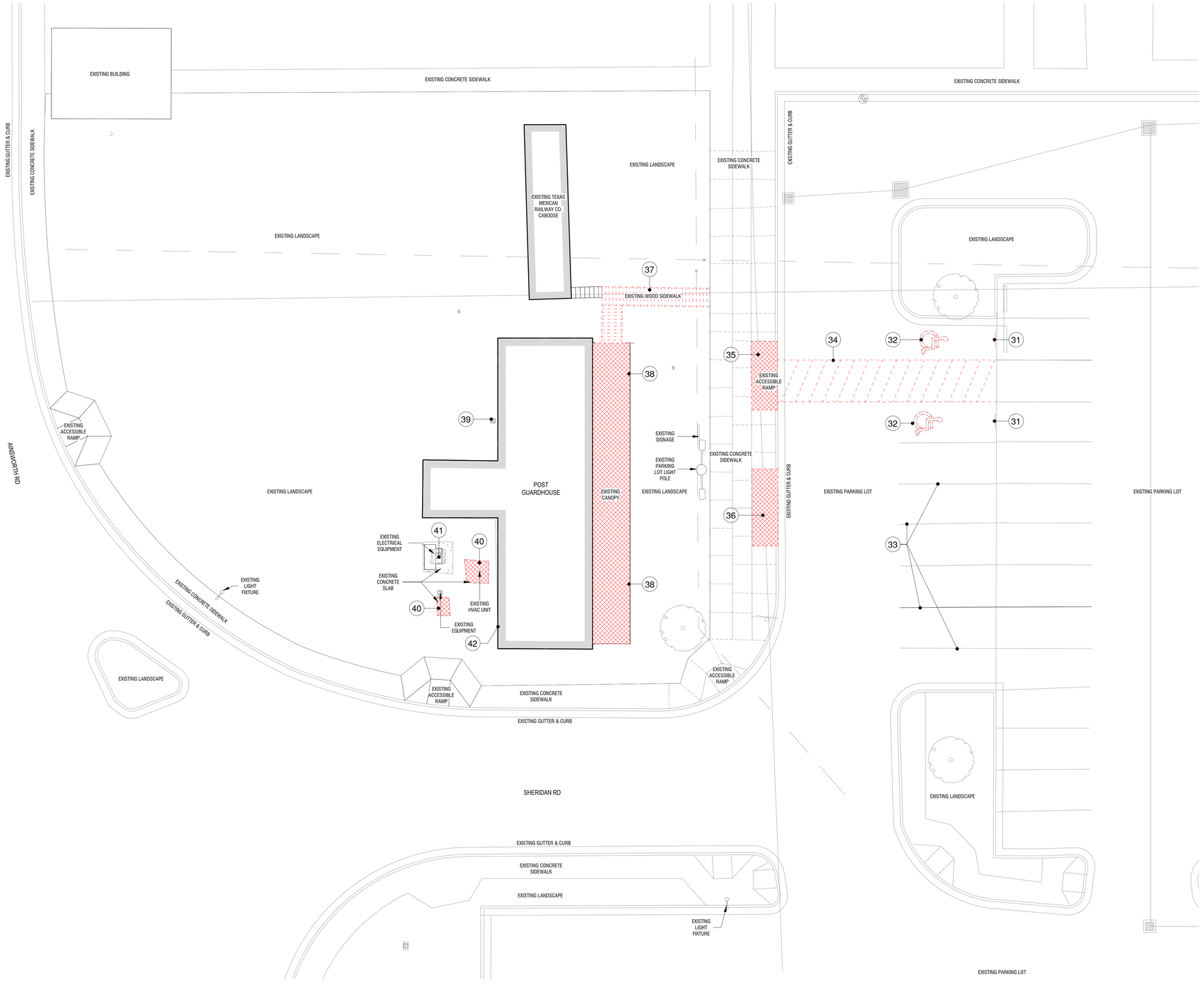
KEY PLAN

EXISTING SECTIONS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

AEX-105

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



1 **DEMOLITION SITE PLAN**
3/32" = 1'-0"

DEMO KEYNOTES

Number	Description
1	DEMO & DISPOSE EXISTING MASONRY FOOTINS & ALL ASSOCIATED ELEMENTS.
2	DEMO & DISPOSE EXISTING CONCRETE SLAB.
3	DEMO & DISPOSE EXISTING CONCRETE STEPS.
4	DEMO PORTION OF EXISTING MASONRY WALL.
5	DEMO & DISPOSE EXISTING MASONRY WALL.
6	REMOVE & DISPOSE EXISTING FRAME.
7	DEMO & DISPOSE EXISTING DOOR, FRAME & ALL ASSOCIATED ELEMENTS.
8	DEMO & DISPOSE EXISTING WOOD COLUMNS & ALL ASSOCIATED STRUCTURAL ELEMENTS, TYP.
9	DEMO & DISPOSE EXISTING WINDOW, FRAME & STEEL WINDOWS PROTECTIONS.
10	DEMO & DISPOSE EXISTING WOOD LOUVER & FRAME.
11	EXISTING ELECTRICAL EQUIPMENT TO DEMOLISH AND DISPOSE.
12	REMOVE & DISPOSE EXISTING MECHANICAL EQUIPMENT.
13	REMOVE & DISPOSE EXISTING ELECTRICAL EQUIPMENT & ALL ASSOCIATED ELEMENTS.
14	REMOVE & DISPOSE PLUMBING PIPES & ALL ASOCIATED ELEMENTS.
15	REMOVE & DISPOSE EXISTING ROOF WOOD SHINGLES, TRIMS, FRAMING, CELING, SOFFIT & ALL ASOCIATED CONCEALED STRUCTURAL ELEMENTS, TYP.
16	REMOVE & DISPOSE EXISTING CEILING (INCLUDES, WOOD CEILING, LIGHT FIXTURES, CEILING FANS & ALL ASSOCIATED CONNECTIONS.) TYP.
17	EXISTING BRICK VENEER TO BE REPAIR & REPOINT (50%). DAMAGED BRICK (10%) TO BE REPLACED WITH NEW PIECES
18	EXISTING WOOD WINDOW, FRAME & STEEL PROTECTION TO BE PATCHED & REPAIRED AS REQ. AND PREPARE FOR NEW FINISH RE: SHEET R-301
19	PATCH & REPAIR EXISTING WOOD FLOOR & PREPARE SURFACE FOR NEW FLOOR & BASE FINISH
20	REMOVE & DISPOSE EXISTING CEILING & FRAMING (INCLUDES, WOOD CEILING,SUSPENSION SYSTEM FRAMING, LIGHT FIXTURES, CEILING FANS & ALL ASSOCIATED CONNECTIONS.) TYP.
21	REMOVE & DISPOSE EXISTING ROOF SHINGLES, PLYWOOD AND ALL RELATED ELEMENTS. WOOD FRAMING TO REMAIN & PREPARE TO RECIEVE NEW PLYWOOD DECK AND ROOF FINISH. (TYP.)
22	EXISTING WOOD DOOR & METAL DOOR PROTECTION TO REMAIN, OPERATIONAL HARDWARE TO BE REMOVED TO KEEP DOORS FIXED; REFINISH WOOD DOOR. RE: SPECIFICATIONS; REPAINT METAL DOOR PROTECTION
23	REMOVE & DISPOSE EXISTING WALL PACK.
24	REMOVE & DISPOSE EXISTING VENT.
25	CONCRETE SLAB TO REMAIN PATCH & REPAIR AS REQ.
26	REMOVE DOORS & FRAMES AND RETURN TO OWNER FOR REUSE IF OWNER SO DESIRES.
27	DEMOLISH EXISTING WALL AS REQUIRED FOR NEW DOOR/WINDOW.
28	REPOINT EXISTING INTERIOR BRICK ASSUME 50% OF INTERIOR BRICK WILL REQUIRE REPOINTING AND 10% OF INTERIOR BRICK IS DAMAGED AND WILL NEED TO BE REPLACED WITH NEW.
29	EXISTING HISTORIC WINDOW FRAMES AND GLAZING GENERALLY TO REMAIN; REPAIR AND PAINT DAMAGED WOOD COMPONENTS AS REQUIRED. REMOVE AND REPLACE BROKEN GLAZING UNITS. EXISTING STEEL BARS TO REPAINTED; REMOVE AND REINSTALL BARS IF REQUIRED TO REPAIR EXISTING WINDOWS.
30	REMOVE & RELOCATE EXISTING COMMUNICATION EQUIPMENT; RE: CIVIL DRAWINGS.
31	REMOVE & DISPOSE OF ADA SIGN RE:CIVIL DRAWINGS
32	ADA STRIPING TO BE REMOVED RE:CIVIL DRAWINGS
33	PARKING STRIPING TO BE REMOVED RE:CIVIL DRAWINGS
34	CROSSWALK STRIPING TO BE REMOVED RE:CIVIL DRAWINGS
35	DEMOLISH AND DISPOSE ADA RAMP & SIDEWALK
36	DEMOLISH AND DISPOSE OF SIDEWALK
37	WOODEN RAMP TO BE DEMOLISHED & DISPOSE
38	PORCH AREA TO BE DEMOLISHED & DISPOSED
39	COMMUNICATION EQUIPMENT TO REMOVE AND RELOCATE COMMUNICATION.
40	CONCRETE PADS TO BE DEMOLISHED & UTILITY PEDESTALS TO BE RELOCATED CONTRACTOR TO COORDINATE W/ APPROPIATE UTILITY COMPANIES BEFORE DEMOLISHING CONCRETE PADS & RELOCATION UNDERGROUND LINES RE: MEP PLANS
41	CONCRETE PAD TO REMAIN, PATCH AND REPAIR AS REQ.
42	EXITING ELECTRICAL BOARD TO DEMOLISH

DEMOLITION LEGEND

- WALLS & FLOOR TO BE DEMOLISHED
- CEILING & TILE TO BE DEMOLISHED
- EXISTING WALL TO REMAIN
- CEILING GRID TO REMAIN, TILE TO BE REMOVED
- FIXED FURNITURE TO BE DEMOLISH

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT ☆ GUILLERMO J. CAVAZOS JR. ☆ 20150 ☆ STATE OF TEXAS

NOTES:
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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

SITE PLAN DEMOLITION

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

AD-101

Scale: As indicated

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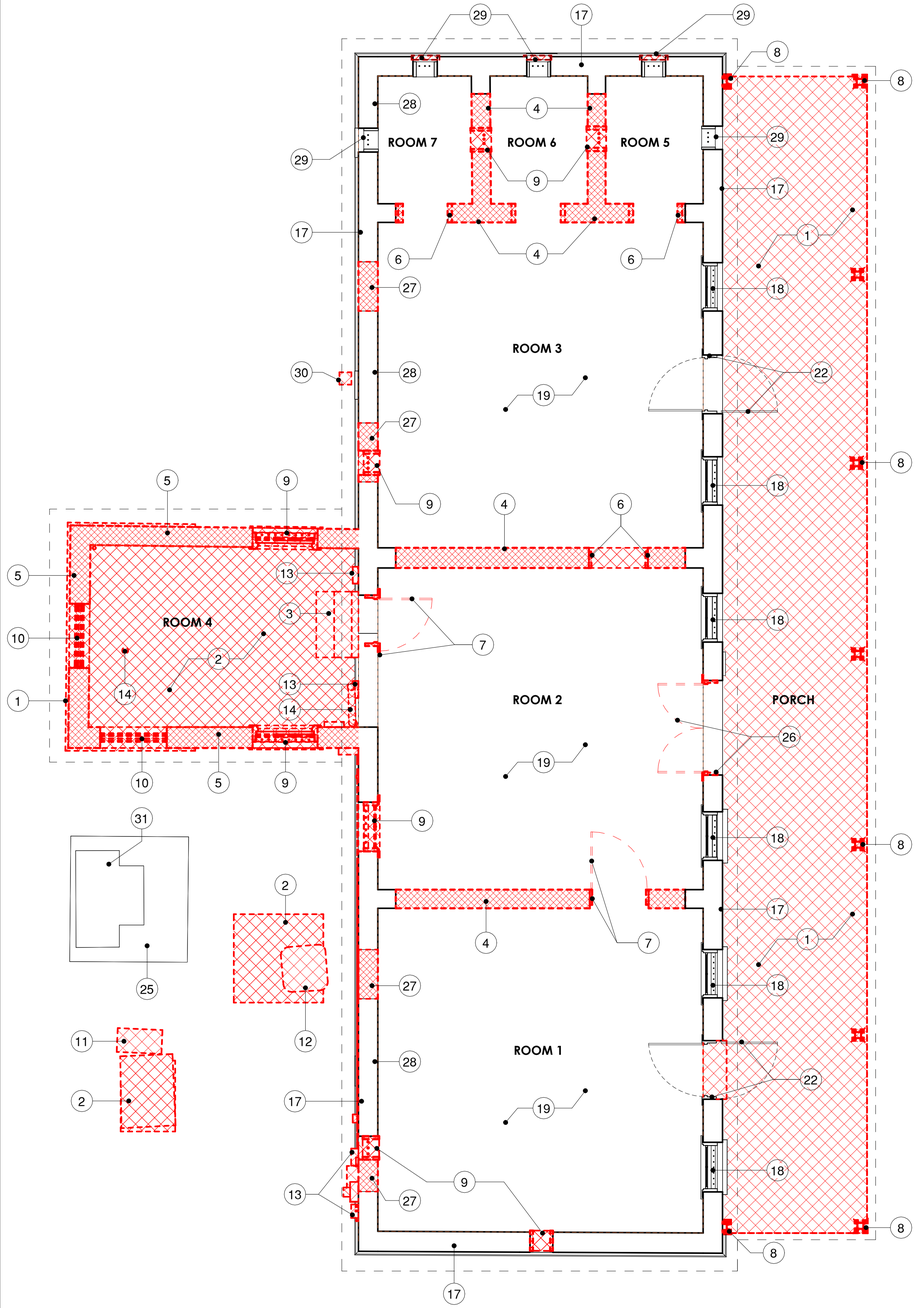
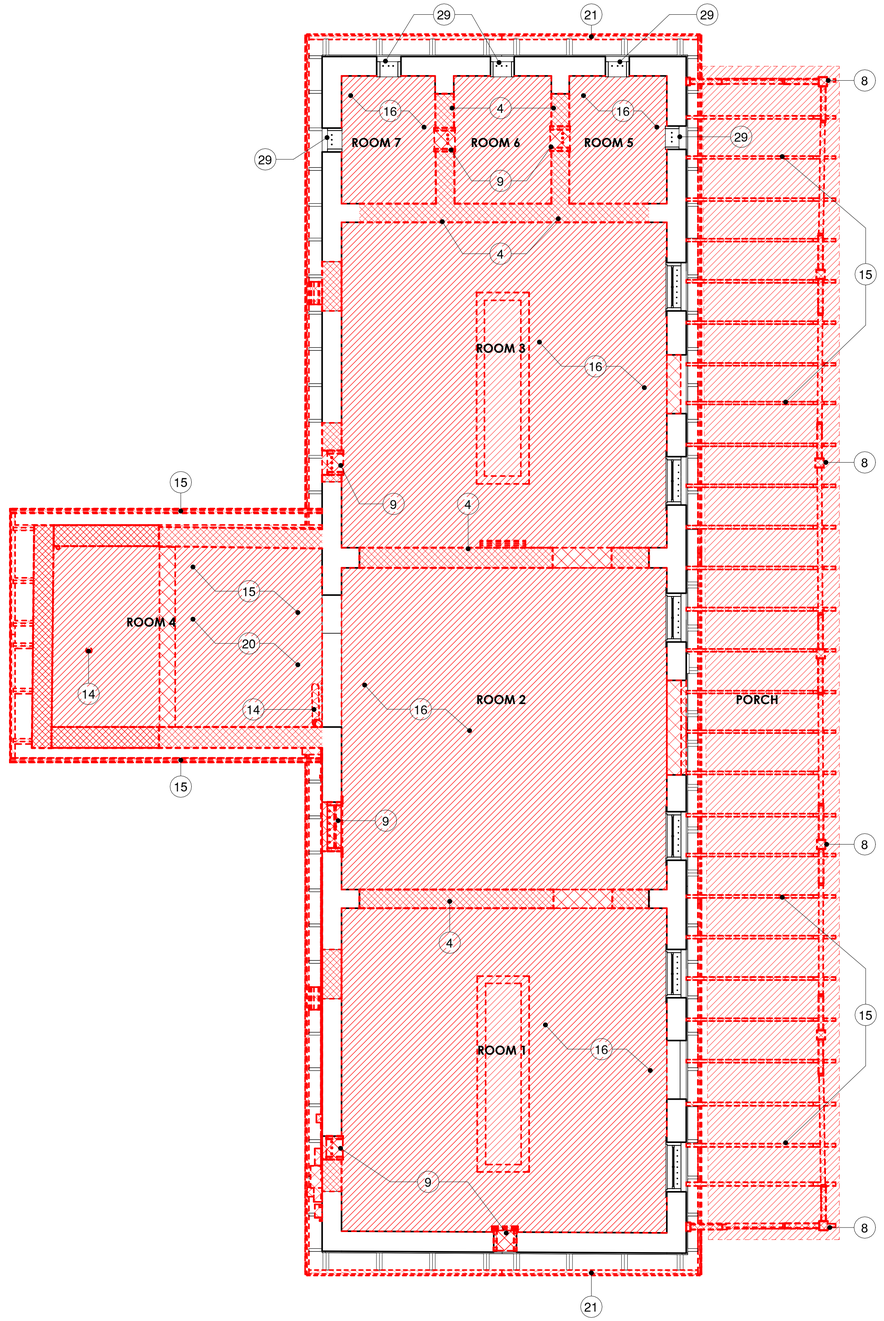


1 **DEMO FIRST FLOOR PLAN**
1/4" = 1'-0"



2 **DEMO RCP PLAN**
1/4" = 1'-0"

DEMO KEYNOTES

Number	Description
1	DEMO & DISPOSE EXISTING MASONRY FOOTINS & ALL ASSOCIATED ELEMENTS.
2	DEMO & DISPOSE EXISTING CONCRETE SLAB.
3	DEMO & DISPOSE EXISTING CONCRETE STEPS.
4	DEMO PORTION OF EXISTING MASONRY WALL.
5	DEMO & DISPOSE EXISTING MASONRY WALL.
6	REMOVE & DISPOSE EXISTING FRAME.
7	DEMO & DISPOSE EXISTING DOOR, FRAME & ALL ASSOCIATED ELEMENTS.
8	DEMO & DISPOSE EXISTING WOOD COLUMNS & ALL ASSOCIATED STRUCTURAL ELEMENTS, TYP.
9	DEMO & DISPOSE EXISTING WINDOW, FRAME & STEEL WINDOWS PROTECTIONS.
10	DEMO & DISPOSE EXISTING WOOD LOUVER & FRAME.
11	EXISTING ELECTRICAL EQUIPMENT TO DEMOLISH AND DISPOSE.
12	REMOVE & DISPOSE EXISTING MECHANICAL EQUIPMENT.
13	REMOVE & DISPOSE EXISTING ELECTRICAL EQUIPMENT & ALL ASSOCIATED ELEMENTS.
14	REMOVE & DISPOSE PLUMBING PIPES & ALL ASOCIATED ELEMENTS.
15	REMOVE & DISPOSE EXISTING ROOF WOOD SHINGLES, TRIMS, FRAMING, CELING, SOFFIT & ALL ASOCIATED CONCEALED STRUCTURAL ELEMENTS, TYP.
16	REMOVE & DISPOSE EXISTING CEILING (INCLUDES, WOOD CEILING, LIGHT FIXTURES, CEILING FANS & ALL ASSOCIATED CONNECTIONS.) TYP.
17	EXISTING BRICK VENEER TO BE REPAIR & REPOINT (50%). DAMAGED BRICK (10%) TO BE REPLACED WITH NEW PIECES
18	EXISTING WOOD WINDOW, FRAME & STEEL PROTECTION TO BE PATCHED & REPAIRED AS REQ. AND PREPARE FOR NEW FINISH RE: SHEET R-301
19	PATCH & REPAIR EXISTING WOOD FLOOR & PREPARE SURFACE FOR NEW FLOOR & BASE FINISH
20	REMOVE & DISPOSE EXISTING CEILING & FRAMING (INCLUDES, WOOD CEILING,SUSPENSION SYSTEM FRAMING, LIGHT FIXTURES, CEILING FANS & ALL ASSOCIATED CONNECTIONS.) TYP.
21	REMOVE & DISPOSE EXISTING ROOF SHINGLES, PLYWOOD AND ALL RELATED ELEMENTS. WOOD FRAMING TO REMAIN & PREPARE TO RECIEVE NEW PLYWOOD DECK AND ROOF FINISH. (TYP.)
22	EXISTING WOOD DOOR & METAL DOOR PROTECTION TO REMAIN, OPERATIONAL HARDWARE TO BE REMOVED TO KEEP DOORS FIXED; REFINISH WOOD DOOR. RE: SPECIFICATIONS; REPAINT METAL DOOR PROTECTION
23	REMOVE & DISPOSE EXISTING WALL PACK.
24	REMOVE & DISPOSE EXISTING VENT.
25	CONCRETE SLAB TO REMAIN PATCH & REPAIR AS REQ.
26	REMOVE DOORS & FRAMES AND RETURN TO OWNER FOR REUSE IF OWNER SO DESIRES.
27	DEMOLISH EXISTING WALL AS REQUIRED FOR NEW DOOR/WINDOW.
28	REPOINT EXISTING INTERIOR BRICK ASSUME 50% OF INTERIOR BRICK WILL REQUIRE REPOINTING AND 10% OF INTERIOR BRICK IS DAMAGED AND WILL NEED TO BE REPLACED WITH NEW.
29	EXISTING HISTORIC WINDOW FRAMES AND GLAZING GENERALLY TO REMAIN; REPAIR AND PAINT DAMAGED WOOD COMPONENTS AS REQUIRED. REMOVE AND REPLACE BROKEN GLAZING UNITS. EXISTING STEEL BARS TO REPAINTED; REMOVE AND REINSTALL BARS IF REQUIRED TO REPAIR EXISTING WINDOWS.
30	REMOVE & RELOCATE EXISTING COMMUNICATION EQUIPMENT; RE: CIVIL DRAWINGS.
31	REMOVE & DISPOSE OF ADA SIGN RE:CIVIL DRAWINGS
32	ADA STRIPING TO BE REMOVED RE:CIVIL DRAWINGS
33	PARKING STRIPING TO BE REMOVED RE:CIVIL DRAWINGS
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41	CONCRETE PAD TO REMAIN, PATCH AND REPAIR AS REQ.
42	EXITING ELECTRICAL BOARD TO DEMOLISH

DEMOLITION LEGEND

- WALLS & FLOOR TO BE DEMOLISHED
- CEILING & TILE TO BE DEMOLISHED
- EXISTING WALL TO REMAIN
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- FIXED FURNITURE TO BE DEMOLISH

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CONSTRUCTION DOCUMENTS

GUILLERMO J. CAVAZOS JR. 20150 REGISTERED ARCHITECT STATE OF TEXAS

NOTES:
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No.	Description	Date

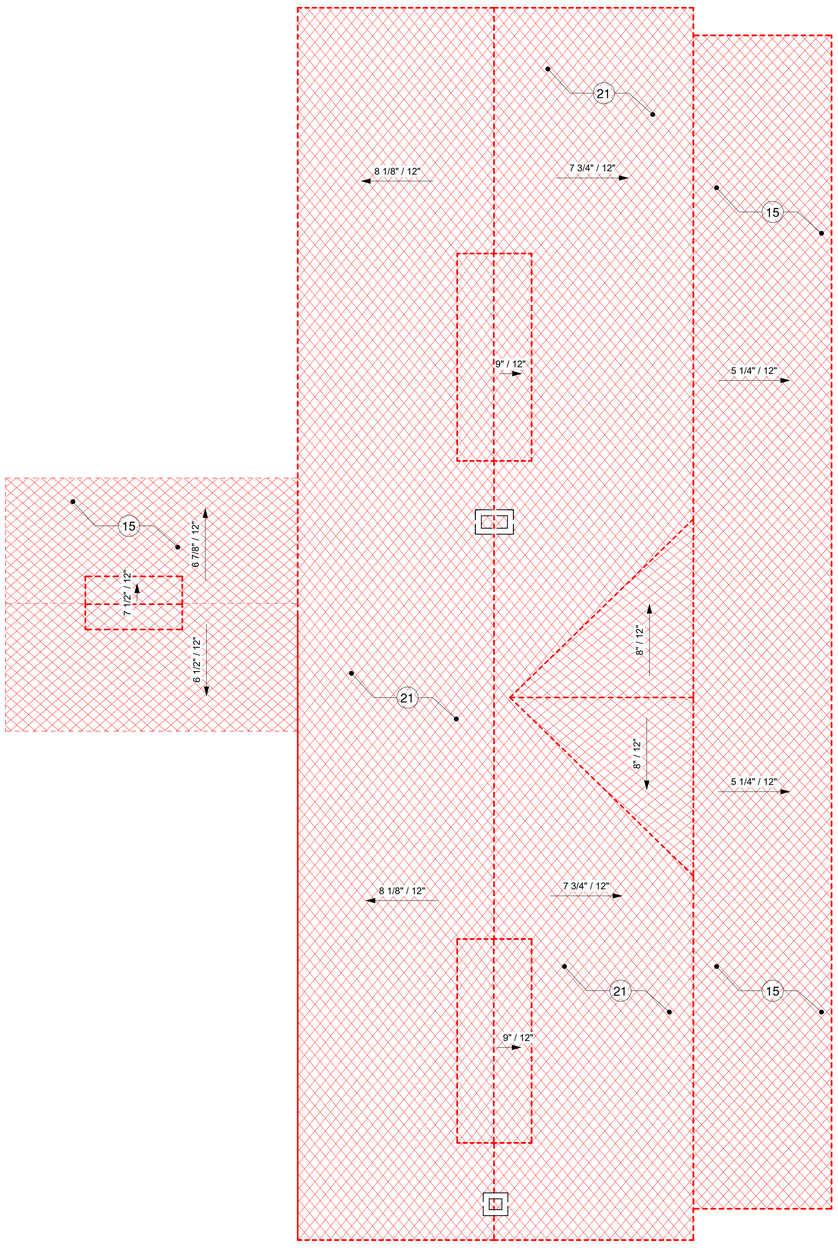
KEY PLAN

DEMOLITION FLOOR PLAN, ROOF & RCP

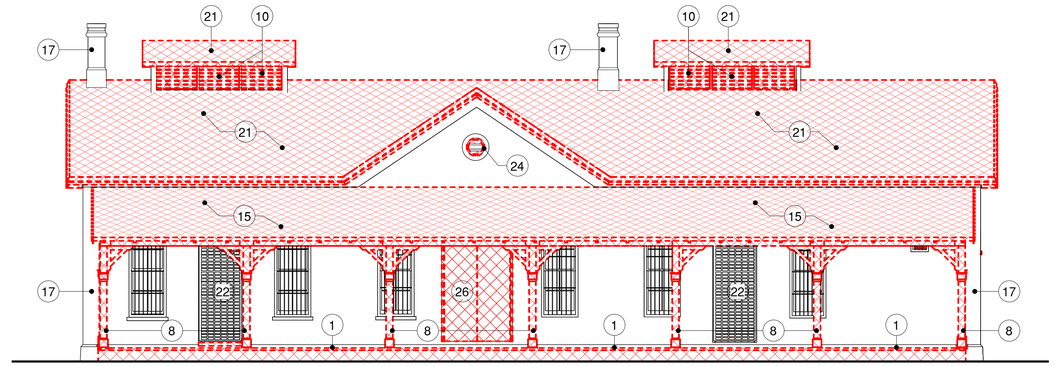
Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

AD-102

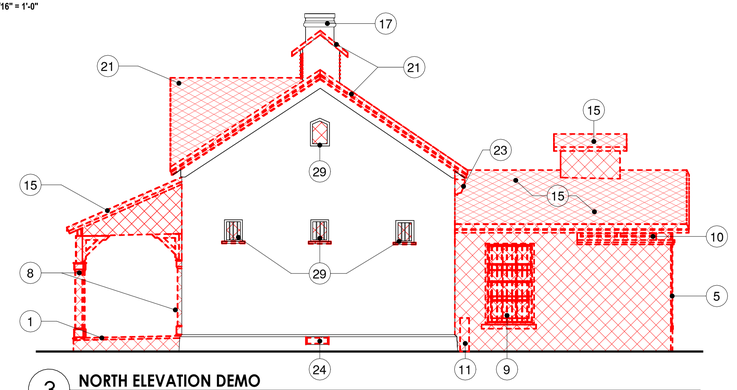
Scale: As indicated



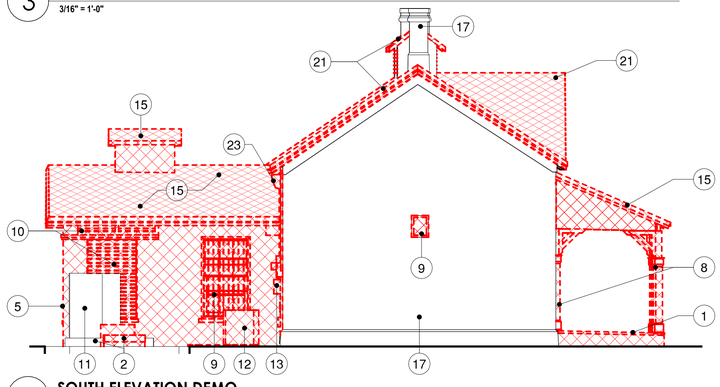
1 **DEMO ROOF PLAN**
1/4" = 1'-0"



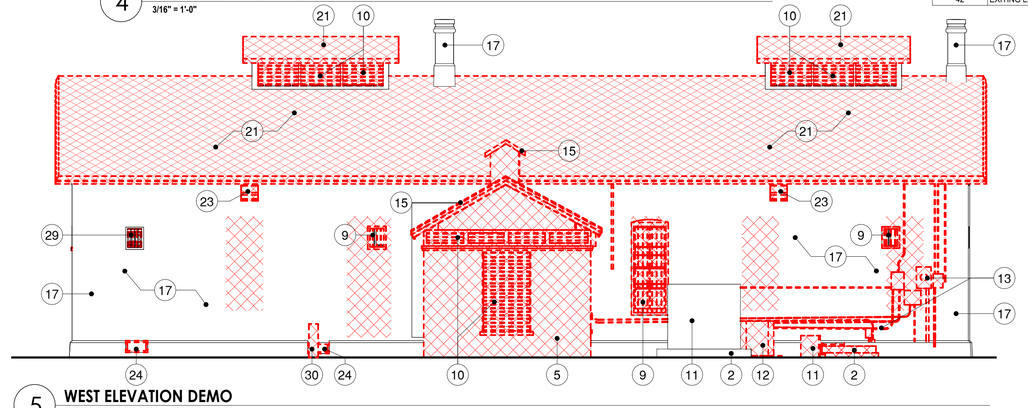
2 **EAST ELEVATION DEMO**
3/16" = 1'-0"



3 **NORTH ELEVATION DEMO**
3/16" = 1'-0"



4 **SOUTH ELEVATION DEMO**
3/16" = 1'-0"



5 **WEST ELEVATION DEMO**
3/16" = 1'-0"

DEMO KEYNOTES

Number	Description
1	DEMO & DISPOSE EXISTING MASONRY FOOTINS & ALL ASSOCIATED ELEMENTS.
2	DEMO & DISPOSE EXISTING CONCRETE SLAB.
3	DEMO & DISPOSE EXISTING CONCRETE STEPS.
4	DEMO PORTION OF EXISTING MASONRY WALL.
5	DEMO & DISPOSE EXISTING MASONRY WALL.
6	REMOVE & DISPOSE EXISTING FRAME.
7	DEMO & DISPOSE EXISTING DOOR, FRAME & ALL ASSOCIATED ELEMENTS.
8	DEMO & DISPOSE EXISTING WOOD COLUMNS & ALL ASSOCIATED STRUCTURAL ELEMENTS, TYP.
9	DEMO & DISPOSE EXISTING WINDOW, FRAME & STEEL WINDOWS PROTECTIONS.
10	DEMO & DISPOSE EXISTING WOOD LOUVER & FRAME.
11	EXISTING ELECTRICAL EQUIPMENT TO DEMOLISH AND DISPOSE.
12	REMOVE & DISPOSE EXISTING MECHANICAL EQUIPMENT.
13	REMOVE & DISPOSE EXISTING ELECTRICAL EQUIPMENT & ALL ASSOCIATED ELEMENTS.
14	REMOVE & DISPOSE PLUMBING PIPES & ALL ASOCIATED ELEMENTS.
15	REMOVE & DISPOSE EXISTING ROOF WOOD SHINGLES, TRIMS, FRAMING, CELING, SOFFIT & ALL ASOCIATED CONCEALED STRUCTURAL ELEMENTS, TYP.
16	REMOVE & DISPOSE EXISTING CEILING (INCLUDES, WOOD CEILING, LIGHT FIXTURES, CEILING FANS & ALL ASSOCIATED CONNECTIONS.) TYP.
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18	EXISTING WOOD WINDOW, FRAME & STEEL PROTECTION TO BE PATCHED & REPAIRED AS REQ. AND PREPARE FOR NEW FINISH RE: SHEET R-301
19	PATCH & REPAIR EXISTING WOOD FLOOR & PREPARE SURFACE FOR NEW FLOOR & BASE FINISH
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22	EXISTING WOOD DOOR & METAL DOOR PROTECTION TO REMAIN, OPERATIONAL HARDWARE TO BE REMOVED TO KEEP DOORS FIXED; REFINISH WOOD DOOR. RE: SPECIFICATIONS; REPAINT METAL DOOR PROTECTION
23	REMOVE & DISPOSE EXISTING WALL PACK.
24	REMOVE & DISPOSE EXISTING VENT.
25	CONCRETE SLAB TO REMAIN PATCH & REPAIR AS REQ.
26	REMOVE DOORS & FRAMES AND RETURN TO OWNER FOR REUSE IF OWNER SO DESIRES.
27	DEMOLISH EXISTING WALL AS REQUIRED FOR NEW DOOR/WINDOW.
28	REPOINT EXISTING INTERIOR BRICK ASSUME 50% OF INTERIOR BRICK WILL REQUIRE REPOINTING AND 10% OF INTERIOR BRICK IS DAMAGED AND WILL NEED TO BE REPLACED WITH NEW.
29	EXISTING HISTORIC WINDOW FRAMES AND GLAZING GENERALLY TO REMAIN; REPAIR AND PAINT DAMAGED WOOD COMPONENTS AS REQUIRED. REMOVE AND REPLACE BROKEN GLAZING UNITS. EXISTING STEEL BARS TO REPAINTED; REMOVE AND REINSTALL BARS IF REQUIRED TO REPAIR EXISTING WINDOWS.
30	REMOVE & RELOCATE EXISTING COMMUNICATION EQUIPMENT; RE: CIVIL DRAWINGS.
31	REMOVE & DISPOSE OF ADA SIGN RE:CIVIL DRAWINGS
32	ADA STRIPING TO BE REMOVED RE:CIVIL DRAWINGS
33	PARKING STRIPING TO BE REMOVED RE:CIVIL DRAWINGS
34	CROSSWALK STRIPING TO BE REMOVED RE:CIVIL DRAWINGS
35	DEMOLISH AND DISPOSE ADA RAMP & SIDEWALK
36	DEMOLISH AND DISPOSE OF SIDEWALK
37	WOODEN RAMP TO BE DEMOLISHED & DISPOSE
38	PORCH AREA TO BE DEMOLISHED & DISPOSED
39	COMMUNICATION EQUIPMENT TO REMOVE AND RELOCATE COMMUNICATION.
40	CONCRETE PADS TO BE DEMOLISHED & UTILITY PEDESTALS TO BE RELOCATED CONTRACTOR TO COORDINATE W/ APPROPIATE UTILITY COMPANIES BEFORE DEMOLISHING CONCRETE PADS & RELOCATION UNDERGROUND LINES RE: MEP PLANS
41	CONCRETE PAD TO REMAIN, PATCH AND REPAIR AS REQ.
42	EXITING ELECTRICAL BOARD TO DEMOLISH

DEMOLITION LEGEND

- WALLS & FLOOR TO BE DEMOLISHED
- CEILING & TILE TO BE DEMOLISHED
- EXISTING WALL TO REMAIN
- CEILING GRID TO REMAIN, TILE TO BE REMOVED
- FIXED FURNITURE TO BE DEMOLISH

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT ☆ GUILLERMO J. CAVAZOS, JR. ☆ 20150 ☆ STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

DEMOLITION ROOF & ELEVATIONS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

AD-103

Scale: As indicated

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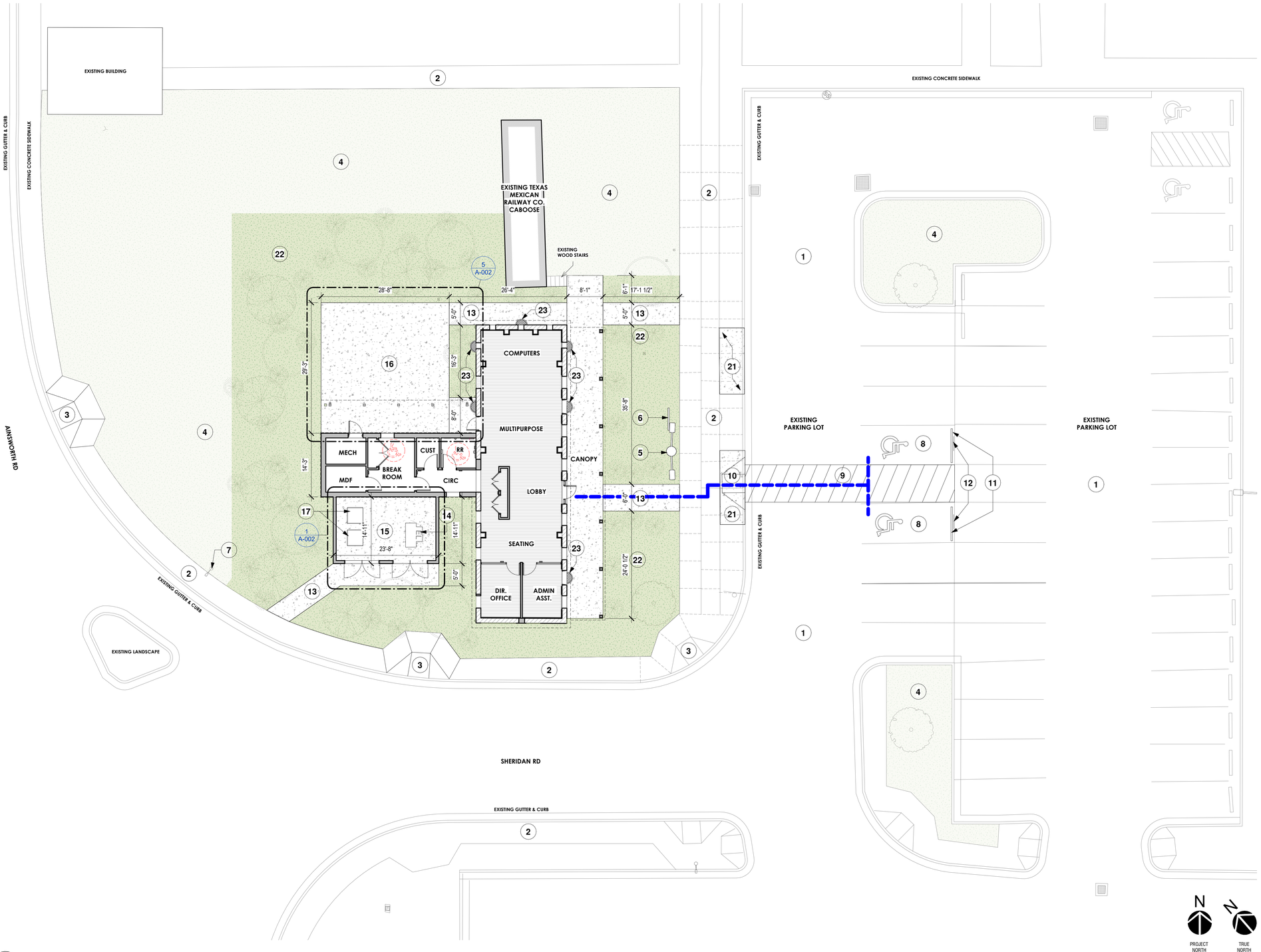

1 **SITE PLAN**
3/32" = 1'-0"

KEYNOTE LEGEND - SITE PLAN

Number	Description
1	EXISTING ASPHALT PAVEMENT
2	EXISTING CONCRETE SIDEWALK
3	EXISTING CURB RAMP
4	EXISTING LANDSCAPE AREA
5	EXISTING PARKING LOT LIGHT POLE
6	EXISTING BUILDING SIGNAGE
7	EXISTING STREET LIGHT POLE
8	PROPOSED ADA STALL RE: CIVIL DRAWINGS
9	PROPOSED ADA ROUTE RE: CIVIL DRAWINGS
10	PROPOSED ACCESSIBLE RAMP
11	ADA PARKING SIGN RE: A-010 - SITE DETAILS
12	PROVIDE WHEEL STOPS, TYP.
13	NEW CONCRETE SIDEWALK RE: CIVIL DRAWINGS
14	EXISTING ELECTRICAL EQUIPMENT
15	NEW CONCRETE PAD FOR ELECTRICAL EQUIPMENT RE: A-003 SITE DETAILS FOR PAD ENCLOSURE DETAILS
16	NEW CONCRETE SLAB OUTDOOR SPACE
17	NEW MECHANICAL EQUIPMENT RE: MEP DRAWINGS
18	NEW TREE RE: LANDSCAPE PLAN
19	NEW SHRUB TBD
20	EXISTING TREE TO REMAIN
21	NEW CONCRETE SIDEWALK
22	NEW LANDSCAPE AREA
23	PROPOSED DEC-O-VENTS WITH DECORATIVE GRATED LIDS RE: CIVIL DRAWINGS

SITE PLAN GENERAL NOTES

A. REFER TO CIVIL DRAWINGS FOR ADDITIONAL ELEVATIONAL, AND SITE DETAILING FOR FINISH GRADING, PAVING AND SITE UTILITIES NOT SHOWN HERE, ALSO INCLUDING TRAFFIC SIGNAGE AND MARKINGS.
B. REFER TO CIVIL FOR ALL PAVING EXPANSION JOINTS AND CONTROL JOINTS SPACING AT GENERAL WALKS NOT SHOWN ON ARCHITECTURAL.
C. THE CONTRACTOR, IN SUBMITTING A BID FOR THIS WORK, IS ASSUMED TO HAVE THOROUGHLY FAMILIARIZED HIMSELF WITH ALL EXISTING CONDITIONS AT THE PROJECT SITE AND TO HAVE REQUESTED, FROM THE ARCHITECT, CLARIFICATION FOR ANY DISCREPANCIES AND/OR AMBIGUOUS ITEMS ENCOUNTERED AFTER THOROUGHLY READING THE CONSTRUCTION DOCUMENTS. (DRAWINGS & SPECIFICATIONS)
D. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING & PROPOSED DIMENSIONS, CONDITIONS, AND WORK, AND SHALL NOTIFY THE ARCHITECT OF AN DISCREPANCIES AND/OR AMBIGUITIES BETWEEN THE CONSTRUCTION DOCUMENTS AND ACTUAL CONDITIONS PRIOR TO PROCEEDING WITH PROCURRING AFFECTED MATERIALS OR PROCEEDING THE WORK.
E. DO NOT SCALE THESE DRAWINGS. USE DIMENSIONS THAT ARE ON THE DRAWINGS OR ARE PROVIDED BY THE ARCHITECT OR OWNER VERIFY ALL DIMENSIONS BY FIELD MEASUREMENT.
F. VERIFY LOCATION OF ALL EXISTING UTILITIES AND TIE-IN POINTS PRIOR TO PROCEEDING WITH ANY WORK.
G. CONTRACTOR SHALL ASSURE ACCESSIBILITY OF FIRE TRUCKS AT ALL TIMES ON ALL PUBLIC STREETS, DRIVEWAYS, AND ARE AS DESIGNATED AS FIRE LANES.
H. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL COSTS AND OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT.
I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL COSTS ASSOCIATED WITH ANY PROTECTION MEASURES THAT WILL BE REQUIRED BY THE CONSTRUCTION/DEMOLITION ACTIVITIES TO SAFEGUARD THE HEALTH, SAFETY AND WELFARE OF THE PUBLIC.
J. ALL UTILITY MANHOLES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE PROTECTED DURING THE CONSTRUCTION PERIOD. PROVIDE ACCESS TO THE SAME WHEN NEEDED BY THE UTILITY AGENCIES.
K. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITH ALL EXISTING CONDITIONS THAT WILL AFFECT THE DEMOLITION AND CONSTRUCTION OF ALL WORK REQUIRED TO COMPLETE THIS PROJECT.
L. NOT ALL LANDSCAPE, MEP, AND CIVIL SITE WORK AND IMPROVEMENTS SHOWN ON ARCHITECTURAL SITE PLANS. SEE ALSO CIVIL AND MEP DRAWINGS.
M. RESTORE AND FILL TO DESIGN FINISH GRADE WHERE SITE ITEMS AND IMPROVEMENTS REMOVED.
N. COORDINATE CONSTRUCTION SITE FENCING AND EVERY GATE AS REQUIRED BY OWNER.

SITE LEGEND

GRASS; TIFWAY 419 BERMUDA, SOLID SOD

CONCRETE PAVING; RE: CIVIL FOR FURTHER INFORMATION; BROOM FINISH ON ALL SIDEWALKS AND PEDESTRIAN PAVING.

ACCESSIBLE ROUTE, ADA COMPLIANT PAVING RE: CIVIL FOR SITE ADA RAMPS, CROSSWALK MARKINGS AND SIGNAGE

PLANTING LEGEND

LIVE OAK 2.5" CAL. - 10-12' MIN. 4-6' SPRED

CEDAR ELM 2.5" CAL. - 10-12'H MIN. 4.6' SPRED

PITTOSPORUM SHRUB 5 GALLON

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS JR.
20150
STATE OF TEXAS

NOTES:
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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

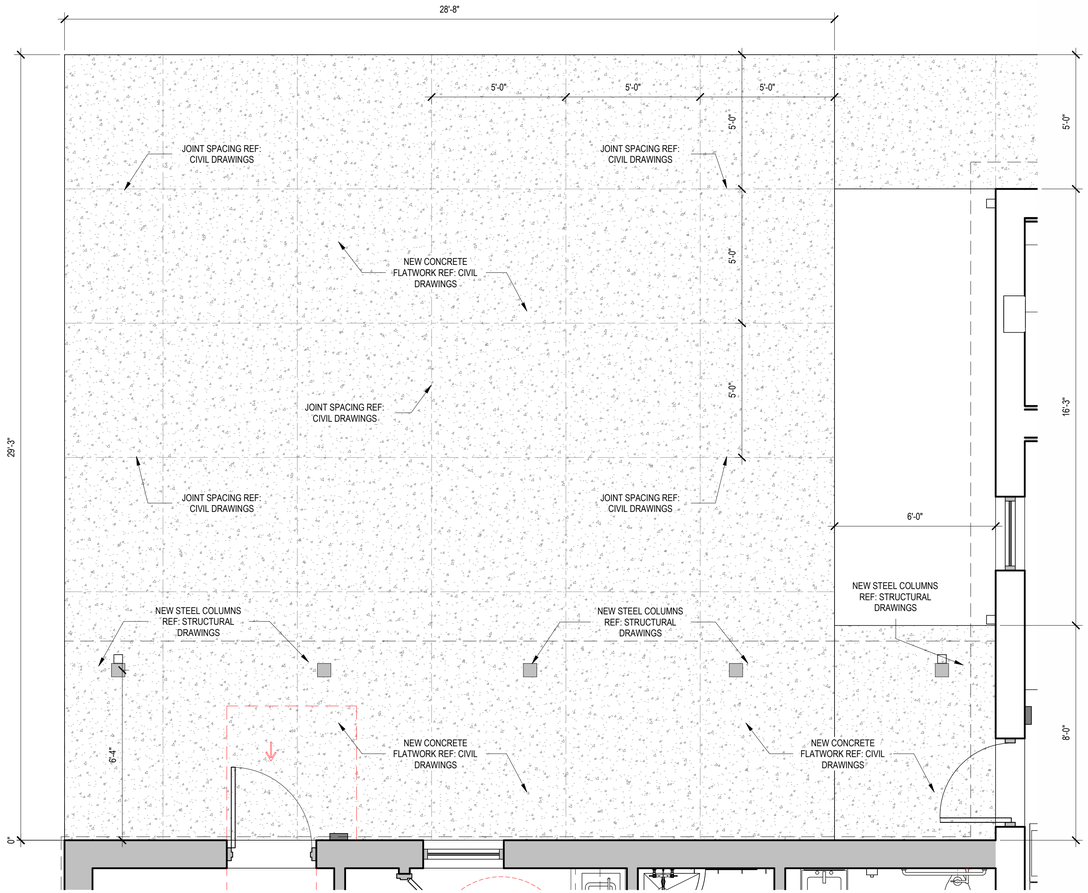
KEY PLAN

SITE PLAN

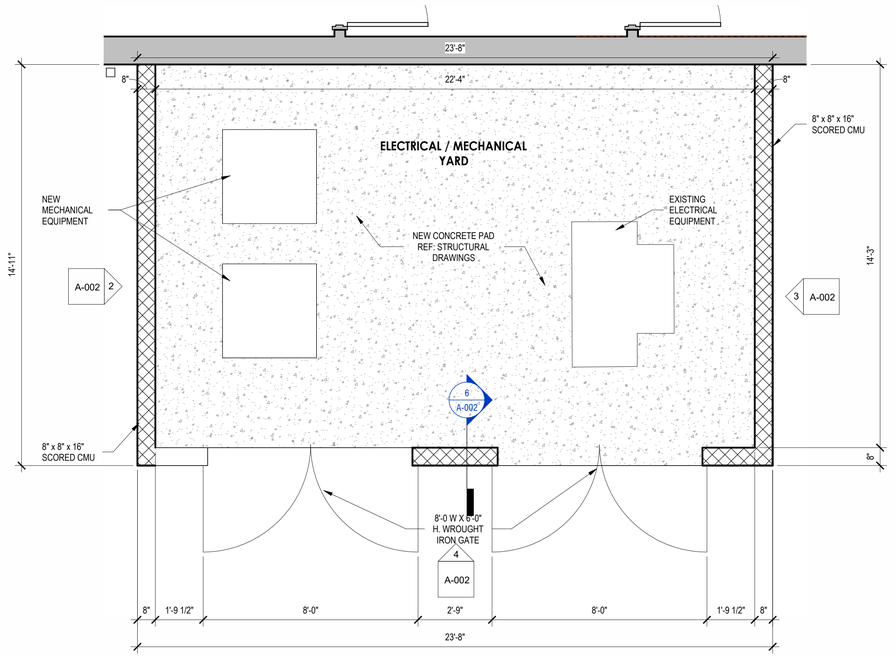
Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-001

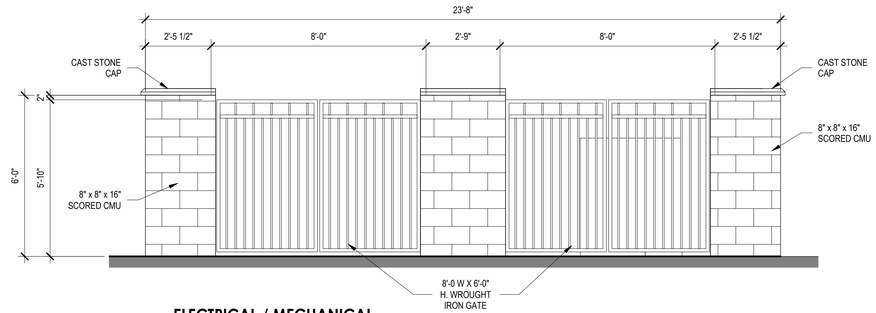
Scale: As indicated



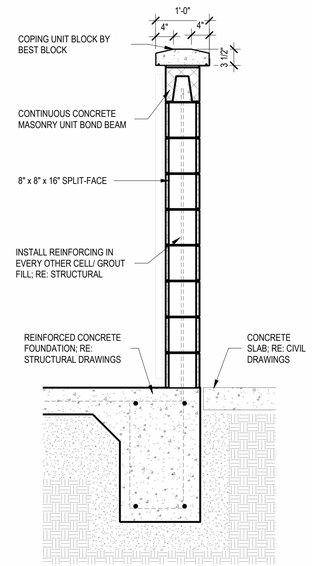
5 SITE PLAN OUTDOOR AREA
3/8" = 1'-0"



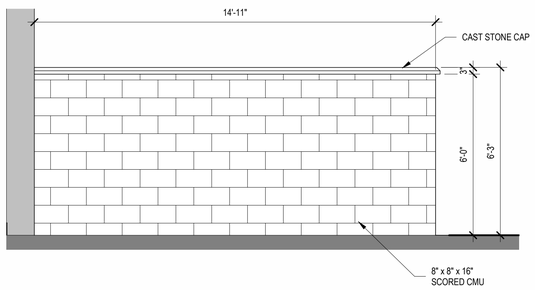
1 FLOOR PLAN CONCRETE PAD
3/8" = 1'-0"



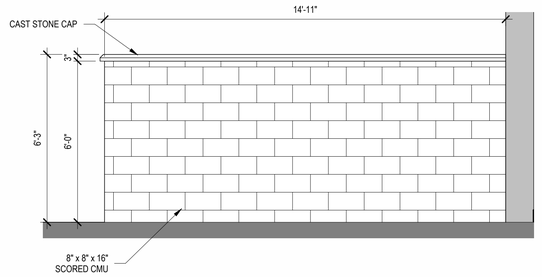
4 ELECTRICAL / MECHANICAL YARD
3/8" = 1'-0"



6 TYPICAL SECTION
3/4" = 1'-0"



2 ELECTRICAL YARD 2
3/8" = 1'-0"



3 ELECTRICAL YARD 3
3/8" = 1'-0"

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS JR.
20150
STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

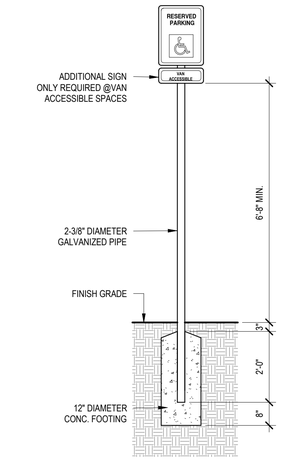
KEY PLAN

ENLARGED SITE PLANS

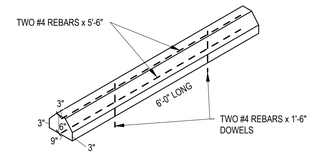
Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-002

Scale: As indicated



1 **ADA PARKING SIGN**
1/2" = 1'-0"



2 **PARKING WHEEL STOP DETAIL**
1/2" = 1'-0"

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS, JR.
20150
STATE OF TEXAS

NOTES:
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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

SITE DETAILS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-003

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

1 **LANDSCAPE PLAN**
3/16" = 1'-0"

KEYNOTE LEGEND - SITE PLAN	
Number	**Description**
1	EXISTING ASPHALT PAVEMENT
2	EXISTING CONCRETE SIDEWALK
3	EXISTING CURB RAMP
4	EXISTING LANDSCAPE AREA
5	EXISTING PARKING LOT LIGHT POLE
6	EXISTING BUILDING SIGNAGE
7	EXISTING STREET LIGHT POLE
8	PROPOSED ADA STALL RE: CIVIL DRAWINGS
9	PROPOSED ADA ROUTE RE: CIVIL DRAWINGS
10	PROPOSED ACCESSIBLE RAMP
11	ADA PARKING SIGN RE: A-010 - SITE DETAILS
12	PROVIDE WHEEL STOPS, TYP.
13	NEW CONCRETE SIDEWALK RE: CIVIL DRAWINGS
14	EXISTING ELECTRICAL EQUIPMENT
15	NEW CONCRETE PAD FOR ELECTRICAL EQUIPMENT RE: A-003 SITE DETAILS FOR PAD ENCLOSURE DETAILS
16	NEW CONCRETE SLAB OUTDOOR SPACE
17	NEW MECHANICAL EQUIPMENT RE: MEP DRAWINGS
18	NEW TREE RE: LANDSCAPE PLAN
19	NEW SHRUB TBD
20	EXISTING TREE TO REMAIN
21	NEW CONCRETE SIDEWALK
22	NEW LANDSCAPE AREA
23	PROPOSED DEC-O-VENTS WITH DECORATIVE GRATED LIDS RE: CIVIL DRAWINGS

LANDSCAPE & IRRIGATION NOTES:

A. G.C. TO PROVIDE DESIGN FOR IRRIGATION SYSTEM BY LICENSED IRRIGATOR, TO BE APPROVED BY ARCHITECT, DURING SUBMITTALS PHASE; PROVIDE SHOP DRAWINGS.
B. THIS IRRIGATION PLAN SHALL PROVIDE A CONCEPTUAL IDEA OF THE PROPOSED LANDSCAPING PLAN. THE CONTRACTOR SHALL PROVIDE AN ALLOWANCE OF $50,000.00 IN THEIR VID PACKAGE FOR LANDSCAPING & IRRIGATION, WHICH INCLUDES ALL NEW GRASS/TURF, PLANTS, SHRUBS, TREES, GRATES AND OTHER PLANTING ACCESSORIES, AND A COMPLETE IRRIGATION SYSTEM. AFTER THE BID IS AWARDED, THE CONTRACTOR SHALL PROVIDE A COST FOR ALL OF THE ITEMS LISTED ABOVE SHOWN AS "NEW" ON THIS LANDSCAPING PLAN, AND SHALL REVIEW THE COST(S) WITH THE ARCHITECT & OWNER'S REPRESENTATIVE.
C. PROVIDE DRIP IRRIGATION SYSTEM (1/2" - 3/4") ADJUSTABLE DRIPPER. SYSTEM SHALL HAVE AUTOMATIC TIMERS, MOUNT CONTROLLER (AND CONNECT TO ELECTRICAL SOURCE) AS PER ARCHITECT'S INSTRUCTION.
D. PROVIDE SEPARATE IRRIGATION METERS AS PART OF BID PACKAGE, AS PER CITY REQUIREMENTS. COORDINATE WITH CIVIL ENGINEERING DRAWINGS.
E. PROVIDE 1/2 GALLON/MINUTE BUBBLERS AT EACH TREE.
F. PROVIDE 5' DIA MULCH RING AROUND EACH TREE.
G. PROVIDE SUITABLE WEEDBARRIER PERMEABLE FABRIC UNDERNEATH ALL PERMEABLE PAVERS (SOURCE: EWING IRRIGATION & LANDSCAPE SUPPLY, LAREDO, TX)
H. COORDINATE FINAL GRADES AT ALL EXTERIOR PAVER AREAS
I. CONTRACTOR TO PROVIDE SEPARATE LINE ITEM FOR EACH CATEGORY (TREES, PAVERS, IRRIGATION COMPONENTS, ETC..) IN SCHEDULE OF VALUES.
J. FOR UNDERGROUND CONDUIT SIZES, TYPES, AND LOCATIONS, REFER TO ELECTRICAL SITE KEY NOTES ON ELECTRICAL SITE PLAN.

SITE LEGEND

GRASS; TIFWAY 419 BERMUDA, SOLID SOD

CONCRETE PAVING; RE: CIVIL FOR FURTHER INFORMATION; BROOM FINISH ON ALL SIDEWALKS AND PEDESTRIAN PAVING.

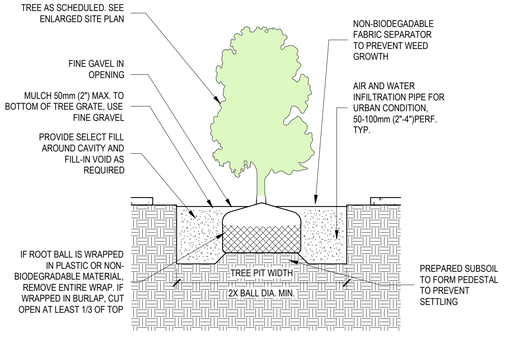
ACCESSIBLE ROUTE, ADA COMPLIANT PAVING RE: CIVIL FOR SITE ADA RAMPS, CROSSWALK MARKINGS AND SIGNAGE

PLANTING LEGEND

LIVE OAK 2.5" CAL. - 10-12' MIN. 4-6' SPRED

CEDAR ELM 2.5" CAL. - 10-12'H MIN. 4.6' SPRED

PITTOSPORUM SHRUB 5 GALLON



2 **TREE PANTER DETAIL**
1/2" = 1'-0"

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT ☆ GUILLERMO J. CAVAZOS, JR. ☆ 20150 ☆ STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

LANDSCAPE PLAN

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-005

Scale: As indicated

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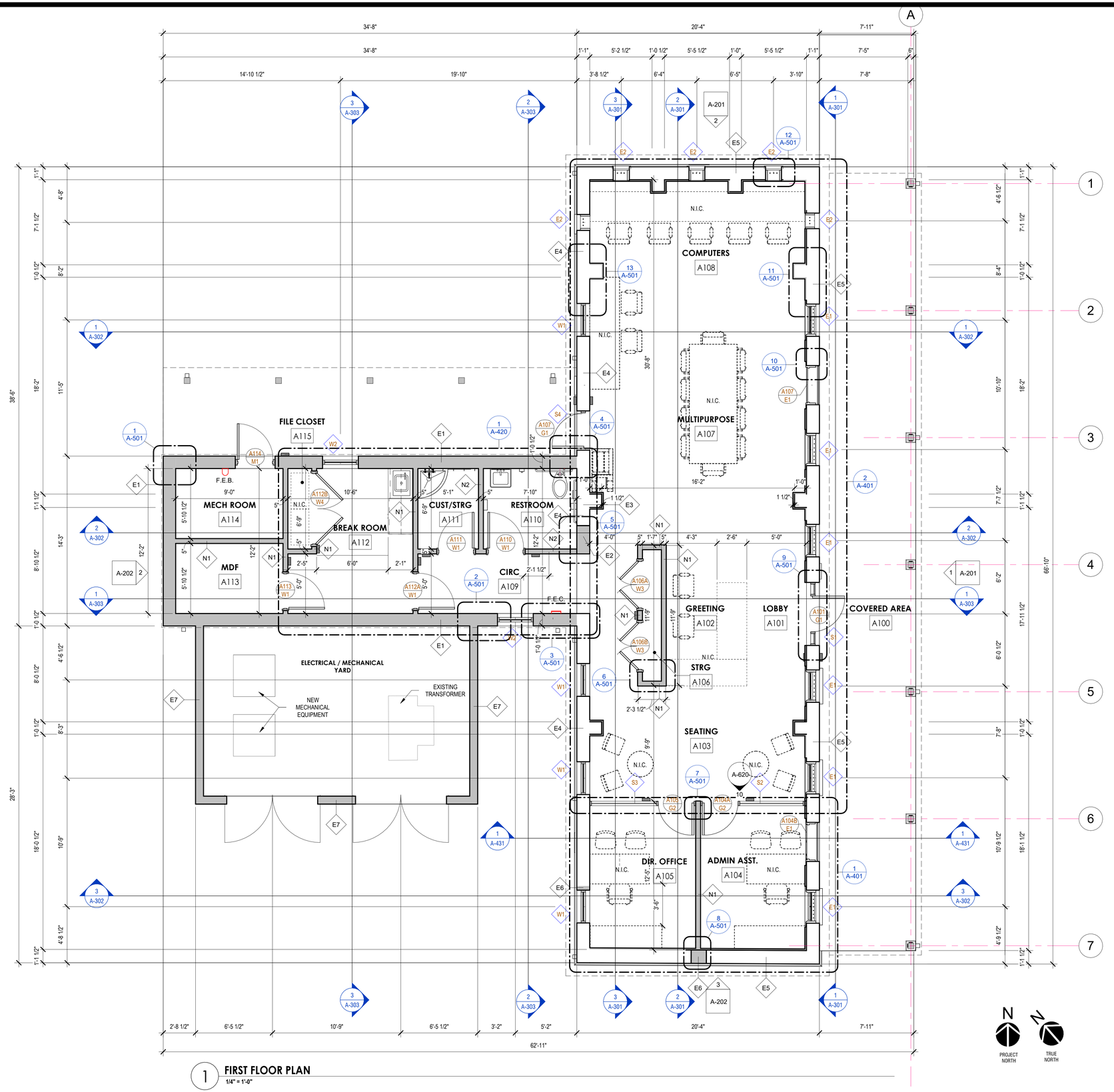

1 **FIRST FLOOR PLAN**
1/4" = 1'-0"

FLOOR PLAN GENERAL NOTES

A. MILLWORK IS INDICATED ON EQUIPMENT & SIGNAGE PLANS - A103-A104

B. GRID LINES CORRESPOND WITH STRUCTURAL GRID LINES. REFER TO STRUCTURAL PLANS FOR FURTHER INFORMATION. IN CASE OF CONFLICT, CONTACT ARCHITECT PRIOR TO BIDDING.
C. UNLESS OTHERWISE INDICATED, PLAN DIMENSIONS ARE TO COLUMN GRID ON CENTERLINES, NOMINAL SURFACE OF MASONRY, FACE OF STUDS AND FACE OF CONCRETE WALLS.
D. REFER TO SYMBOL LEGEND ON SHEET G-001 FOR WINDOW, DOOR, WALL, EQUIPMENT TAGS
E. WHERE A DOOR IS LOCATED NEAR CORNER OF ROOM AND IS NOT LOCATED BY DIMENSION ON PLAN OR DETAILS, DIMENSION SHALL BE 3" FROM FACE OF WALL TO FACE OF ROUGH OPENING. DIMENSION SHALL BE 6" FROM FACE OF WALL TO EDGE OF ROUGH OPENING AT CONCRETE WALLS.
F. AT ALL INTERIOR PARTITIONS WHERE PARTITION DOES NOT EXTEND TO ROOF DECK OR FLOOR DECK ABOVE, AND NO INSULATION ABOVE CEILING IS CALLED FOR, BACK LOAD CEILING PANELS WITH LOW-DENSITY FACED FLAME SPREAD R11 BATTS ALONG ENTIRE LENGTH OF PARTITION, FOR A DISTANCE OF 4' FROM THE FACE OF THE PARTITION.
G. REPETITIVE FEATURES ARE NOT DRAWN IN THEIR ENTIRETY AND SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL.
H. FURNITURE N.I.C., SHOWN FOR COORDINATION PURPOSES.

I. RE: STRUCTURAL FOR INFORMATION ON FOUNDATIONS, STRUCTURAL COLUMNS, STRUCTURAL FRAMING & METAL DECKS. SOME STRUCTURAL COLUMNS SHOWN FOR COORDINATION PURPOSES. REFER TO STRUCTURAL DRAWINGS FOR FURTHER INFORMATION.
J. DO NOT SCALE DRAWINGS IF DIMENSIONS ARE IN QUESTION, OBTAIN CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING THE WORK.
K. NOTIFY ARCHITECT OF ANY VARIATION REQUIRED IN THE DIMENSIONS NOTES FOR INSTALLATIONS OF EQUIPMENT BEFORE CONTINUING THE WORK.
L. VERIFY DIMENSIONS BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK.
M. PROVIDE BLOCKING AS REQUIRED FOR PROPER SUPPORT OF WALL AND CEILING MOUNTED EQUIPMENT.
N. REFER TO SHEET A-602 FOR ROOM SIGNAGE LEGEND, INTERIOR SIGNAGE MOUNTING AND SIGNAGE NOTES.
O. REFER TO SHEET A-401 FOR TOILET ROOM ACCESSORIES & PLUMBING FIXTURE MOUNTING HEIGHT SCHEDULE.
P. REFER TO SPECIFICATIONS SECTION 099000 PAINTING & COATING.

FLOOR PLAN LEGEND

EXISTING WALLS TO REMAIN

PROPOSED WALLS

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT GUILLERMO J. CAVAZOS, JR. 20150 STATE OF TEXAS

NOTES:
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No.	Description	Date

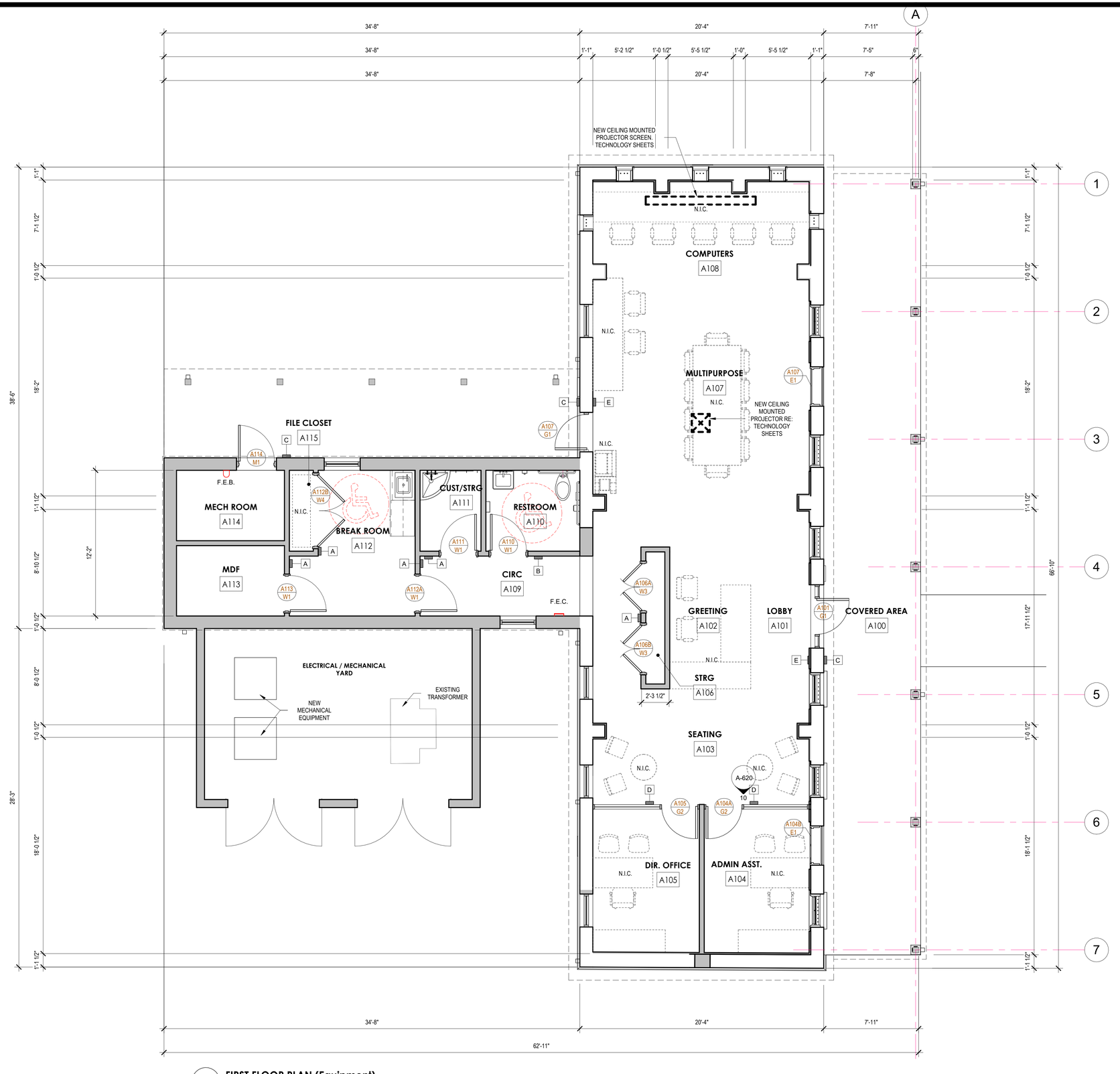
KEY PLAN

1st FLOOR PLAN

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-101

Scale: As indicated



1 **FIRST FLOOR PLAN (Equipment)**
1/4" = 1'-0"

EQUIPMENT & SIGNAGE PLANS GENERAL NOTES

A. REFER TO MILLWORK ELEVATIONS & DETAILS SHEETS FOR FURTHER INFORMATION.
B. CLOSET SHELVES (SHF) & STANDARD MILLWORK STORAGE UNITS (MWF) ARE DESCRIBED ON MILLWORK ELEVATIONS & DETAILS SHEET A-700
C. REFER TO EQUIPMENT SCHEDULES SHEET FOR FURTHER INFORMATION ON CLASSROOM EQUIPMENT & INTERIOR SIGNAGE.
D. TVS & BRACKETS TO BE FURNISHED AND INSTALLED BY OWNER UNLESS NOTED OTHERWISE.
E. FURNITURE N.I.C., SHOWN FOR COORDINATION PURPOSES ONLY.

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT ☆ GUILLERMO J. CAVAZOS, JR. ☆ 20150 ☆ STATE OF TEXAS

NOTES:
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No.	Description	Date

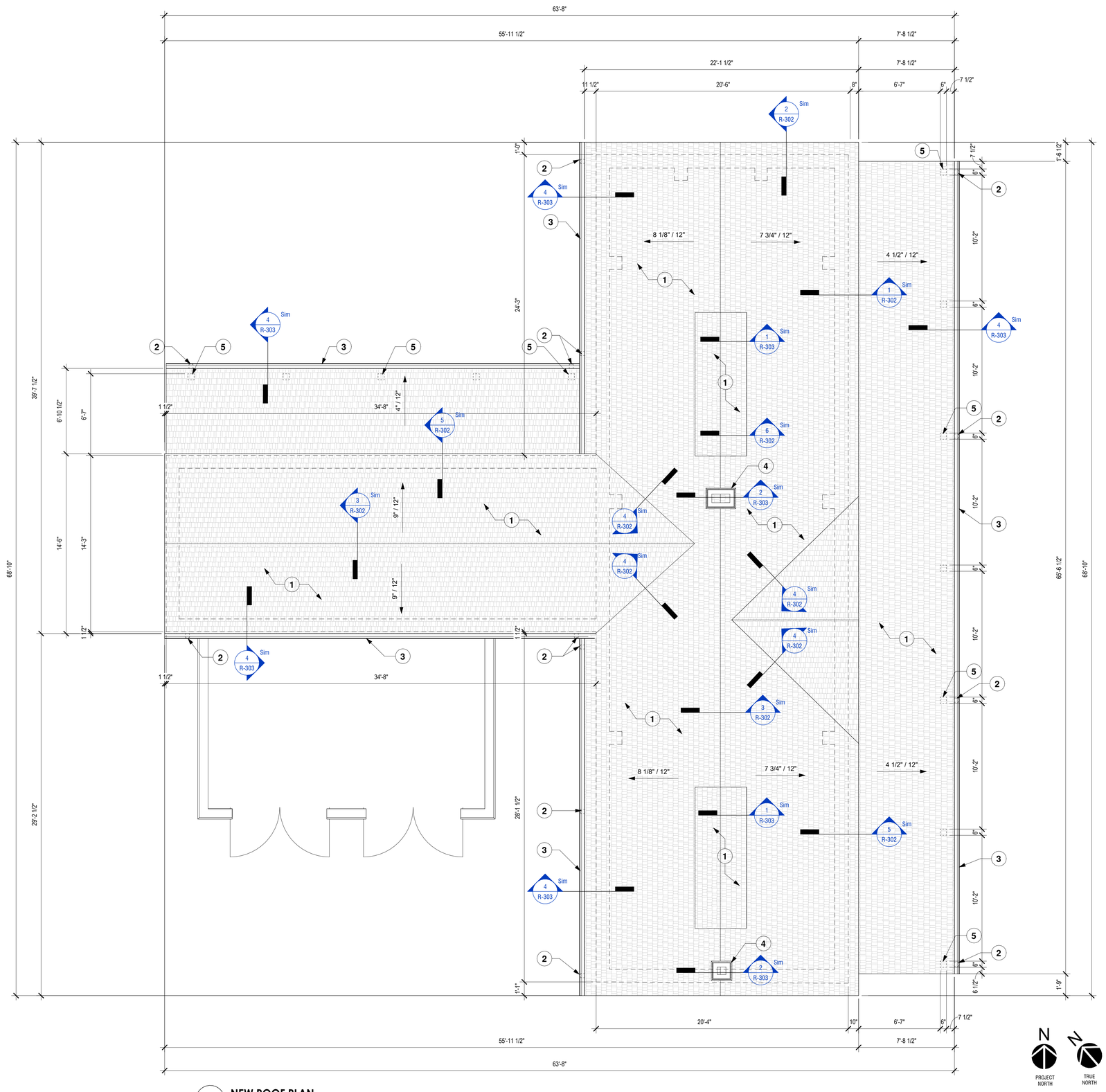
KEY PLAN

1st FLOOR EQUIPMENT & SIGNS PLAN

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-103

Scale: As indicated



1 **NEW ROOF PLAN**
1/4" = 1'-0"

ROOF GENERAL NOTES:

A. REFER TO MECHANICAL DRAWINGS FOR VERIFICATION OF PENETRATION, NOT ALL MAY BE SHOWN. PROVIDE ALL FLASHING, GASKETING AND SEALANTS WATER TIGHT CONDITIONS AT THESE EQUIPMENT AND PENETRATIONS PER TYPICAL DETAILS.
B. PROVIDE ALL FLASHING AND TRIM ACCESSORIES FOR WATER TIGHT ROOF CONSTRUCTION.
C. COORDINATE ALL PENETRATION LOCATIONS WITH STRUCTURAL. PROVIDE ALL MISCELLANOUS STEEL CHANNEL, ANGLE FRAMING SPANNING AND ANCHORED TO STRUCTURAL MEMBERS AS NECESSARY TO SUPPORT AND FRAME OPENING PENETRATION IN THE ROOF DECK.
D. CONTRACTOR TO COORDINATE ALL ROOF TOP MECHANICAL EQUIPMENT, EXHAUST FANS & VENTS ROOF CURB & SUPPORT WITH EQUIPMENT REQUIREMENTS.
E. PROVIDE DOWNSPOUTS WHERE INDICATED ON ELEVATIONS, WITH MTL. SPLASHSPANS AT ALL ROOFTOP DISCHARGE LOCATIONS AND SPLASHBLOCKS AT ALL GRADE LOCATIONS NOT DISCHARGING ON CONCRETE PAVING.
F. REVIEW AND COORDINATE WITH STRUCT. DRAWINGS FOR STRUCTURAL DECK SLOPES.
G. LOCATE PENETRATIONS AND CURBS TO NOT OBSTRUCT VALLEYS AND/OR FLOW FROM DOWNSPOUTS.
H. REFER TO R-SHEETS FOR ADDITIONAL INFORMATION ON ROOF ASSEMBLY, ROOF FLASHING AND OTHER DETAIL CONDITIONS.

KEYNOTE LEGEND - ROOF PLAN

LEGEND	Description
1	NEW METAL SHAKES OVER NEW PLYWOOD DECK RE: STRUCTURAL DRAWINGS
2	NEW 4" x 4" PRE-FINISHED METAL DOWNSPOUTS COLOR BY ARCHITECT RE: SPECS
3	NEW 5" x 5" PRE-FINISHED METAL GUTTER COLOR BY ARCHITECT RE: SPECS
4	EXISTING MASONRY CHIMNEY TO REMAIN, PROTECT DURING DEMOLITION & NEW CONSTRUCTION, PATCH & REPAIR AS PER DETAILS ON SHEET R-603, REPAIR CRACKS, REPOINT MORTAR ON ENTIRE BLDG EXTERIOR; RE: SPEC SECTION 045313 MASONRY REPAIR & RESTORATION. PREPARE SURFACE TO BE LOW PRESSURE WASHED & CLEANED
5	COLUMNS BELOW; TYP.

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
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STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

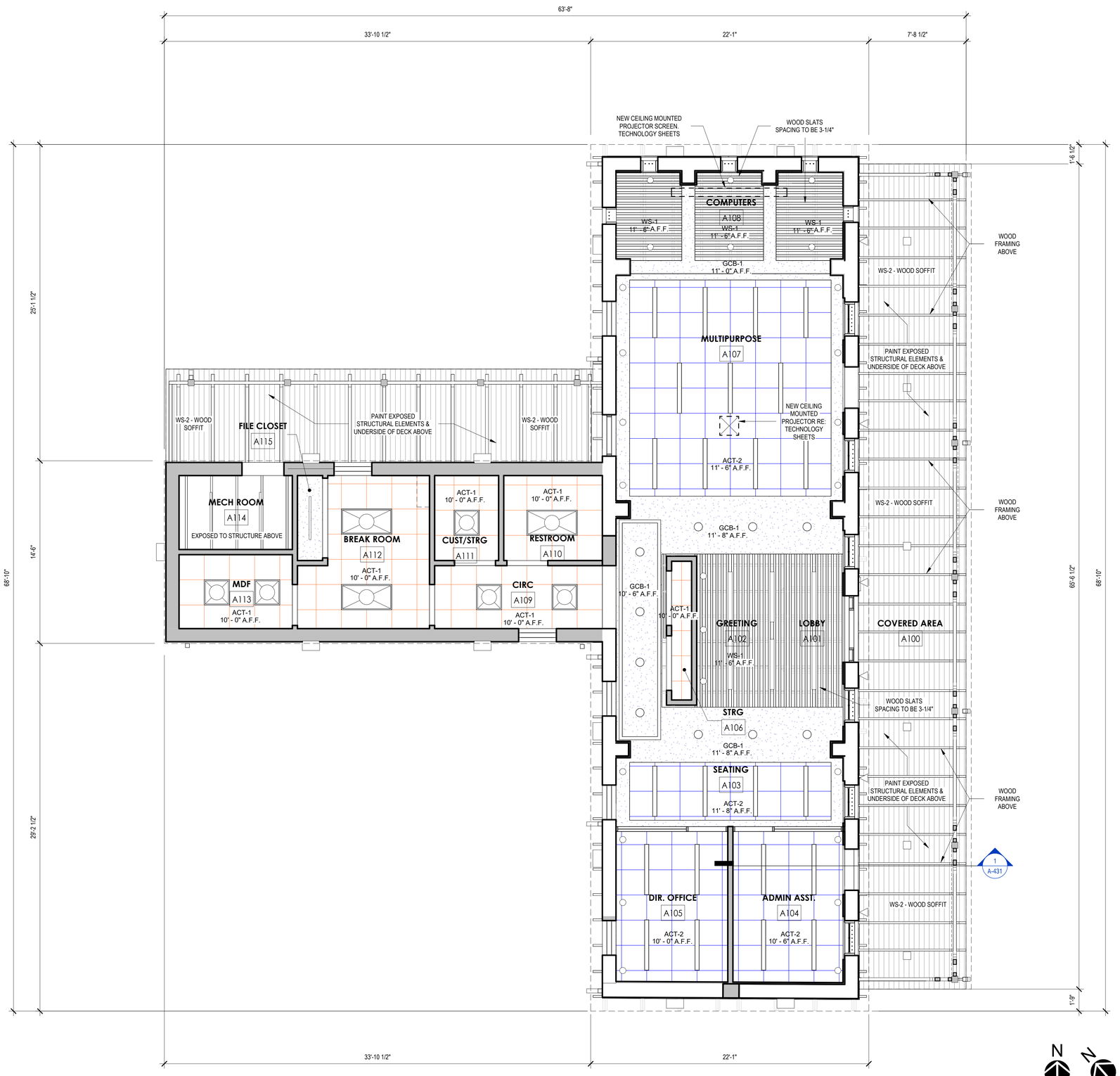
KEY PLAN

ROOF PLAN

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-110

Scale: As indicated



1 **FIRST FLOOR RCP**
1/4" = 1'-0"

CEILING SCHEDULE1

Type Mark	Description	Manufacturer	Model	Specification Section
ACT-1	2 x 2 Suspended Acoustical Ceiling Tile System	Armstrong or Equal	1732 Fine Fissured (White)	09 51 13
ACT-2	2 x 2 Suspended Acoustical Ceiling Tile System	Armstrong or Equal	2822 Calla Square Tegular (White)	09 51 15
GCB-1	1/2" Type X Gypsum Board on Metal Stud Framing; Moisture Resistant; Re: Specs	Re: Specs	Re: Specs	
WS-1	Wooden Slats	Armstrong or Equal	6333L_S17 Woodworks Grille Forte Veneered Panels. 3/4"W x 4"H Slats with 3-1/4" space between slats; Color by Architect from Manufacturer's full range.	09 51 26
WS-2	1x6 V-Groove Wood Soffit	Woodtone or Equal	Traditional Panel 1x6 V-Groove; Color by Architect from Manufacturer's full range.	

REFLECTED CEILING PLAN GENERAL NOTES

A. REFER TO ELECTRICAL DRAWINGS FOR LIGHTING SCHEDULES & LIGHTING LOCATIONS.
B. REFER TO M.E.P. DRAWINGS FOR DESIGN OF DUCT SIZES, CIRCUITING, ETC., REFLECTED CEILING PLANS TO GOVERN LOCATION OF ITEMS INSTALLED IN CEILINGS, NOTIFY ARCHITECT IN CASE OF CONFLICTS.
C. INSTALL REGISTERS & LIGHTING FIXTURES WITHIN CEILING GRIDS, INSTALL DOWNLIGHT FIXTURES OR OTHER CEILING ELEMENTS IN THE GEOMETRIC CENTER OF CEILING TILES OR CENTER OF CORRIDOR, UNLESS NOTED OTHERWISE.
D. CENTER ALL EXIT SIGNS, SMOKE DETECTORS, ETC. ON CENTER OF CORRIDOR AND CENTERLINE OF LIGHT FIXTURES UNLESS NOTED OTHERWISE.
E. REFER TO MEP DRAWINGS FOR EXIT LIGHTS, SWITCHES, FIRE ALARM PULL, A.D.A. STROBE LOCATIONS, ETC. GC TO COORDINATE WITH OWNER & ARCHITECT FOR FINAL LOCATIONS OF ALL MEP, LIFE SAFETY, I.T./A.V. & SECURITY DEVICES.
F. NO ACCESS PANELS ARE TO BE LOCATED IN GYPSUM BOARD CEILING OF LOBBY, VESTIBULE, PUBLIC CORRIDOR.
G. REFER TO I.T. DRAWINGS FOR ADDITIONAL A.V. EQUIPMENT INFORMATION AND LOCATIONS. PROVIDE BLOCKING AS REQUIRED FOR MOUNTING EQUIPMENT. PROVIDE MESH CABLE TRAYS AT ALL CABLE ROUTES.
H. ALL EXTERIOR WALLS SHALL EXTEND TO DECK AND BE SEALED, INCLUDING WALLS ADJACENT TO SOFFITS AND ABOVE DOORS AND WINDOWS.
I. EXTEND PERIMETER WALLS AT MECHANICAL ROOMS, ELECTRICAL ROOMS MDF ROOM, ELEVATOR SHAFTS & STAIRWELLS UP TO STRUCTURAL DECK.

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No.	Description	Date

KEY PLAN

1st FLOOR RCP

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-120

Scale: As indicated

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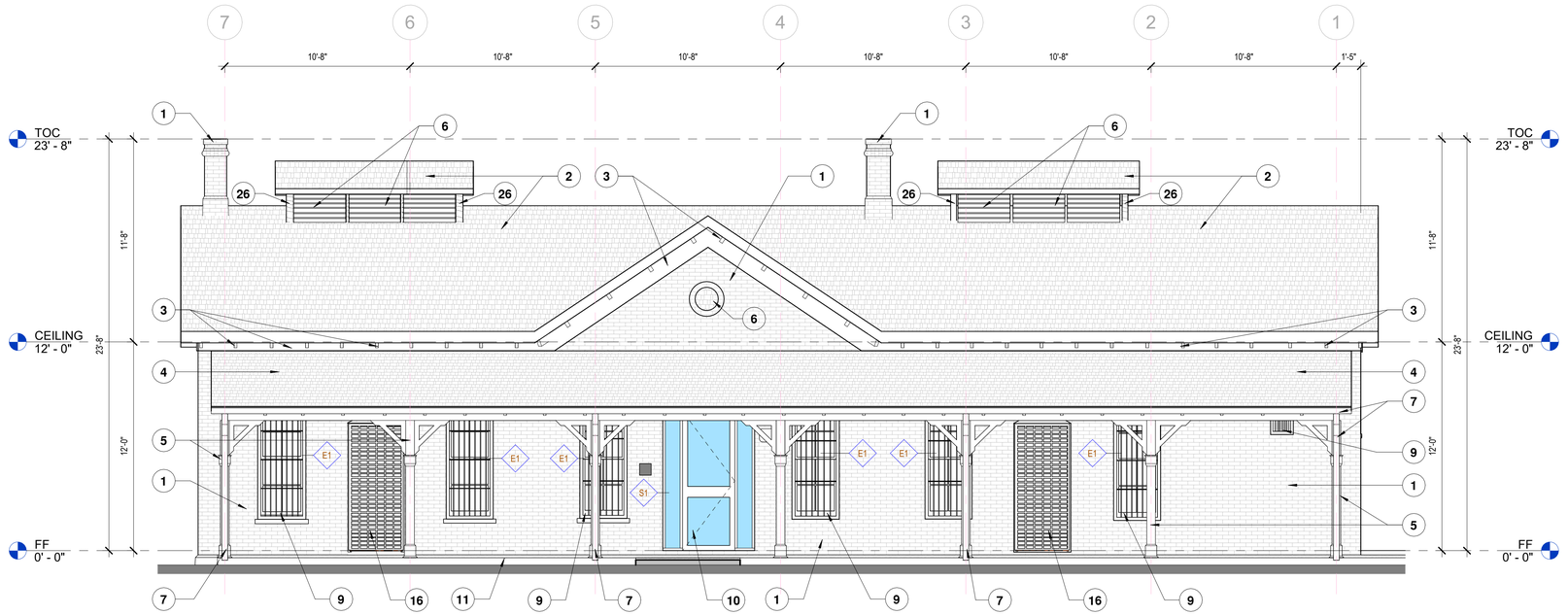
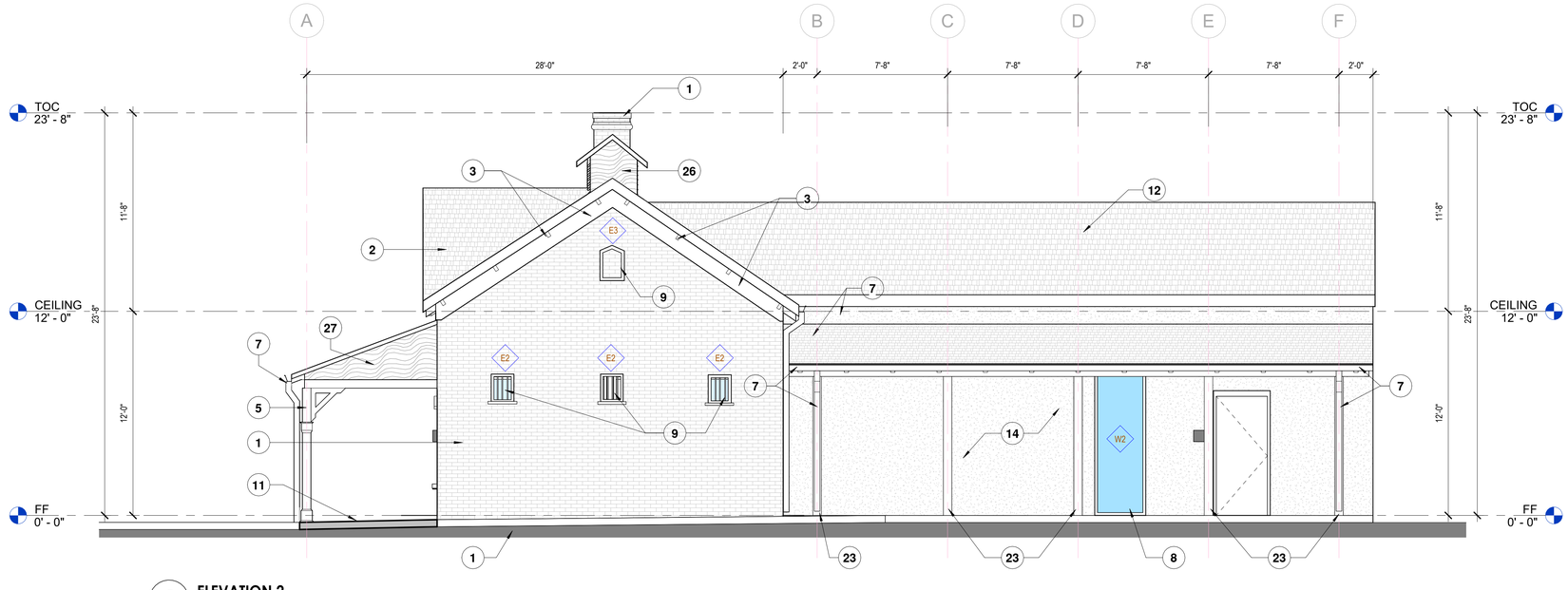


1 **ELEVATION 1**
1/4" = 1'-0"



2 **ELEVATION 2**
1/4" = 1'-0"

KEYNOTE LEGEND - ELEVATIONS & SECTIONS

Number	Description
1	EXISTING MASONRY TO REMAIN, PROTECT DURING DEMOLITION & NEW CONSTRUCTION, PATCH & REPAIR AS PER DETAILS ON SHEET R-301, REPAIR CRACKS, REPOINT MORTAR ON ENTIRE BLDG EXTERIOR; RE: SPEC SECTION 045313 MASONRY REPAIR & RESTORATION. LOW PRESSURE WASH & CLEAN, SCRAPE AND REPAINT ALL EXPOSED MASONRY ON EXTERIOR AND INTERIOR WALL FACES TO BE REPAINTED AFTER REPAIRS & REPOINTING.
2	NEW METAL SHINGLES OR SHAKES OVER NEW PLYWOOD DECK RE: STRUCTURAL DRAWINGS
3	EXISTING WOOD FRAMING & TRIM TO REMAIN, PATCH, REPAIR OR REPLACE AS REQ.
4	NEW METAL SHINGLES OR SHAKES OVER NEW PLYWOOD DECK & WOOD FRAMING RE: STRUCTURAL DRAWINGS
5	NEW WOOD COLUMNS, BEAMS, ROOF FRAMING & DECK REF: STRUCTURAL DRAWINGS. COLUMNS & MAIN BEAM SHAPE DESIGN TO MATCH EXISTING ELEMENTS, ALL ELEMENTS TO BE PAINTED COLOR TBD
6	NEW LOUVER; PROVIDE SEALED, WATERTIGHT BLANK-OFF PANELS RE: R-303 DETAIL 1
7	NEW PRE-FINISHED METAL GUTTER & DOWNSPOUT
8	NEW ALUMINUM WINDOW AS SCHED.
9	REPAIR ALL WOOD-FRAMED WINDOWS AND DOORS IN ACCORDANCE WITH HISTORIC REPAIR PROCEDURES. THIS INCLUDES SCRAPING LOOSE PAINT, FILLING SMALL AREAS OF DAMAGE, REPLACING PIECES THAT ARE SEVERELY DAMAGED, REMOVING AND REPLACING BROKEN GLASS LITES, AND CUTTING OUT AND REPLACING DEGRADED GLAZING PUTTY, THEN PRIMING AND PAINTING. PAINT ALL EXISTING WROUGHT IRON BURGLAR BARS TBD. RE: SPEC SECTION 08 59 00
10	NEW GLASS DOOR W/ ALUMINUM FRAME AS SCHED.
11	NEW CONCRETE SLAB RE: STRUCTURAL DRAWINGS
12	NEW METAL SHINGLES OR SHAKES OVER NEW METAL DECK & STRUCTURE REF: STRUCTURAL DRAWINGS.
13	NEW EXTERIOR SPLIT-FACE CMU WALL
14	NEW PLASTER & METAL LATH - FIELD COLOR "TBD"
15	NEW WROUGHT IRON GATE
16	EXISTING WOOD DOOR, FRAME & METAL PROTECTION TO BE PATCH & REPAIR AS REQ. OPERATIONAL HARDWARE TO BE REMOVED TO KEEP DOORS FIXED
17	NEW WOOD SLATS CEILING
18	EXISTING WOOD FLOOR STRUCTURE
19	EXISTING CRAWL SPACE
20	NEW CEILING AS SCHED.
21	NEW DOOR & FRAME AS SCHED.
22	NEW GYPSUM BOARD WALL
23	NEW STEEL COLUMNS RE STRUCTURAL DRAWINGS
24	NEW CMU WALL W/ METAL LATH & PLASTER FINISH COLOR BY ARCHITECT
25	NEW ROOF WOOD STRUCTURE WITH METAL SHAKE PANELS FINISH COLOR BY ARCHITECT
26	NEW ROOF DORMER TO BE WOOD STRUCTURE WITH WOOD WHITE PINE SIDING AT THE EXTERIOR FACE OF THE WALL, TO BE PAINTED COLOR TBD
27	NEW WOOD WHITE PINE SIDING, TO BE PAINTED COLOR TBD

ELEVATIONS GENERAL NOTES

A. TYP CONTROL JOINT TO BE 3/8" WITH BACKER ROD AND SEALANT.
B. ALL LETTERS DEPICTED ON DRAWINGS TO BE CAST ALUMINUM; G.C. TO PROVIDE SHOP DRAWINGS FOR APPROVAL.
C. ELEVATION GENERAL NOTES SHALL APPLY TO ALL ELEVATION SHEETS.
D. PROVIDE 1" THRU WALL EXPANSION JOINTS AT ALL BUILDING EXPANSION JOINTS, WITH BACKER RODS AND SEALANT.
E. RUNNING BOND IS TYPICAL UNLESS NOTED OTHERWISE.
F. ALLOW FOR A MINIMUM 3 COURSE BRICK LUG ALL AROUND BELOW FINISH FLOOR, BACKGROUTED WITH CONT. MWP-4 FLASHING WITH WEEPS 30 " O.C. MAX. AND MORTAR NET IN CAVITY.
G. REFER TO CIVIL FOR FINISH GRADING AT BUILDING.
H. REFER TO STRUCTURAL FOR ADDITIONAL REQUIREMENTS.
I. PROVIDE 12" HIGH SHEET METAL EXPANSION JOINTS IN THE ROOFING WHERE BUILDING EXPANSION JOINTS OCCUR, WITH TREATED WOOD BLOCKING AND MWP-II SELF ADHERING WATERPROOFING UNDERLAYMENT, ALLOWING 1 " HORIZONTAL MOVEMENT, COMPLIANT WITH SMACNA RECOMMENDATIONS.
J. ALL BUILDING MASONRY PARAPET WALLS ARE TO BE PROVIDED WITH PREFINISHED SHEET METAL PARAPET CAPS ON TREATED WOOD BLOCKING WITH MWP-11 WATERPROOFING.
K. PROJECTING AND RECESSED BRICK DETAILS AT STRING COURSES, LINTELS, SILLS AND RECESSED PANELS SHALL NOT EXCEED 1 " IN DIFFERENTIAL TO THE MAIN WALL SURFACE.

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS, JR.
20150
STATE OF TEXAS

NOTES:
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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

BUILDING ELEVATIONS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-201

Scale: As indicated

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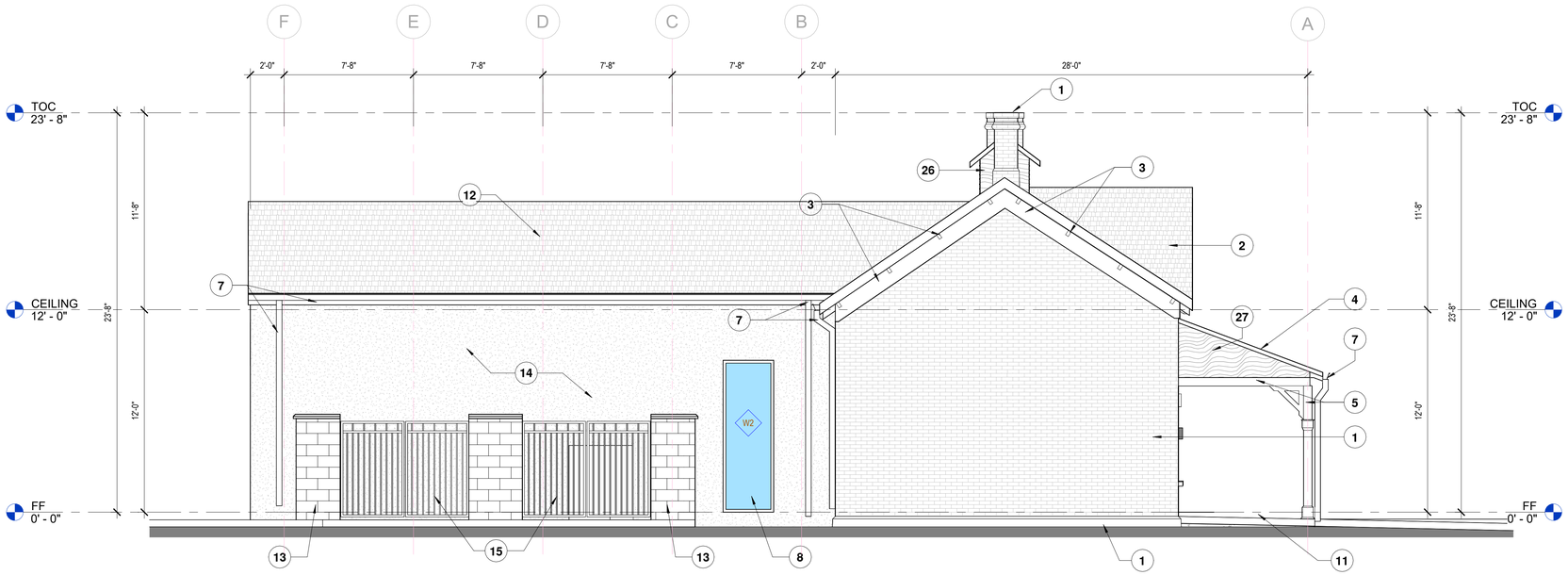
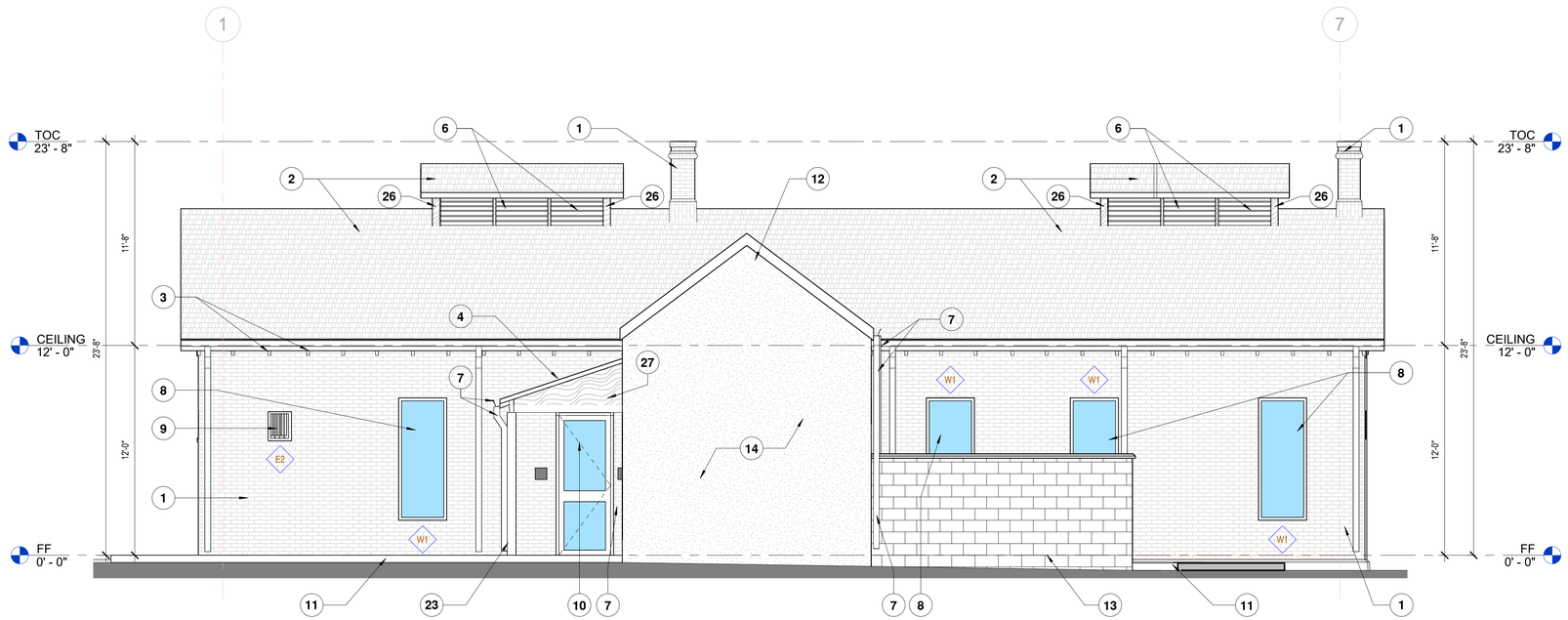


3 **ELEVATION 3**
1/4" = 1'-0"



2 **ELEVATION 4**
1/4" = 1'-0"

KEYNOTE LEGEND - ELEVATIONS & SECTIONS

Number	Description
1	EXISTING MASONRY TO REMAIN, PROTECT DURING DEMOLITION & NEW CONSTRUCTION, PATCH & REPAIR AS PER DETAILS ON SHEET R-301, REPAIR CRACKS, REPOINT MORTAR ON ENTIRE BLDG EXTERIOR; RE: SPEC SECTION 045313 MASONRY REPAIR & RESTORATION. LOW PRESSURE WASH & CLEAN, SCRAPE AND REPAINT ALL EXPOSED MASONRY ON EXTERIOR AND INTERIOR WALL FACES TO BE REPAINTED AFTER REPAIRS & REPOINTING.
2	NEW METAL SHINGLES OR SHAKES OVER NEW PLYWOOD DECK RE: STRUCTURAL DRAWINGS
3	EXISTING WOOD FRAMING & TRIM TO REMAIN, PATCH, REPAIR OR REPLACE AS REQ.
4	NEW METAL SHINGLES OR SHAKES OVER NEW PLYWOOD DECK & WOOD FRAMING RE: STRUCTURAL DRAWINGS
5	NEW WOOD COLUMNS, BEAMS, ROOF FRAMING & DECK REF: STRUCTURAL DRAWINGS. COLUMNS & MAIN BEAM SHAPE DESIGN TO MATCH EXISTING ELEMENTS, ALL ELEMENTS TO BE PAINTED COLOR TBD
6	NEW LOUVER; PROVIDE SEALED, WATERTIGHT BLANK-OFF PANELS RE: R-303 DETAIL 1
7	NEW PRE-FINISHED METAL GUTTER & DOWNSPOUT
8	NEW ALUMINUM WINDOW AS SCHED.
9	REPAIR ALL WOOD-FRAMED WINDOWS AND DOORS IN ACCORDANCE WITH HISTORIC REPAIR PROCEDURES. THIS INCLUDES SCRAPING LOOSE PAINT, FILLING SMALL AREAS OF DAMAGE, REPLACING PIECES THAT ARE SEVERELY DAMAGED, REMOVING AND REPLACING BROKEN GLASS LITES, AND CUTTING OUT AND REPLACING DEGRADED GLAZING PUTTY, THEN PRIMING AND PAINTING. PAINT ALL EXISTING WROUGHT IRON BURGLAR BARS TBD. RE: SPEC SECTION 08 59 00
10	NEW GLASS DOOR W/ ALUMINUM FRAME AS SCHED.
11	NEW CONCRETE SLAB RE: STRUCTURAL DRAWINGS
12	NEW METAL SHINGLES OR SHAKES OVER NEW METAL DECK & STRUCTURE REF: STRUCTURAL DRAWINGS.
13	NEW EXTERIOR SPLIT-FACE CMU WALL
14	NEW PLASTER & METAL LATH - FIELD COLOR "TBD"
15	NEW WROUGHT IRON GATE
16	EXISTING WOOD DOOR, FRAME & METAL PROTECTION TO BE PATCH & REPAIR AS REQ. OPERATIONAL HARDWARE TO BE REMOVED TO KEEP DOORS FIXED
17	NEW WOOD SLATS CEILING
18	EXISTING WOOD FLOOR STRUCTURE
19	EXISTING CRAWL SPACE
20	NEW CEILING AS SCHED.
21	NEW DOOR & FRAME AS SCHED.
22	NEW GYPSUM BOARD WALL
23	NEW STEEL COLUMNS RE STRUCTURAL DRAWINGS
24	NEW CMU WALL W/ METAL LATH & PLASTER FINISH COLOR BY ARCHITECT
25	NEW ROOF WOOD STRUCTURE WITH METAL SHAKE PANELS FINISH COLOR BY ARCHITECT
26	NEW ROOF DORMER TO BE WOOD STRUCTURE WITH WOOD WHITE PINE SIDING AT THE EXTERIOR FACE OF THE WALL, TO BE PAINTED COLOR TBD
27	NEW WOOD WHITE PINE SIDING, TO BE PAINTED COLOR TBD

ELEVATIONS GENERAL NOTES

A. TYP CONTROL JOINT TO BE 3/8" WITH BACKER ROD AND SEALANT.
B. ALL LETTERS DEPICTED ON DRAWINGS TO BE CAST ALUMINUM; G.C. TO PROVIDE SHOP DRAWINGS FOR APPROVAL.
C. ELEVATION GENERAL NOTES SHALL APPLY TO ALL ELEVATION SHEETS.
D. PROVIDE 1" THRU WALL EXPANSION JOINTS AT ALL BUILDING EXPANSION JOINTS, WITH BACKER RODS AND SEALANT.
E. RUNNING BOND IS TYPICAL UNLESS NOTED OTHERWISE.
F. ALLOW FOR A MINIMUM 3 COURSE BRICK LUG ALL AROUND BELOW FINISH FLOOR, BACKGROUTED WITH CONT. MWP-4 FLASHING WITH WEEPS 30 " O.C. MAX. AND MORTAR NET IN CAVITY.
G. REFER TO CIVIL FOR FINISH GRADING AT BUILDING.
H. REFER TO STRUCTURAL FOR ADDITIONAL REQUIREMENTS.
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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT GUILLERMO J. CAVAZOS JR. 20150 STATE OF TEXAS

NOTES:
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No.	Description	Date

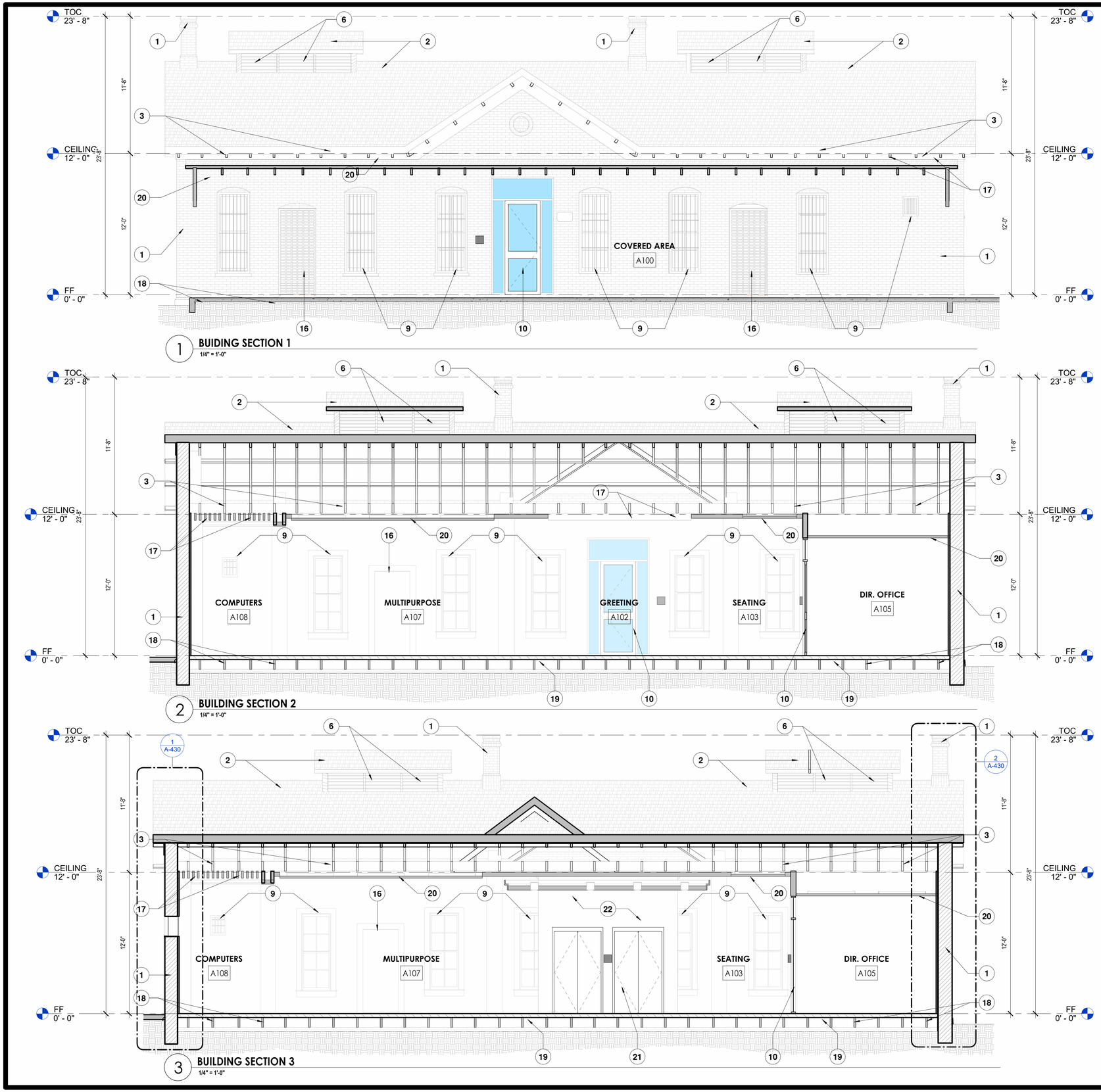
KEY PLAN

BUILDING ELEVATIONS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-202

Scale: As indicated



1 BUIDING SECTION 1
1/4" = 1'-0"

2 BUILDING SECTION 2
1/4" = 1'-0"

3 BUILDING SECTION 3
1/4" = 1'-0"

KEYNOTE LEGEND - ELEVATIONS & SECTIONS

Number	Description
1	EXISTING MASONRY TO REMAIN, PROTECT DURING DEMOLITION & NEW CONSTRUCTION, PATCH & REPAIR AS PER DETAILS ON SHEET R-301, REPAIR CRACKS, REPOINT MORTAR ON ENTIRE BLDG EXTERIOR; RE: SPEC SECTION 045313 MASONRY REPAIR & RESTORATION. LOW PRESSURE WASH & CLEAN, SCRAPE AND REPAINT ALL EXPOSED MASONRY ON EXTERIOR AND INTERIOR WALL FACES TO BE REPAINTED AFTER REPAIRS & REPOINTING.
2	NEW METAL SHINGLES OR SHAKES OVER NEW PLYWOOD DECK RE: STRUCTURAL DRAWINGS
3	EXISTING WOOD FRAMING & TRIM TO REMAIN, PATCH, REPAIR OR REPLACE AS REQ.
4	NEW METAL SHINGLES OR SHAKES OVER NEW PLYWOOD DECK & WOOD FRAMING RE: STRUCTURAL DRAWINGS
5	NEW WOOD COLUMNS, BEAMS, ROOF FRAMING & DECK REF: STRUCTURAL DRAWINGS. COLUMNS & MAIN BEAM SHAPE DESIGN TO MATCH EXISTING ELEMENTS, ALL ELEMENTS TO BE PAINTED COLOR TBD
6	NEW LOUVER; PROVIDE SEALED, WATERTIGHT BLANK-OFF PANELS RE: R-303 DETAIL 1
7	NEW PRE-FINISHED METAL GUTTER & DOWNSPOUT
8	NEW ALUMINUM WINDOW AS SCHED.
9	REPAIR ALL WOOD-FRAMED WINDOWS AND DOORS IN ACCORDANCE WITH HISTORIC REPAIR PROCEDURES. THIS INCLUDES SCRAPING LOOSE PAINT, FILLING SMALL AREAS OF DAMAGE, REPLACING PIECES THAT ARE SEVERELY DAMAGED, REMOVING AND REPLACING BROKEN GLASS LITES, AND CUTTING OUT AND REPLACING DEGRADED GLAZING PUTTY, THEN PRIMING AND PAINTING. PAINT ALL EXISTING WROUGHT IRON BURGLAR BARS TBD. RE: SPEC SECTION 08 59 00
10	NEW GLASS DOOR W/ ALUMINUM FRAME AS SCHED.
11	NEW CONCRETE SLAB RE: STRUCTURAL DRAWINGS
12	NEW METAL SHINGLES OR SHAKES OVER NEW METAL DECK & STRUCTURE REF: STRUCTURAL DRAWINGS.
13	NEW EXTERIOR SPLIT-FACE CMU WALL
14	NEW PLASTER & METAL LATH - FIELD COLOR "TBD"
15	NEW WROUGHT IRON GATE
16	EXISTING WOOD DOOR, FRAME & METAL PROTECTION TO BE PATCH & REPAIR AS REQ. OPERATIONAL HARDWARE TO BE REMOVED TO KEEP DOORS FIXED
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18	EXISTING WOOD FLOOR STRUCTURE
19	EXISTING CRAWL SPACE
20	NEW CEILING AS SCHED.
21	NEW DOOR & FRAME AS SCHED.
22	NEW GYPSUM BOARD WALL
23	NEW STEEL COLUMNS RE STRUCTURAL DRAWINGS
24	NEW CMU WALL W/ METAL LATH & PLASTER FINISH COLOR BY ARCHITECT
25	NEW ROOF WOOD STRUCTURE WITH METAL SHAKE PANELS FINISH COLOR BY ARCHITECT
26	NEW ROOF DORMER TO BE WOOD STRUCTURE WITH WOOD WHITE PINE SIDING AT THE EXTERIOR FACE OF THE WALL, TO BE PAINTED COLOR TBD
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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS, JR.
20150
STATE OF TEXAS

NOTES:
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No.	Description	Date

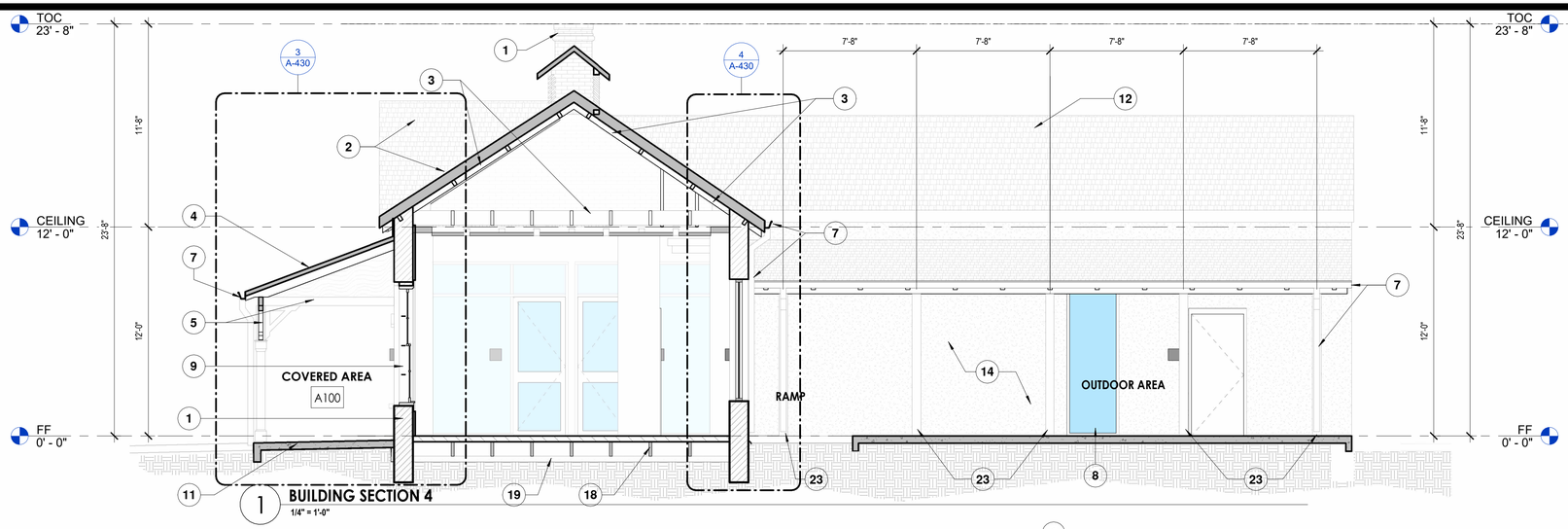
KEY PLAN

BUILDING SECTIONS

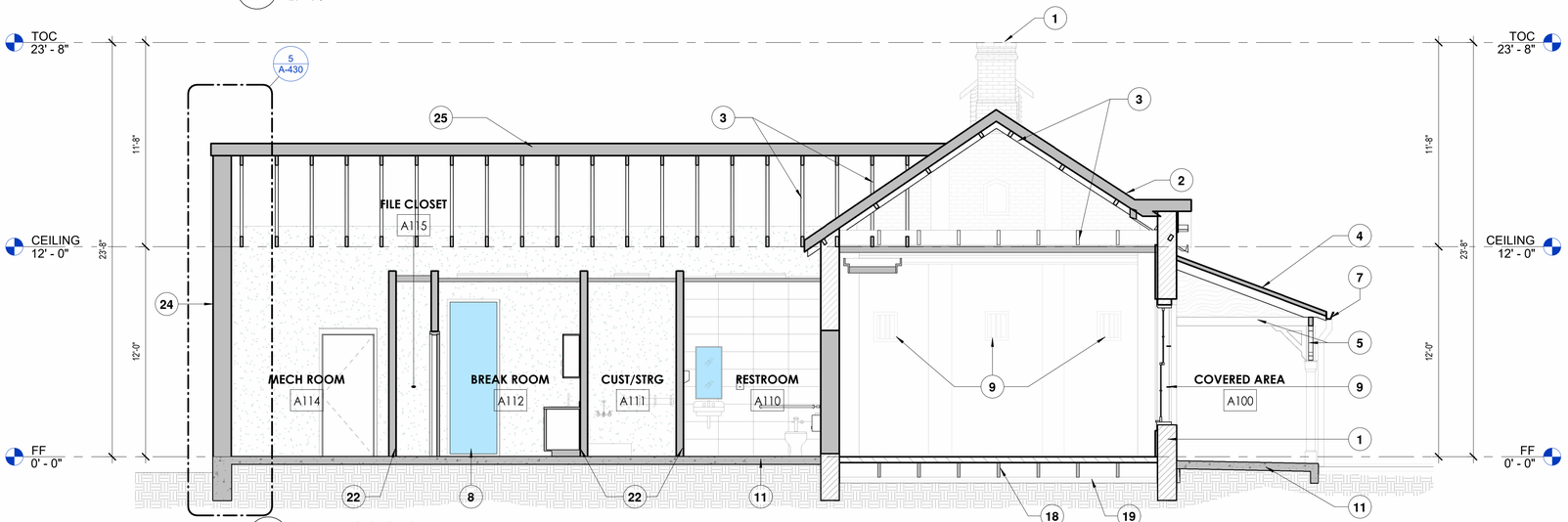
Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-301

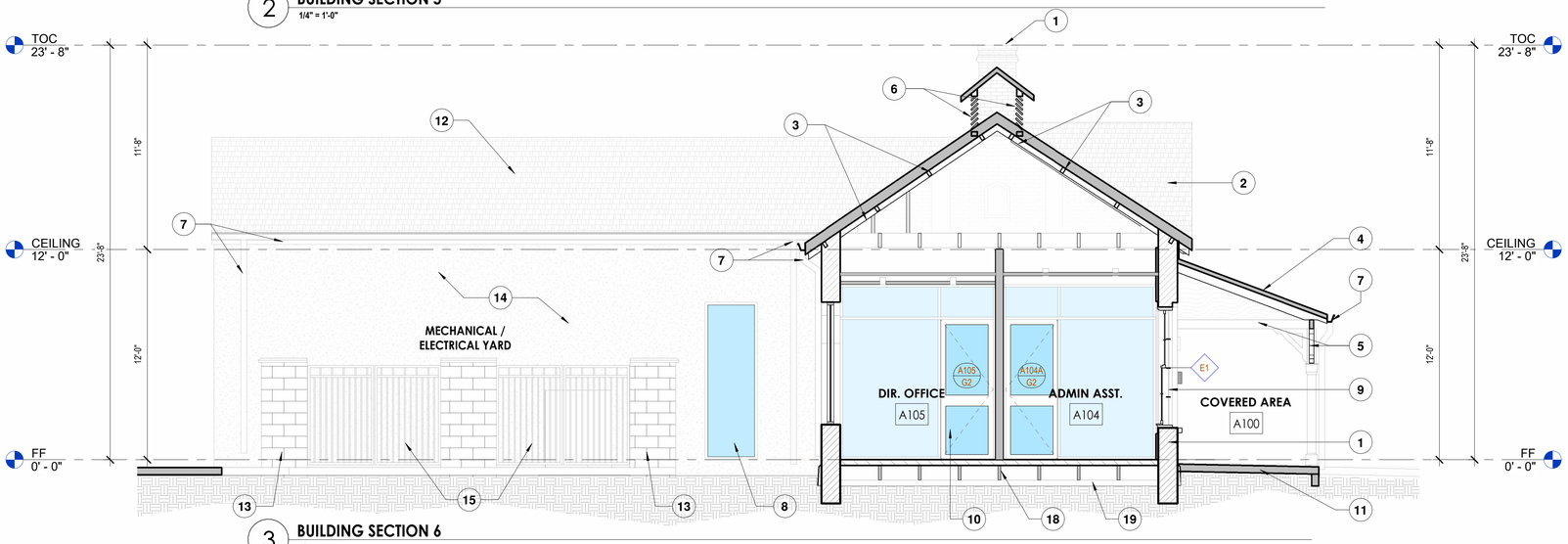
Scale: 1/4" = 1'-0"



1 BUILDING SECTION 4
1/4" = 1'-0"



2 BUILDING SECTION 5
1/4" = 1'-0"



3 BUILDING SECTION 6
1/4" = 1'-0"

KEYNOTE LEGEND - ELEVATIONS & SECTIONS

Number	Description
1	EXISTING MASONRY TO REMAIN, PROTECT DURING DEMOLITION & NEW CONSTRUCTION, PATCH & REPAIR AS PER DETAILS ON SHEET R-301, REPAIR CRACKS, REPOINT MORTAR ON ENTIRE BLDG EXTERIOR; RE: SPEC SECTION 045313 MASONRY REPAIR & RESTORATION. LOW PRESSURE WASH & CLEAN, SCRAPE AND REPAINT ALL EXPOSED MASONRY ON EXTERIOR AND INTERIOR WALL FACES TO BE REPAINTED AFTER REPAIRS & REPOINTING.
2	NEW METAL SHINGLES OR SHAKES OVER NEW PLYWOOD DECK RE: STRUCTURAL DRAWINGS
3	EXISTING WOOD FRAMING & TRIM TO REMAIN, PATCH, REPAIR OR REPLACE AS REQ.
4	NEW METAL SHINGLES OR SHAKES OVER NEW PLYWOOD DECK & WOOD FRAMING RE: STRUCTURAL DRAWINGS
5	NEW WOOD COLUMNS, BEAMS, ROOF FRAMING & DECK REF: STRUCTURAL DRAWINGS. COLUMNS & MAIN BEAM SHAPE DESIGN TO MATCH EXISTING ELEMENTS, ALL ELEMENTS TO BE PAINTED COLOR TBD
6	NEW LOUVER; PROVIDE SEALED, WATERTIGHT BLANK-OFF PANELS RE: R-303 DETAIL 1
7	NEW PRE-FINISHED METAL GUTTER & DOWNSPOUT
8	NEW ALUMINUM WINDOW AS SCHED.
9	REPAIR ALL WOOD-FRAMED WINDOWS AND DOORS IN ACCORDANCE WITH HISTORIC REPAIR PROCEDURES. THIS INCLUDES SCRAPING LOOSE PAINT, FILLING SMALL AREAS OF DAMAGE, REPLACING PIECES THAT ARE SEVERELY DAMAGED, REMOVING AND REPLACING BROKEN GLASS LITES, AND CUTTING OUT AND REPLACING DEGRADED GLAZING PUTTY, THEN PRIMING AND PAINTING. PAINT ALL EXISTING WROUGHT IRON BURGLAR BARS TBD. RE: SPEC SECTION 08 59 00
10	NEW GLASS DOOR W/ ALUMINUM FRAME AS SCHED.
11	NEW CONCRETE SLAB RE: STRUCTURAL DRAWINGS
12	NEW METAL SHINGLES OR SHAKES OVER NEW METAL DECK & STRUCTURE REF: STRUCTURAL DRAWINGS.
13	NEW EXTERIOR SPLIT-FACE CMU WALL
14	NEW PLASTER & METAL LATH - FIELD COLOR "TBD"
15	NEW WROUGHT IRON GATE
16	EXISTING WOOD DOOR, FRAME & METAL PROTECTION TO BE PATCH & REPAIR AS REQ. OPERATIONAL HARDWARE TO BE REMOVED TO KEEP DOORS FIXED
17	NEW WOOD SLATS CEILING
18	EXISTING WOOD FLOOR STRUCTURE
19	EXISTING CRAWL SPACE
20	NEW CEILING AS SCHED.
21	NEW DOOR & FRAME AS SCHED.
22	NEW GYPSUM BOARD WALL
23	NEW STEEL COLUMNS RE STRUCTURAL DRAWINGS
24	NEW CMU WALL W/ METAL LATH & PLASTER FINISH COLOR BY ARCHITECT
25	NEW ROOF WOOD STRUCTURE WITH METAL SHAKE PANELS FINISH COLOR BY ARCHITECT
26	NEW ROOF DORMER TO BE WOOD STRUCTURE WITH WOOD WHITE PINE SIDING AT THE EXTERIOR FACE OF THE WALL, TO BE PAINTED COLOR TBD
27	NEW WOOD WHITE PINE SIDING, TO BE PAINTED COLOR TBD

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS JR.
20150
STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

BUILDING SECTIONS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-302

Scale: 1/4" = 1'-0"

Autodesk Docs://LC Veterans Center/LC Veterans Center R25.rvt
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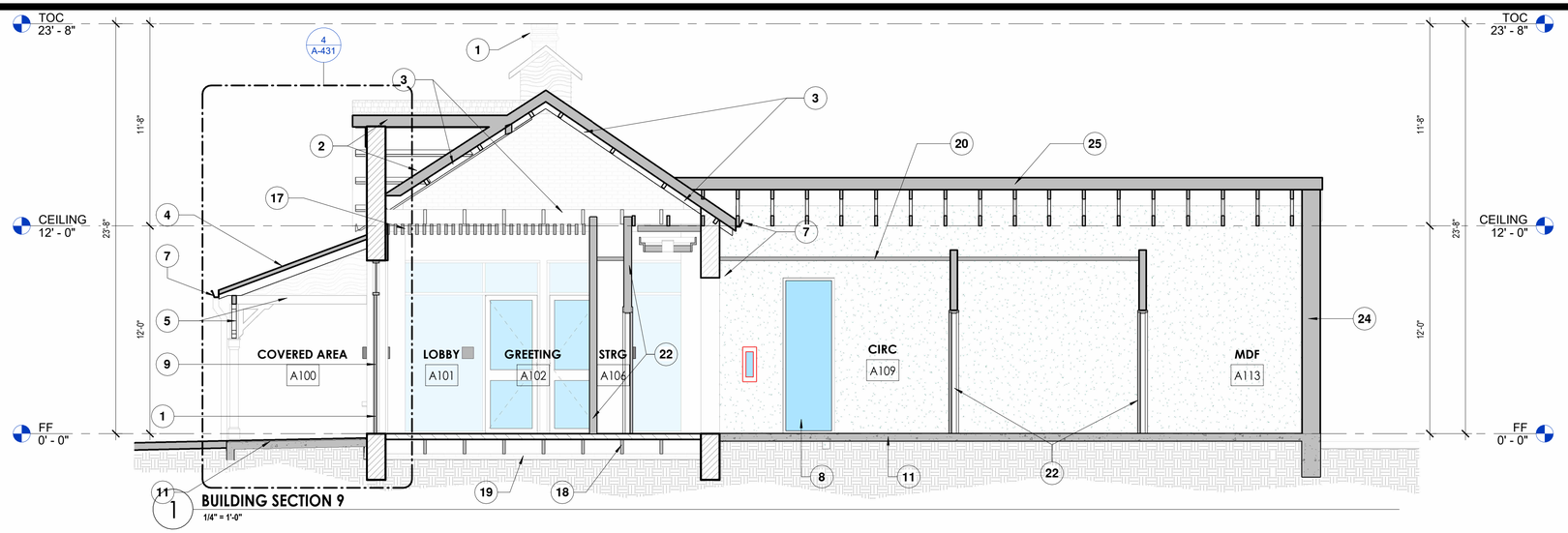

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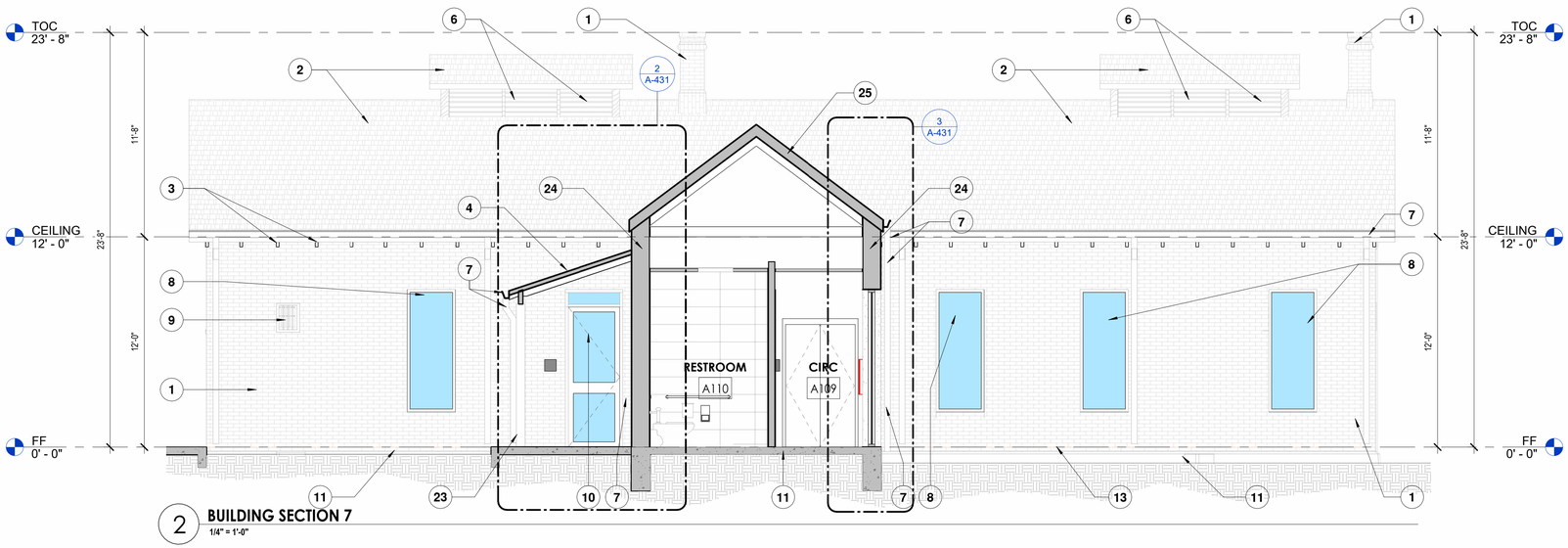

2 BUILDING SECTION 7
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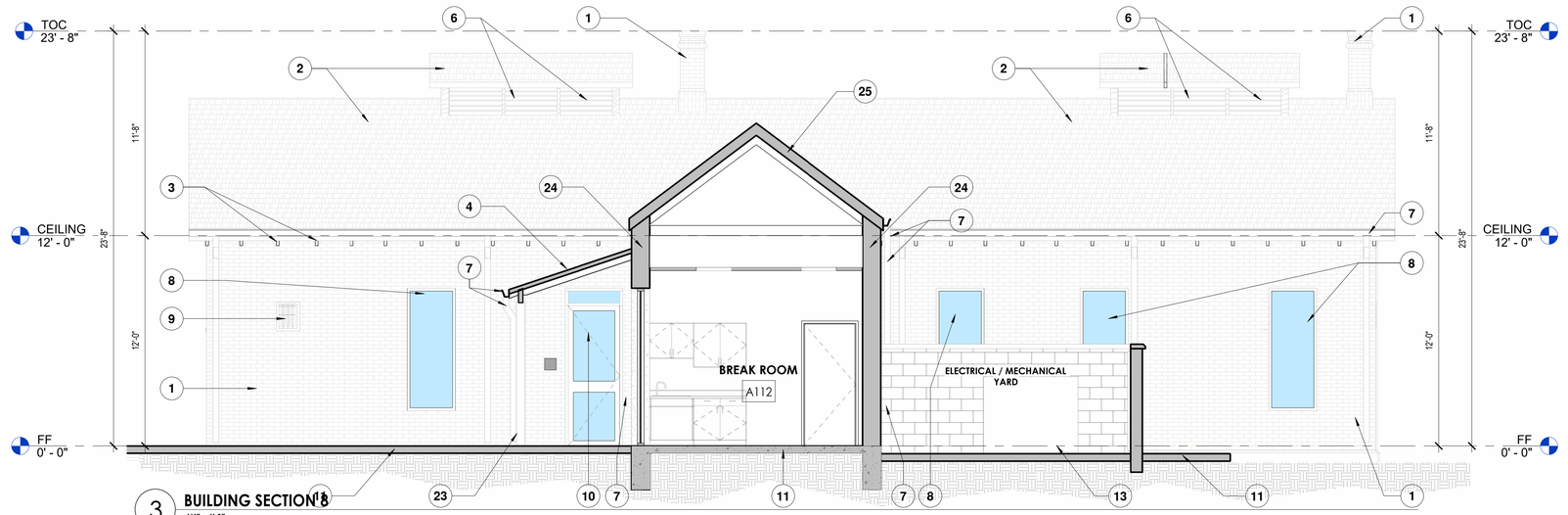

3 BUILDING SECTION 8
1/4" = 1'-0"

KEYNOTE LEGEND - ELEVATIONS & SECTIONS

Number	Description
1	EXISTING MASONRY TO REMAIN, PROTECT DURING DEMOLITION & NEW CONSTRUCTION, PATCH & REPAIR AS PER DETAILS ON SHEET R-301, REPAIR CRACKS, REPOINT MORTAR ON ENTIRE BLDG EXTERIOR; RE: SPEC SECTION 045313 MASONRY REPAIR & RESTORATION. LOW PRESSURE WASH & CLEAN, SCRAPE AND REPAINT ALL EXPOSED MASONRY ON EXTERIOR AND INTERIOR WALL FACES TO BE REPAINTED AFTER REPAIRS & REPOINTING.
2	NEW METAL SHINGLES OR SHAKES OVER NEW PLYWOOD DECK RE: STRUCTURAL DRAWINGS
3	EXISTING WOOD FRAMING & TRIM TO REMAIN, PATCH, REPAIR OR REPLACE AS REQ.
4	NEW METAL SHINGLES OR SHAKES OVER NEW PLYWOOD DECK & WOOD FRAMING RE: STRUCTURAL DRAWINGS
5	NEW WOOD COLUMNS, BEAMS, ROOF FRAMING & DECK REF: STRUCTURAL DRAWINGS. COLUMNS & MAIN BEAM SHAPE DESIGN TO MATCH EXISTING ELEMENTS, ALL ELEMENTS TO BE PAINTED COLOR TBD
6	NEW LOUVER; PROVIDE SEALED, WATERTIGHT BLANK-OFF PANELS RE: R-303 DETAIL 1
7	NEW PRE-FINISHED METAL GUTTER & DOWNSPOUT
8	NEW ALUMINUM WINDOW AS SCHED.
9	REPAIR ALL WOOD-FRAMED WINDOWS AND DOORS IN ACCORDANCE WITH HISTORIC REPAIR PROCEDURES. THIS INCLUDES SCRAPING LOOSE PAINT, FILLING SMALL AREAS OF DAMAGE, REPLACING PIECES THAT ARE SEVERELY DAMAGED, REMOVING AND REPLACING BROKEN GLASS LITES, AND CUTTING OUT AND REPLACING DEGRADED GLAZING PUTTY, THEN PRIMING AND PAINTING. PAINT ALL EXISTING WROUGHT IRON BURGLAR BARS TBD. RE: SPEC SECTION 08 59 00
10	NEW GLASS DOOR W/ ALUMINUM FRAME AS SCHED.
11	NEW CONCRETE SLAB RE: STRUCTURAL DRAWINGS
12	NEW METAL SHINGLES OR SHAKES OVER NEW METAL DECK & STRUCTURE REF: STRUCTURAL DRAWINGS.
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17	NEW WOOD SLATS CEILING
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20	NEW CEILING AS SCHED.
21	NEW DOOR & FRAME AS SCHED.
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24	NEW CMU WALL W/ METAL LATH & PLASTER FINISH COLOR BY ARCHITECT
25	NEW ROOF WOOD STRUCTURE WITH METAL SHAKE PANELS FINISH COLOR BY ARCHITECT
26	NEW ROOF DORMER TO BE WOOD STRUCTURE WITH WOOD WHITE PINE SIDING AT THE EXTERIOR FACE OF THE WALL, TO BE PAINTED COLOR TBD
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GUILLERMO J. CAVAZOS JR.
20150
STATE OF TEXAS

NOTES:
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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

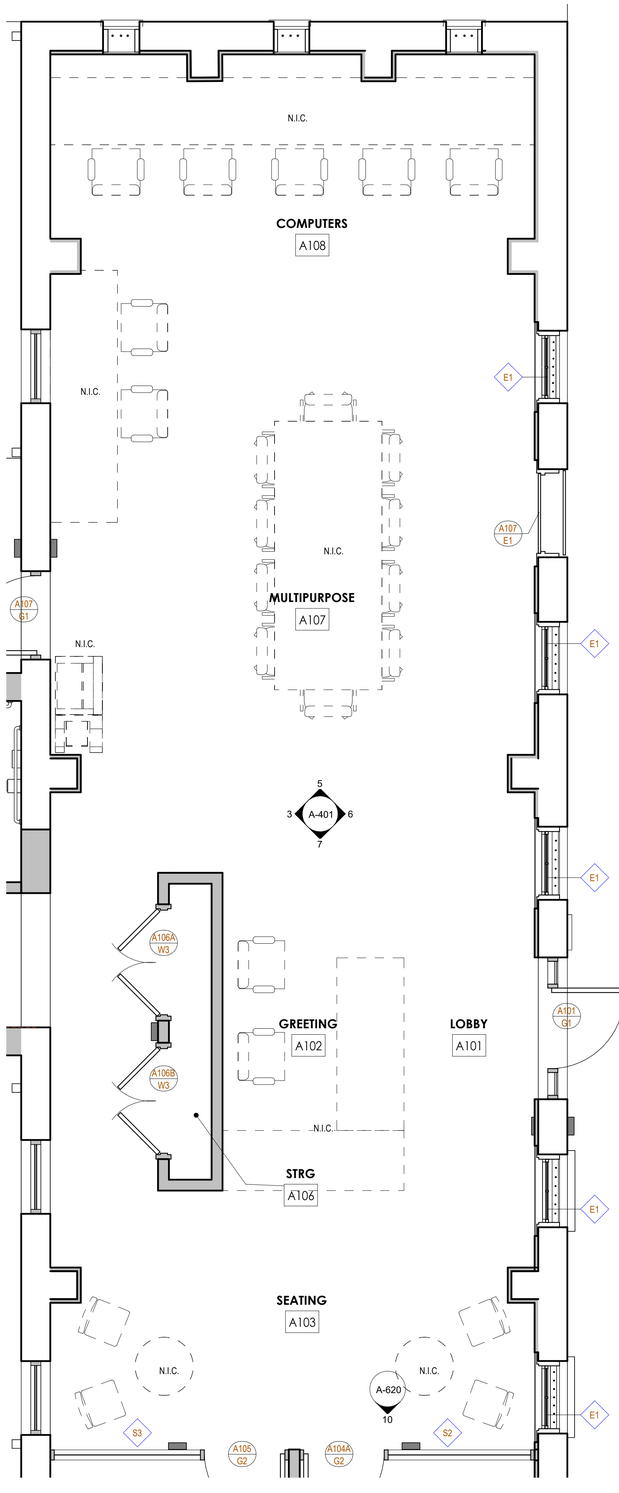
KEY PLAN

BUILDING SECTIONS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-303

Scale: 1/4" = 1'-0"



2 MULTIPURPOSE & ENTRANCE ENLARGED
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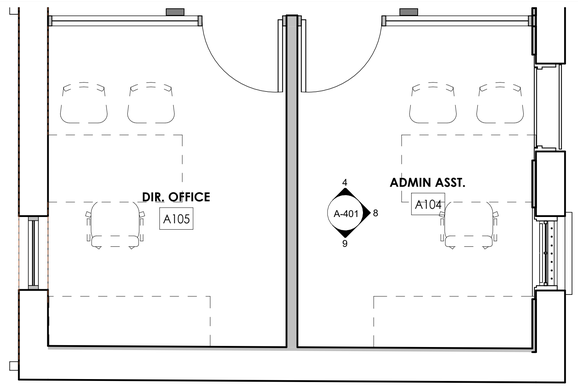
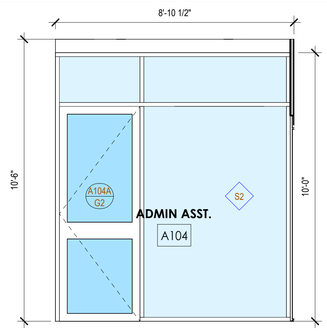


1 OFFICES ENLARGED PLAN
3/8" = 1'-0"



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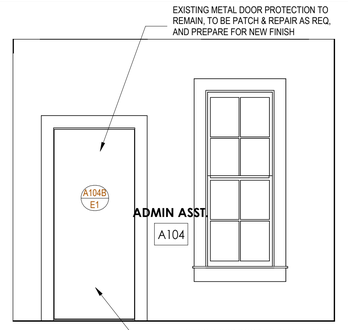
3/8" = 1'-0"



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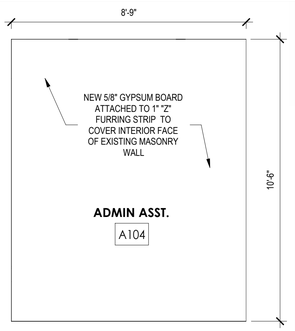

9 OFFICE ELEV 3
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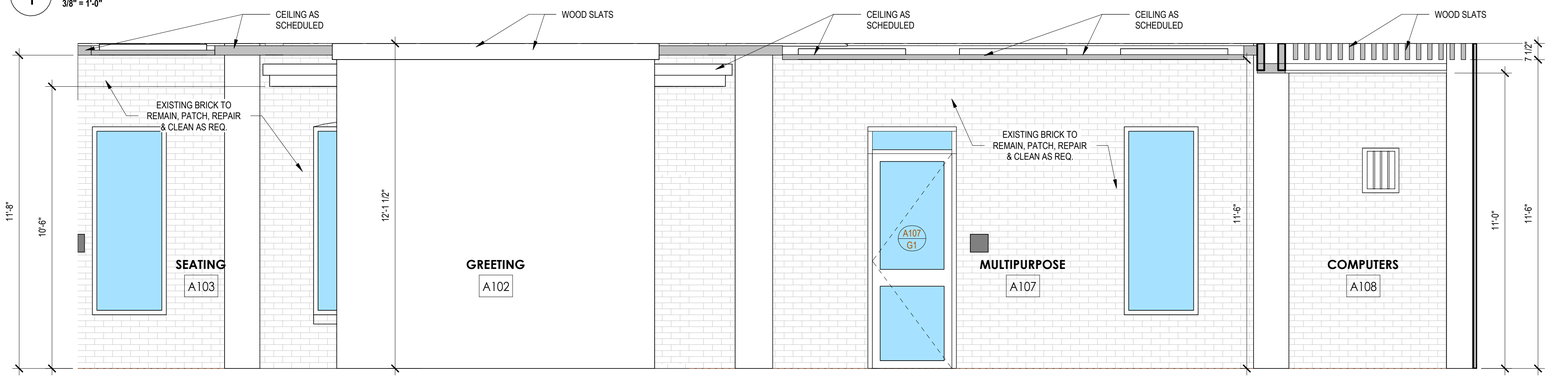

3 MULTI/ENTRANCE - ELEV 1
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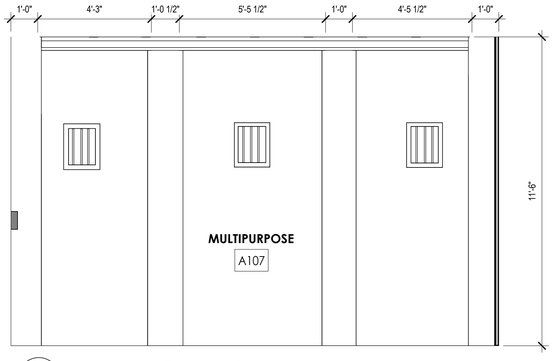
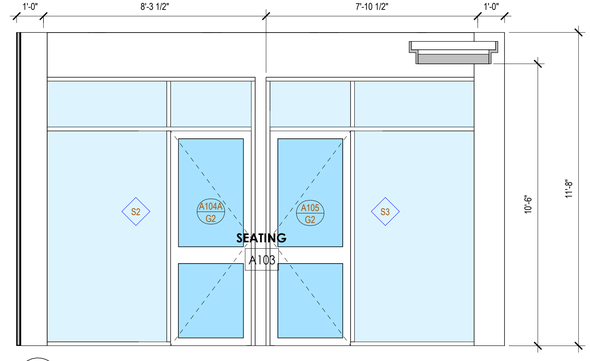
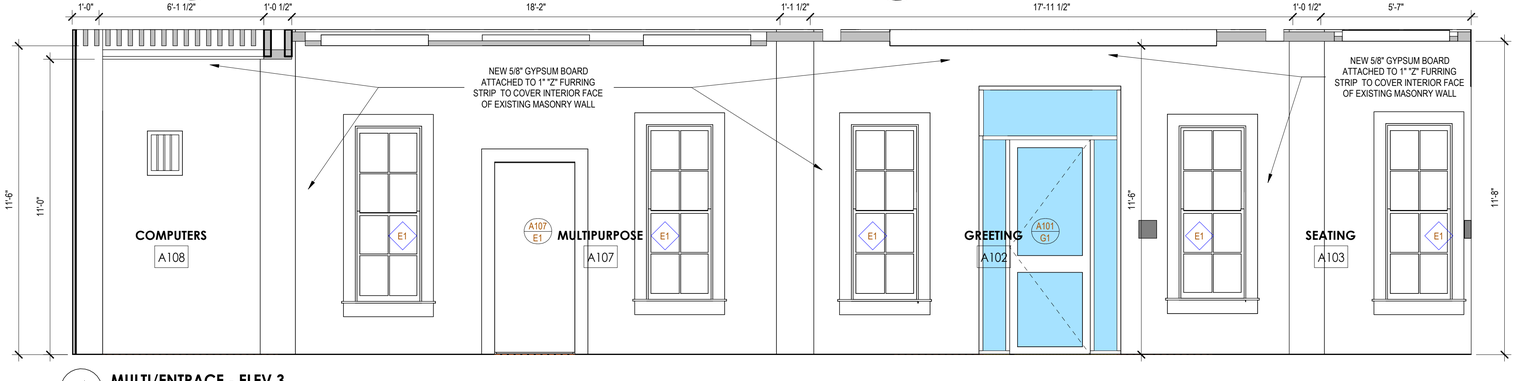


5 MULTI/ENTRANCE - ELEV 2
3/8" = 1'-0"



7 MULTI/ENTRANCE - ELEV 4
3/8" = 1'-0"



6 MULTI/ENTRANCE - ELEV 3
3/8" = 1'-0"

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CONSTRUCTION DOCUMENTS

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GUILLERMO J. CAVAZOS, JR.
20150
STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

ENLARGED PLANS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-401

Scale: 3/8" = 1'-0"

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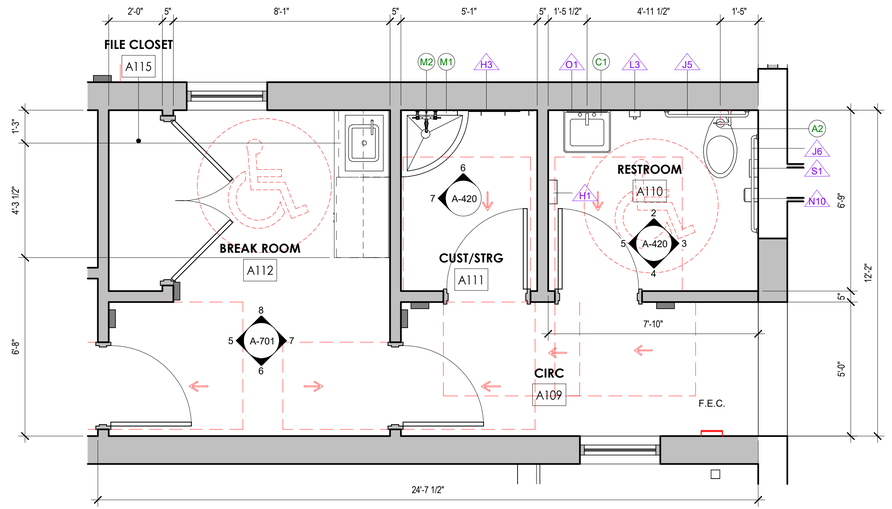
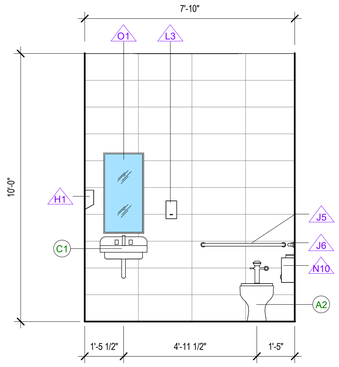
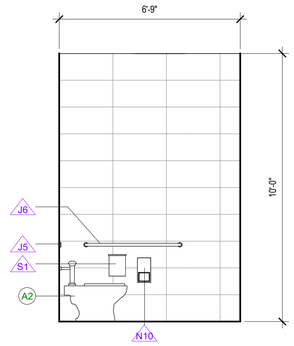


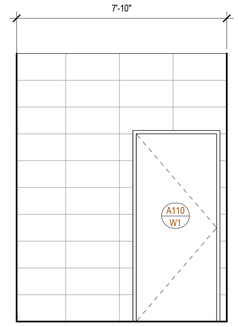
1 **BR & RR ENLARGED PLAN**
3/8" = 1'-0"



2 **VIEW 1 RR - A110**
3/8" = 1'-0"



3 **VIEW 2 RR - A110**
3/8" = 1'-0"



4 **VIEW 3 RR - A110**
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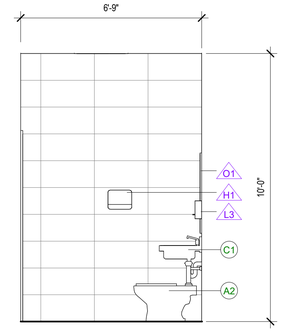


5 **VIEW 4 RR - A110**
3/8" = 1'-0"

RESTROOM ACCESSORY SCHEDULE

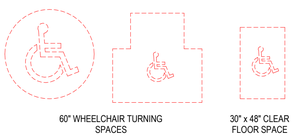
Type	Description	Basis of Design	
		Manufacturer	Model
H1	Surface Mounted Hand Dryer (Adult)	American Specialties, Inc.	0199-00 Turbo-Pro High Speed ADA Hand Dryer
H3	36" Long Stainless Steel Hook Strip	American Specialties, Inc.	10-8215-4
J5	36" Grab Bar	American Specialties, Inc.	10-3801-36
J6	42" Grab Bar	American Specialties, Inc.	10-3801-42
L3	Soap Dispenser (Adult)	American Specialties Inc.	0347
N10	Multi-Roll Toilet Tissue Dispenser (Adult)	American Specialties Inc.	0030
O1	Mirror: 18" Wide x 36" High (Adult)	American Specialties Inc.	10-0620-1836
S1	Sanitary Napkin Disposal	American Specialties Inc.	0652

PLUMBING FIXTURE SCHEDULE

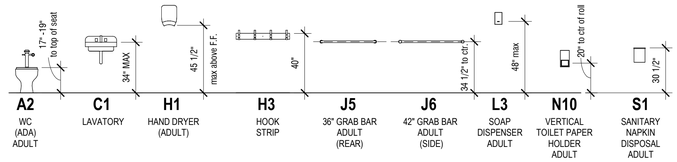
Type Mark	Description	Specification
A2	Water Closet - Floor Mounted - Adult ADA	refer to MEP Specifications
C1	Wall-Hung Lavatory (Adult)	refer to MEP specifications
M1	Corner Mop Sink; RE: MEP Specs	refer to MEP
M2	Service Sink Faucet, Fiat Products 830AA	refer to MEP specifications

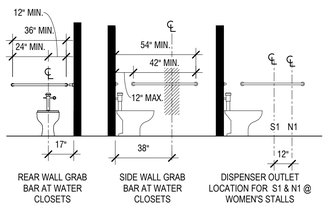
RESTROOM GENERAL NOTES

A. ALL FIXTURES AND ACCESSORIES SHALL BE MOUNTED AT HEIGHTS DESCRIBED IN MOUNTING HEIGHT LEGEND
B. PROVIDE ADEQUATE BLOCKING FOR GRAB BAR SUPPORT PROVIDE NO LESS THAN 250 POUNDS OF VERTICAL OR HORIZONTAL FORCE.
C. VARIFY LOCATIONS & MOUNTING HEIGHTS OF ACCESSORIES WITH ARCHITECT PRIOR TO INSTALLATION.
D. PROVIDE "LATACRETE WATERPROOFING UNDER ALL CERAMIC TILE AREAS.



ADA CLEARANCES
1/4" = 1'-0"





RR Mounting Heights
1/4" = 1'-0"

6 **VIEW 1 CUST - A111**
3/8" = 1'-0"

7 **VIEW 2 CUST - A111**
3/8" = 1'-0"

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CONSTRUCTION DOCUMENTS

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20150
STATE OF TEXAS

NOTES:
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No.	Description	Date

KEY PLAN

RR PLANS & ELEVATIONS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-420

Scale: As indicated

Autodesk Docs://LC Veterans Center/LC Veterans Center R25.rvt
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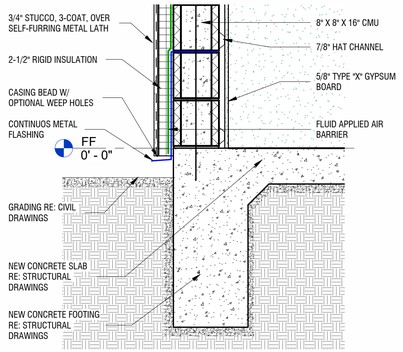
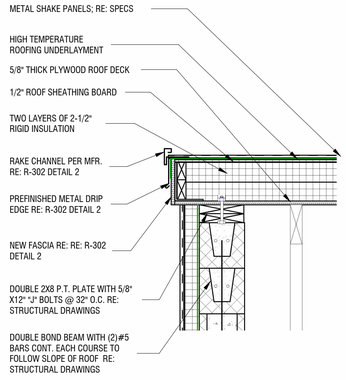


6 SECTION DETAIL
1" = 1'-0"



7 SECTION DETAIL RAKE
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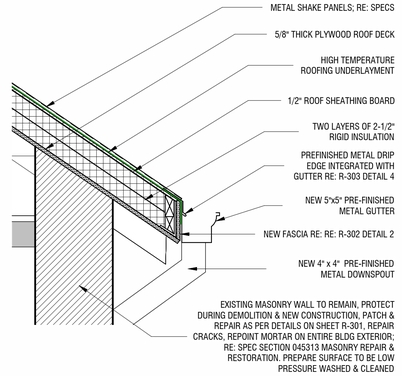

8 SECTION DETAIL GUTTER
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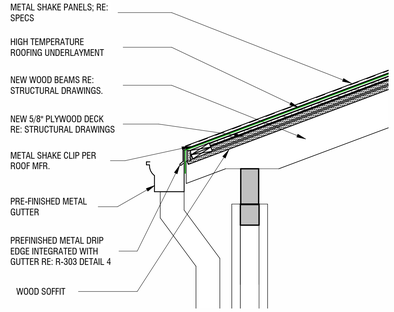

9 SECTION PORCH DETAIL
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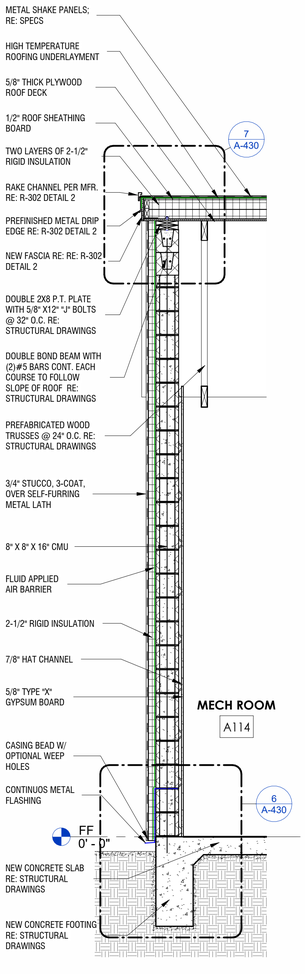
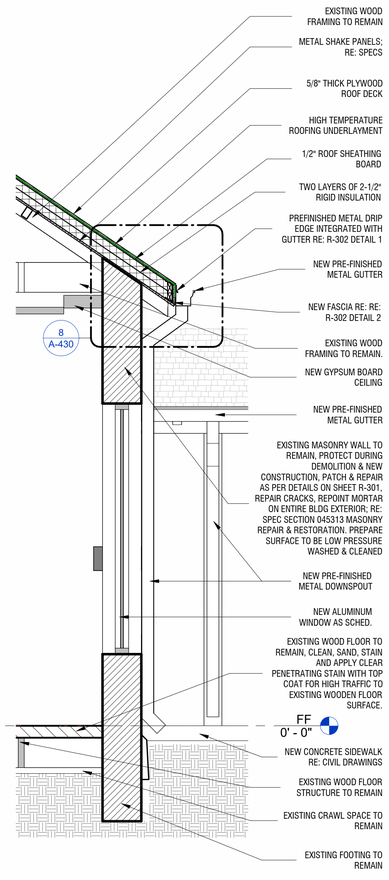
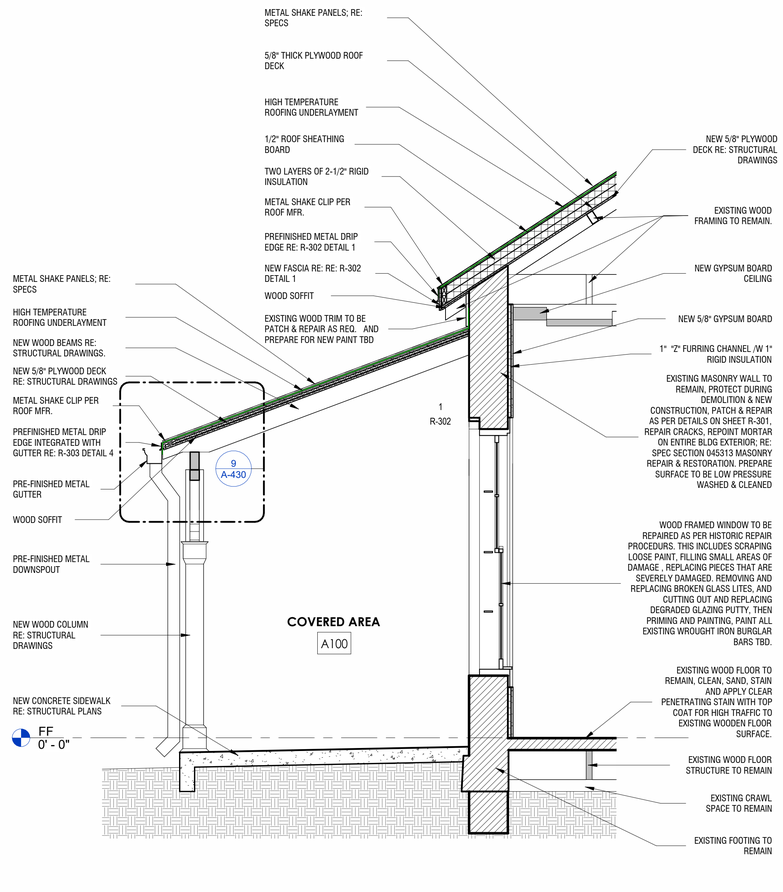


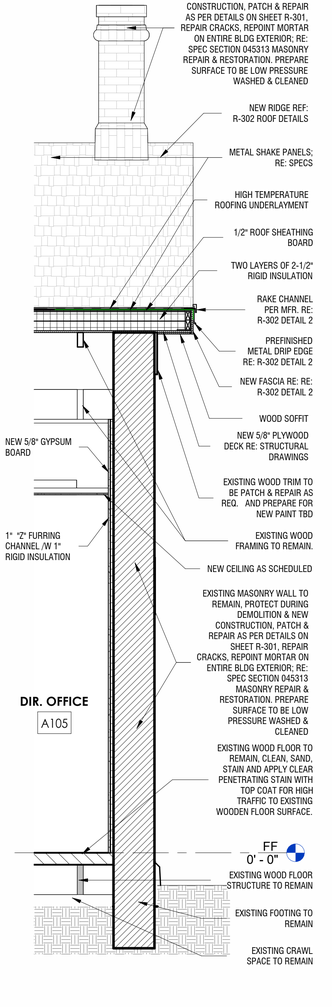
5 WALL SECTION 5
1/2" = 1'-0"



4 WALL SECTION 4
1/2" = 1'-0"



3 WALL SECTION 3
1/2" = 1'-0"



2 WALL SECTION 2
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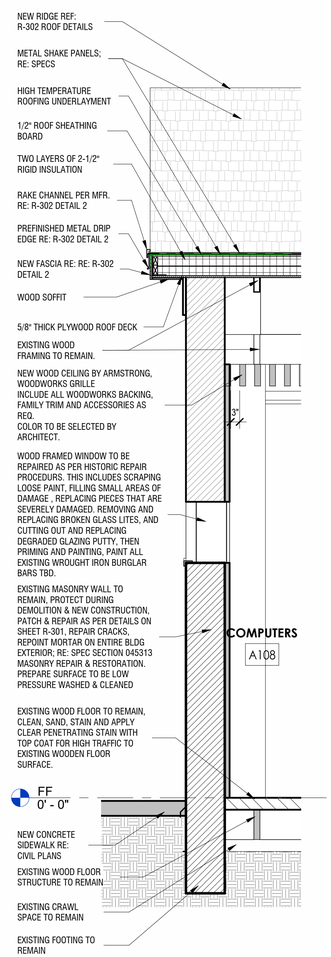

1 WALL SECTION 1
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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT GUILLERMO J. CAVAZOS JR. 20150 STATE OF TEXAS

NOTES:
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No.	Description	Date

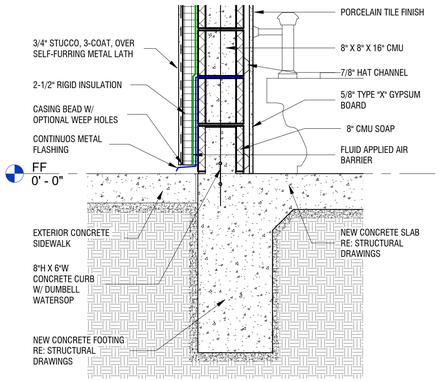
KEY PLAN

WALL SECTIONS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-430

Scale: As indicated



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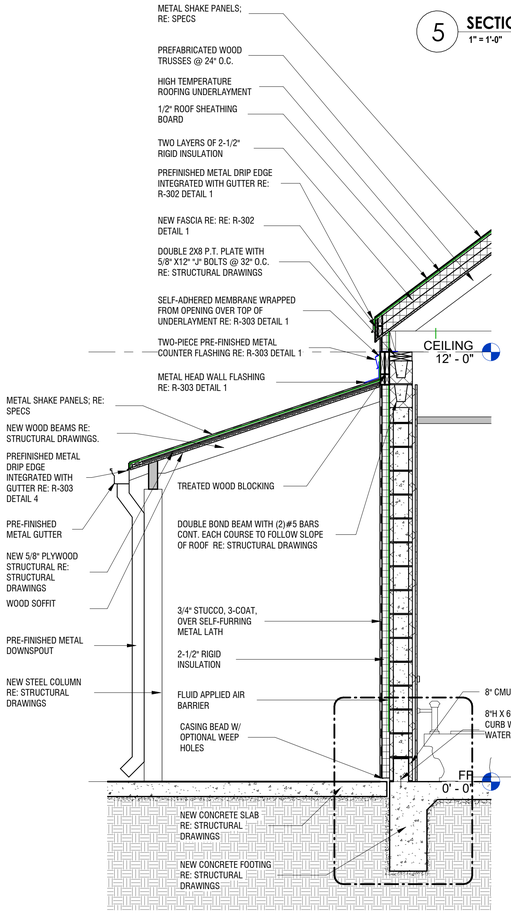

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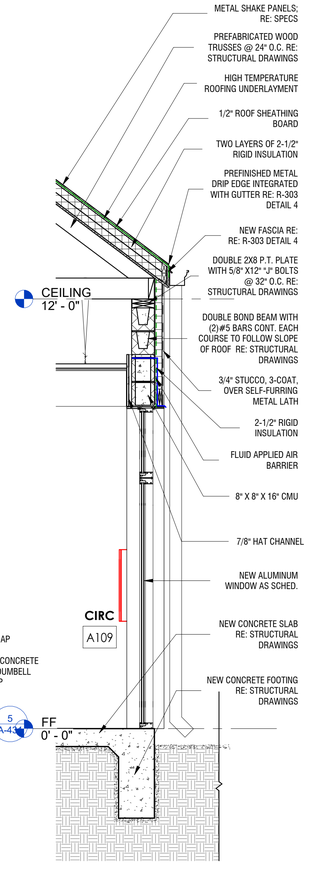
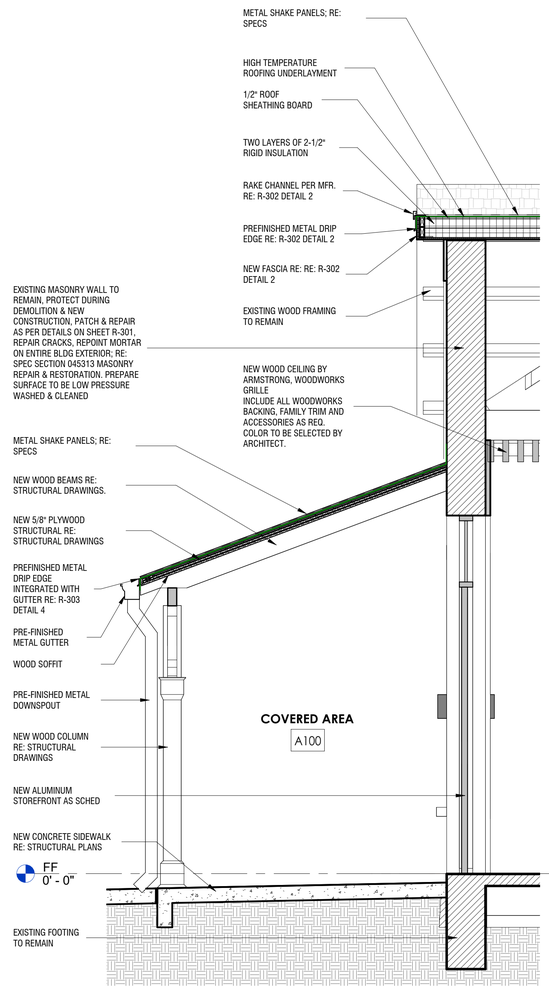
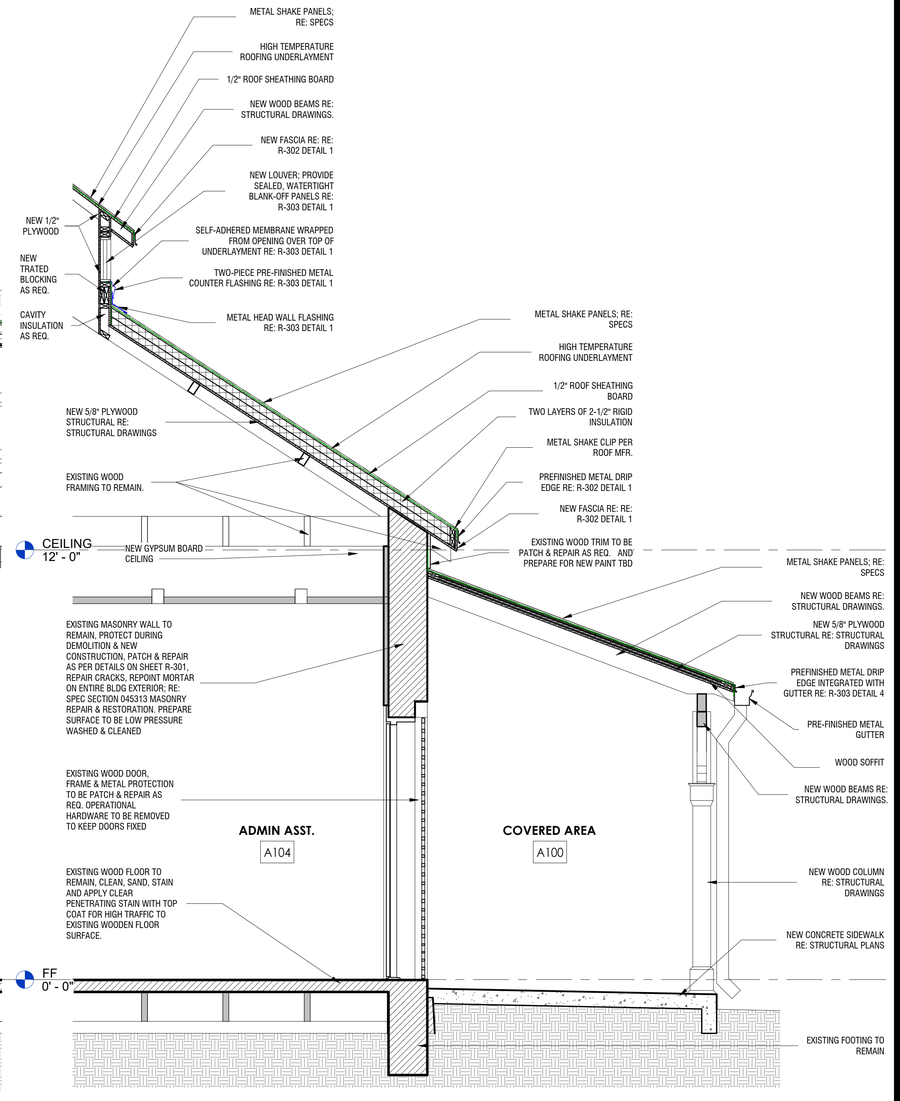


3 **WALL SECTION 7**
1/2" = 1'-0"



4 **WALL SECTION 8**
1/2" = 1'-0"



1 **BUILDING SECTION 10**
1/2" = 1'-0"

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS JR.
20150
STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

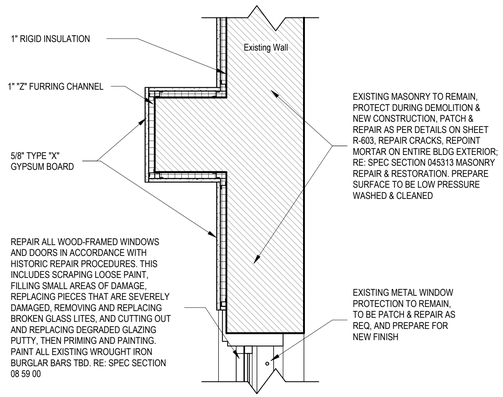
KEY PLAN

WALL SECTIONS

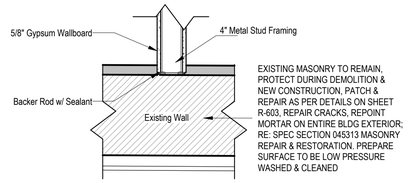
Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-431

Scale: As indicated



11 **PLANT DETAIL 12**
1" = 1'-0"



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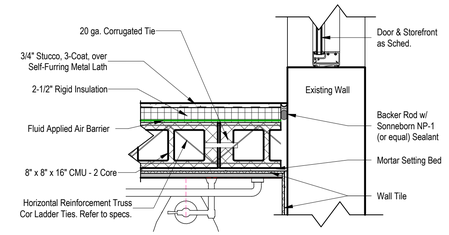

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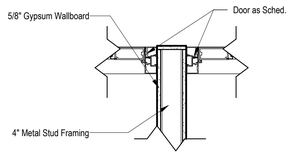

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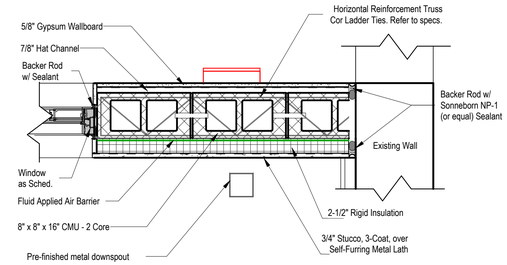

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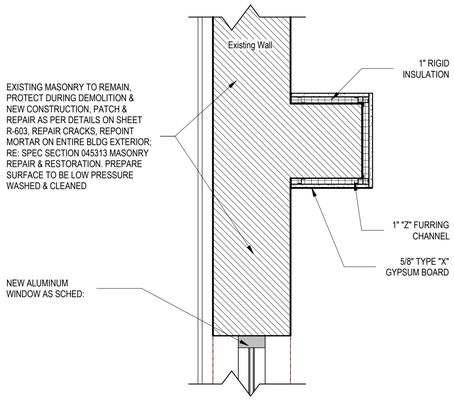

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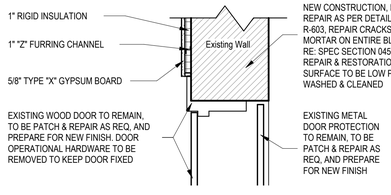

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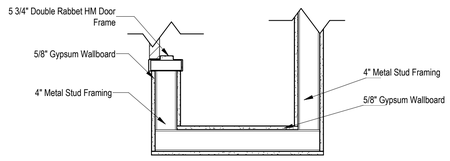

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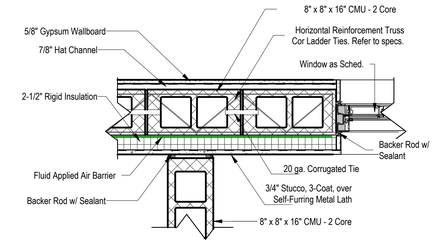

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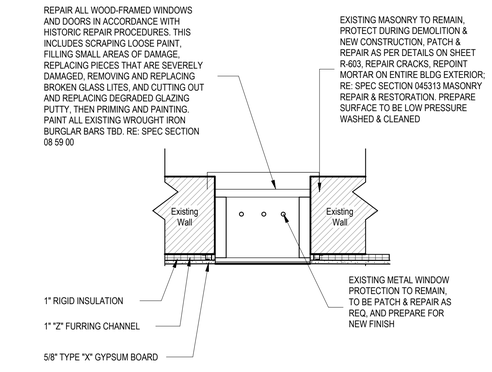

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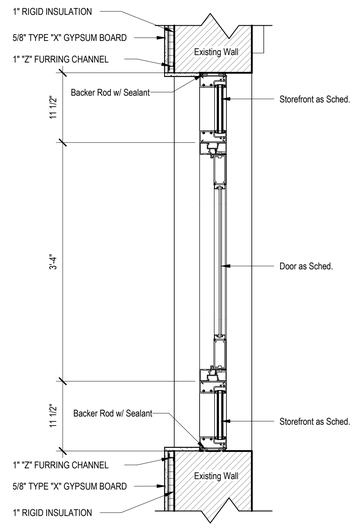

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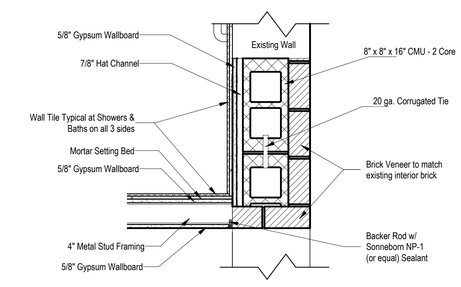

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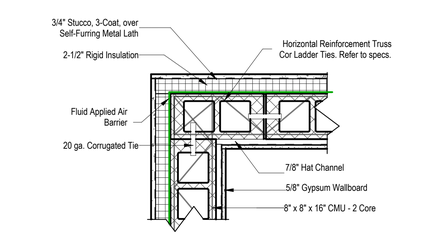

1 **PLAN DETAIL 1**
1" = 1'-0"

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
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20150
STATE OF TEXAS

NOTES:
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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

PLAN DETAILS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-501

Scale: 1" = 1'-0"

ROOM FINISH SCHEDULE

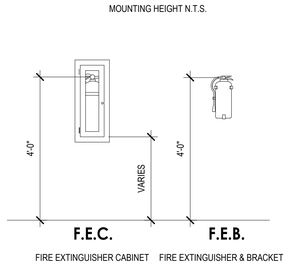
#	ROOM NAME	FLOOR	BASE	WALLS	CEILING	COMMENTS
FF						
A100	COVERED AREA	EXPOSED CONCRETE; BROOM FINISH	N/A	EXISTING WALLS TO REMAIN: PA	WS-2	PAINT ALL EXPOSED STRUCTURAL ELEMENTS, WOOD TRIMS, COMPONENTS, AND UNDERSIDE OF DECKING
A101	LOBBY	WF-1	WB	PA: EXISTING BRICK TO BE PAINTED ON WEST EXTERIOR WALL; ALL OTHER WALLS TO RECEIVE GB-1 FINISH	WS-1	
A102	GREETING	WF-1	WB	PA: EXISTING BRICK TO BE PAINTED ON WEST EXTERIOR WALL; ALL OTHER WALLS TO RECEIVE GB-1 FINISH	WS-1	
A103	SEATING	WF-1	WB	PA: EXISTING BRICK TO BE PAINTED ON WEST EXTERIOR WALL; ALL OTHER WALLS TO RECEIVE GB-1 FINISH	ACT & GCB	EXISTING WEST BRICK WALL TO BE PATCHED & REPAIRED AND CLEANED, AS PER SPECS
A104	ADMIN ASST.	WF-1	WB	PA (GB-1)	ACT	
A105	DIR. OFFICE	WF-1	WB	PA: EXISTING BRICK TO BE PAINTED ON WEST EXTERIOR WALL; ALL OTHER WALLS TO RECEIVE GB-1 FINISH	ACT	EXISTING WEST BRICK WALL TO BE PATCHED & REPAIRED AND CLEANED, AS PER SPECS
A106	STRG	WF-1	WB	PA (GB-1)	ACT	
A107	MULTIPURPOSE	WF-1	WB	PA: EXISTING BRICK TO BE PAINTED ON WEST EXTERIOR WALL; ALL OTHER WALLS TO RECEIVE GB-1 FINISH	ACT-1 & GCB	EXISTING WEST BRICK WALL TO BE PATCHED & REPAIRED AND CLEANED, AS PER SPECS
A108	COMPUTERS	WF-1	WB	PA: EXISTING BRICK TO BE PAINTED ON WEST EXTERIOR WALL; ALL OTHER WALLS TO RECEIVE GB-1 FINISH	WS-1 & GCB	EXISTING WEST BRICK WALL TO BE PATCHED & REPAIRED AND CLEANED, AS PER SPECS
A109	CIRC	PT-1	TB	PA (GB-1)	ACT	
A110	RESTROOM	PT-2, PT-3	GT-1	GT-1 FROM FLOOR TO CEILING	ACT	
A111	CUST/STRG	EPX	PT-2	PT-2 UP TO 4'-0" H. PA (GB-2)	ACT	
A112	BREAK ROOM	PT-1	TB	PA (GB-1)	ACT	
A113	MDF	PT-1	TB	PA (GB-1)	ACT	
A114	MECH ROOM	EPX	VB	PA (TEC)	EXPOSED TO STRUCTURE	TECTUM PANELS TO BE INSTALLED FROM FLOOR TO CEILING ON ALL 4 WALLS
A115	FILE CLOSET	PT-1	TB	PA (GB-1)	GCB	

NOTE: ALL FINISHES DESCRIPTIONS BELOW ARE CONSIDERED A "BASIS OF DESIGN", CONSIDER THAT AN "EQUAL" PRODUCT MAY BE SUBSTITUTED FOR ANY OF THE PRODUCTS BELOW, BUT THEY MUST BE APPROVED BY ARCHITECT PRIOR TO FINALIZING BID PRICES.

FINISHES DESCRIPTIONS

Key Name	Finish Description	Specification Section
ACT	Acoustical Ceiling Grid & Tile System; Re: RCP for Ceiling Types.	09 51 13, 09 51 15
EPX	Epoxy Floor Coating System Armor Seal Tread-Plex	09 90 00
GB-1	5/8" Type X Gypsum Board, Painted	09 21 16
GB-2	Moisture & Mold resistant Glass-Mat Panels, 5/8" thick	09 21 16
GCB	1/2" Moisture-Resistant Type X Gypsum Board on Metal Stud framing, Painted; Re: Specs	09 21 16
GT	Glazed Wall Tile; Vitromex Subway Tile - 3" x 10" (Brooklyn Series), Color: Oyster	09 30 00
PA	Paint Finish	09 90 00
PT-1	Porcelain Floor Tile; Provide $5/sf Material Allowance; Model and Color to be determinated by Architect;	09 30 00
PT-2	Porcelain Accent Floor Tile: Daltile Quartetto. Color: Ocra. Banding to be 4"x8" (Field-Cut 8" x 8" tile). or architect approved equal:	09 30 00
PT-3	Porcelain Floor Tile; Daltile Warm Grande Fiore 8x8 Tile QU12 (note: 4 tiles make up pattern of 16" x 16" size, or architect approved equal	09 30 00
TB	4" Floor Bullnose Base; Match Adjacent Floor Tile Color & Finish	09 30 00
TEC	2" Thick Armstrong Direct Attach Tectum Panels; mount on wood furring strips; Mounting Method C-40; Provide batt insulation behind panels as per mounting method	09 84 00
VB	4"H Roppe Vinyl Wall Base; Color By Architect	09 65 13
WB	6"H paint-grade wood base board; profile to be selected by Architect	
WF-1	Clean, sand, stain, and apply clear penetrating stain with top coat for high traffic to existing wooden floor surface in all existing rooms with wooden floors.	
WS-1	Wood Slats; re: RCP & Ceiling Schedule	09 51 26
WS-2	1x6 Tongue & Groove Wood Soffit; Traditional Series by Woodtone; color to be selected by Architect from manufacturer's full range	

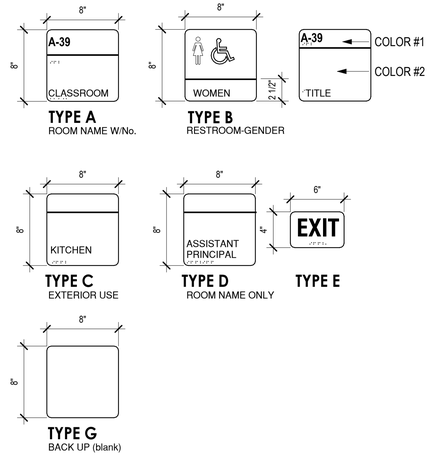
FIRE EXTINGUISHER LEGEND



FIRE EXTINGUISHER CABINET FIRE EXTINGUISHER & BRACKET

NOTE: *ALL FIRE EXTINGUISHERS TO BE IN SEMI-RECESSED CABINETS OR ON SURFACE MOUNTED BRACKETS AS PER SPECS*

ROOM SIGNAGE SCHEDULE



FINISH SCHEDULE NOTES:

1. Product substitutions will be allowed as per Section 012500 Substitution Procedures
2. Architect must approve all material selections & substitutions
3. Provide physical samples to architect for each product for verification and selection.
4. Provide mock-ups of paint samples on site for architect approval.
5. Installation for all materials must follow manufacturer's guidelines and installation procedures.
6. Refer to specifications for additional information.

TILE INSTALLATION NOTES:

1. PROVIDE CRACK ISOLATION OR ANTI-FRACTURE MEMBRANE AT ALL EXISTING CRACKS & JOINTS IN SLABS AS PER MANUFACTURER'S
2. PROVIDE EXPANSION JOINTS EVERY 20'-25' MINIMUM IN ALL DIRECTIONS. ARCHITECT TO PROVIDE DRAWING WITH EXPANSION JOINT LOCATIONS.
3. PROVIDE FLOORING TRANSITION STRIPS AS REQUIRED AT ALL FLOOR FINISH TRANSITIONS. TYPICAL.
4. DO NOT INSTALL GROUT WHERE TILE MEETS WALL CONDITION. LEAVE A 1/8" AIR GAP TO ALLOW FOR EXPANSION. TILE BASE UNIT WILL COVER 1/8" GAP.

INTERIOR SIGNAGE SPECIFICATIONS

1. SIGNAGE SHALL BE SIMILAR TO OR EQUAL TO: NATIONAL SIGNAGE AFFILIATES CCSW
   ARCHITECTURAL GRAPHICS STANDARD SIGN TYPES, ACCENT SERIES WITH VISITOUCH
   ADA FONTS.
2. FOR EXTERIOR ROOM SIGNAGE PROVIDE A .080 ALUMINUM SIGN PAINTED WITH MATTHEWS
   ACRYLIC POLYURETHANE PAINT AND FINISHED WITH A CLEAR COAT FINISH.
3. PROVIDE A BLANK BACK UP WITH COLOR MATCHING FACE COLOR FOR GLASS MOUNTING.
4. SIGNAGE SUPPLIER TO PROVIDE SHOP DRAWING AND SAMPLE SUBMITTALS FOR APPROVAL.

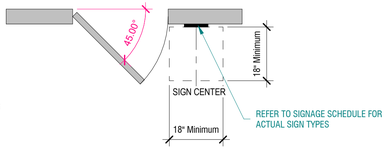
COLOR SCHEME:

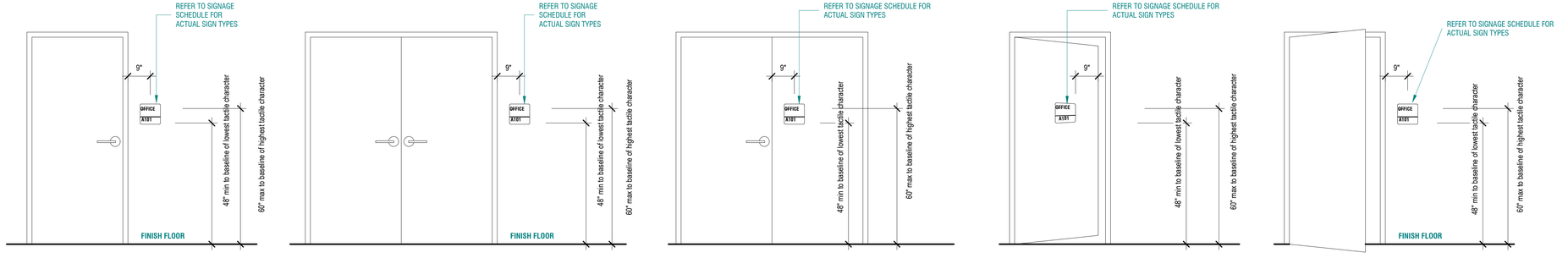
1. BACKGROUND COLORS: *TBD*
2. TEXT COLOR: *TBD*
3. LINE COLOR: COLOR TO MATCH TEXT COLOR SELECTION.
4. EDGE COLOR: PAINTED TO MATCH FACE LAMINATE COLOR.
5. FONT: *HELVETICA 721.*
6. RADIUS: *1/2".*
7. MOUNTING: *3M VHB FOAM TAPE/SILICONE.*

SIGNAGE NOTES

SIGNAGE BASIS OF DESIGN:

- ACCENT SERIES BY CORPUS CHRISTI STAMPWORKS
- ADA COMPLIANT SIGNAGE
- ALL COLORS BY ARCHITECT
- SUBMIT SHOP DRAWINGS FOR APPROVAL, INCLUDING QUANTITIES, LOCATIONS, AND SIGNAGE TYPES.





SINGLE DOOR: SIGN SHALL BE MOUNTED NEXT TO DOOR ON THE LATCH SIDE

DOUBLE DOORS (TWO ACTIVE LEAVES): SIGN SHALL BE LOCATED TO THE RIGHT OF RIGHT HANDED DOOR.

DOUBLE DOORS (ONE ACTIVE LEAF): SIGN SHALL BE LOCATED ON INACTIVE LEAF.

INWARD SWINGING DOORS: SIGN MAY BE MOUNTED ON DOOR IF THE THREE CRITERIA ARE MET: 1) THE DOOR CLOSES AUTOMATICALLY, 2) THE SIGN IS MOUNTED ON THE PUSH SIDE OF THE DOOR, 3) THE DOOR DOES NOT HAVE A HOLD-OPEN DEVICE. (COMMON EXAMPLES OF DOORS THAT MEET THESE CRITERIA ARE KITCHEN DOORS, REST ROOM DOORS, ETC).

IN THE CASE OF OUTWARD SWINGING DOORS, THE SIGN MUST BE MOUNTED TO THE WALL OUTSIDE OF THE ARC OF THE DOOR SWING. THE SIGN SHOULD BE LOCATED WITHIN AN 18"x18" SQUARE OF CLEAR FLOOR SPACE (18" AWAY FROM THE DOOR AND 18" AWAY FROM WALL). SEE DIAGRAM.

1 **SIGNAGE MOUNTING HEIGHTS**
1/2" = 1'-0"

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NOTES:
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No.	Description	Date

KEY PLAN

ROOM FINISH SCHEDULE

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-601

Scale: As indicated

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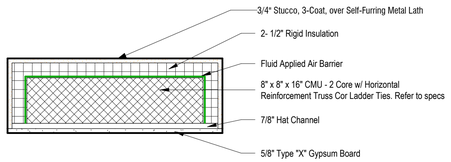
EXTERIOR WALLS

E1



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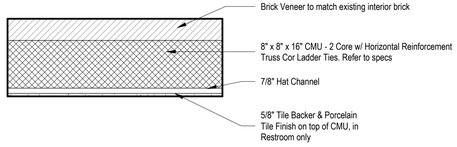

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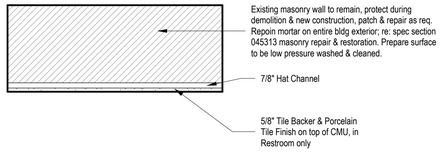
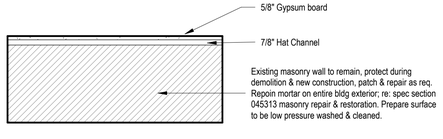


E4

E5



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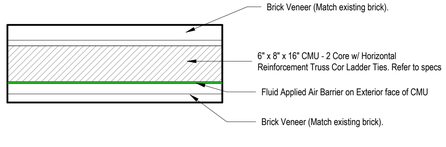

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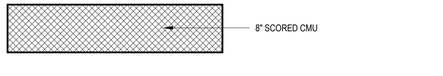
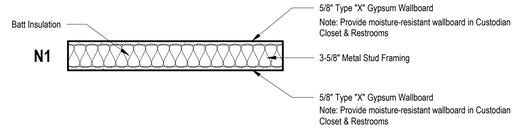


INTERIOR WALLS

NOTE:

PROVIDE 3 1/2" SOUND ATTENUATION BATTS IN ALL INTERIOR PARTITIONS WHERE INDICATED GRAPHICALLY ON WALL LEGEND

N1



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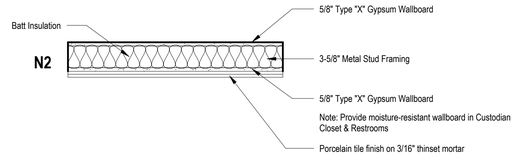

WALL THICKNESSES

Type Mark	Thickness
E1	1' - 0 1/2"
E2	1' - 1"
E3	1' - 2"
E4	1' - 1"
E5	1' - 2 1/2"
E6	1' - 1"
E7	0' - 8"
N1	0' - 4 7/8"
N2	0' - 6"

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT ☆ GUILLERMO J. CAVAZOS, JR. ☆ 20150 ☆ STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

WALL TYPES

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-610

Scale: 1" = 1'-0"

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10/31/2024 6:39:00 PM

DOOR SCHEDULE

Door No.	Type	Description	DOOR Width	Height	Thickness	Material	Finish	Glazing	FRAME Construction	Gage	Finish	DETAILS Head	DETAILS Jamb	Fire Rating	Type Comments
A101	G1	Single (Storefront)	3' - 0"	8' - 0"	2"	Extruded Aluminum	Arch. Class I (.7 mils min.) - Color by Architect	EG-2	Extruded Aluminum	Re: Storefront Schedule	Arch. Class I (.7 mils min.) - Color by Architect	021/A-620	3/A-620		
A104A	G2	Single (Storefront)	3' - 0"	8' - 0"	2"	Extruded Aluminum	Arch. Class I (.7 mils min.) - Color by Architect	IG-1	Extruded Aluminum	Re: Storefront Schedule	Arch. Class I (.7 mils min.) - Color by Architect	1/A-620	3/A-620		
A104B	E1	Single (Existing Door)													EXISTING WOOD DOOR TO REMAIN, TO BE PATCH & REPAIR AS REQ, AND PREPARE FOR NEW FINISH. DOOR OPERATIONAL HARDWARE TO BE REMOVED TO KEEP DOOR FIXED
A105	G2	Single (Storefront)	3' - 0"	8' - 0"	2"	Extruded Aluminum	Arch. Class I (.7 mils min.) - Color by Architect	IG-1	Extruded Aluminum	Re: Storefront Schedule	Arch. Class I (.7 mils min.) - Color by Architect	1/A-620	3/A-620		
A106A	W3	Double Door	4' - 0"	7' - 0"	1 3/4"	Solid Core Wood	Plastic Laminate; Color By Architect		HM Welded/Seamless	16 Gage	Painted; Color By Architect	4/A-620	5/A-620		
A106B	W3	Double Door	4' - 0"	7' - 0"	1 3/4"	Solid Core Wood	Plastic Laminate; Color By Architect		HM Welded/Seamless	16 Gage	Painted; Color By Architect	4/A-620	5/A-620		
A107	E1	Single (Existing Door)													EXISTING WOOD DOOR TO REMAIN, TO BE PATCH & REPAIR AS REQ, AND PREPARE FOR NEW FINISH. DOOR OPERATIONAL HARDWARE TO BE REMOVED TO KEEP DOOR FIXED
A107	G1	Single (Storefront)	2' - 11 1/2"	8' - 0"	2"	Extruded Aluminum	Arch. Class I (.7 mils min.) - Color by Architect	EG-2	Extruded Aluminum	Re: Storefront Schedule	Arch. Class I (.7 mils min.) - Color by Architect	1/A-620	3/A-620		
A110	W1	Single Door	3' - 0"	7' - 0"	1 3/4"	Solid Core Wood	Plastic Laminate; Color By Architect		HM Welded/Seamless	16 Gage	Painted; Color By Architect	4/A-620	5/A-620		
A111	W1	Single Door	3' - 0"	7' - 0"	1 3/4"	Solid Core Wood	Plastic Laminate; Color By Architect		HM Welded/Seamless	16 Gage	Painted; Color By Architect	4/A-620	5/A-620		
A112A	W1	Single Door	3' - 0"	7' - 0"	1 3/4"	Solid Core Wood	Plastic Laminate; Color By Architect		HM Welded/Seamless	16 Gage	Painted; Color By Architect	4/A-620	5/A-620		
A112B	W4	Double Door	6' - 0"	7' - 0"	1 3/4"	Solid Core Wood	Plastic Laminate; Color By Architect		HM Welded/Seamless	16 Gage	Painted; Color By Architect	4/A-620	5/A-620		
A113	W1	Single Door	3' - 0"	7' - 0"	1 3/4"	Solid Core Wood	Plastic Laminate; Color By Architect		HM Welded/Seamless	16 Gage	Painted; Color By Architect	4/A-620	5/A-620		
A114	M1	Single Door	3' - 0"	7' - 0"	1 3/4"	Hollow Metal	Galvanized/Painted; Color By Architect		HM Welded/Seamless	14 Gage Galv.	Painted; Color By Architect	6/A-620	7/A-620		

STOREFRONT SCHEDULE

Mark	Manufacturer	Model	Glazing Type	Type Comments
S1	Kawneer	Trifab Versaglaze 451T	EG-2	Front-Glazing
S2	Kawneer	Versaglaze 450	IG-1	Center-Glazing
S3	Kawneer	Versaglaze 450	IG-1	Center-Glazing
S4	Kawneer	Trifab Versaglaze 451T	EG-2	Front-Glazing

GLAZING SCHEDULE

TYPE	DESCRIPTION
EG-2	1" THICK DOUBLE PANEL LOW-E INSULATED GLASS, TINTED, TEMPERED; RE: GLAZING SPECS
IG-1	1/4" CLEAR TEMPERED GLASS

STOREFRONT NOTES:

A. STOREFRONT ASSEMBLY BASIS OF DESIGN: KAWNEER TRIFAB VERSAGLAZE 451T OR ARCHITECT APPROVED EQUAL (RE: SPECS). COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURER FULL RANGE.

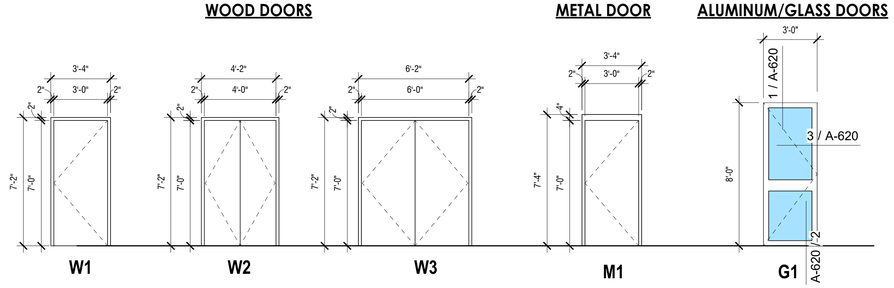
B. REFER TO BUILDING FLOOR PLANS FOR LOCATION OF STOREFRONT ASSEMBLIES (DENOTED BY PREFIX S-). INTERIOR ELEVATIONS WILL CONTAIN FURTHER DIMENSIONAL INFORMATION.

DOOR GENERAL NOTES

1. DOORS WITH SUFFIX "F" INDICATE FIRE-RATED DOOR. RE: DOOR SCHEDULE FOR FIRE RATINGS (i.e. 45 min, 90 min)
2. RE: DOOR SCHEDULE FOR FURTHER INFORMATION ON EACH DOOR TYPE.
3. GLAZING TYPES PER DOOR INDICATED ON DOOR SCHEDULE. RE: GLAZING SCHEDULE FOR GLAZING TYPES.
4. GENERAL CONTRACTOR TO PROVIDE FULL SET OF SHOP DRAWINGS FOR ALL DOOR TYPES PRIOR TO FABRICATION.
5. RE: DOOR SCHEDULE AND SPECIFICATIONS FOR ALUMINUM DOOR MAKE AND MODEL.

1. BASIS OF DESIGN FOR ALUMINUM DOORS: KAWNEER 350 HEAVY WALL DOOR
2. REFER TO DOOR SCHEDULE & GLAZING SCHEDULE FOR GLAZING INFORMATION

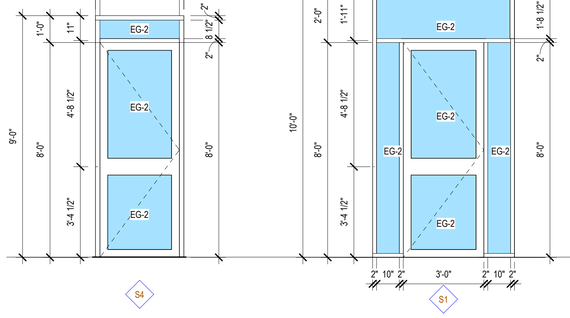
WOOD DOORS / METAL DOOR / ALUMINUM/GLASS DOORS



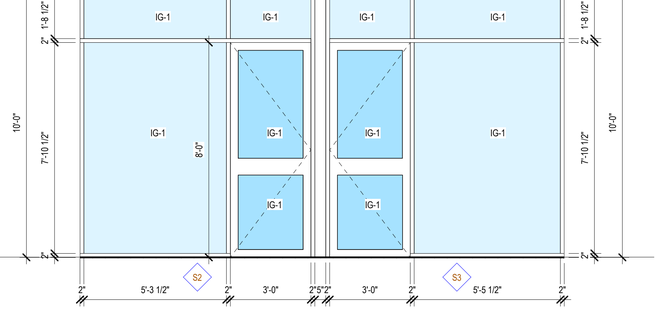
DOOR ELEVATIONS

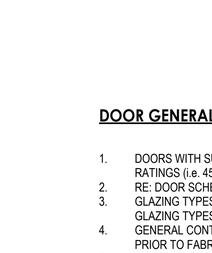
1/4" = 1'-0"

NEW EXTERIOR ALUMINUM STOREFRONTS

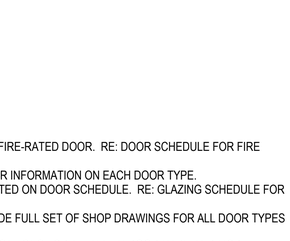


NEW INTERIOR ALUMINUM STOREFRONTS



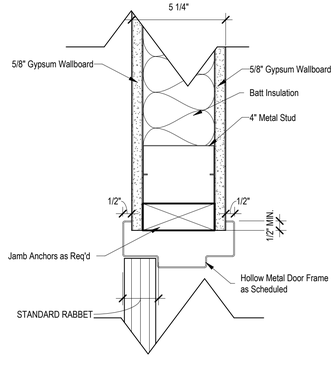


1 **Storefront Entrance - Head**
3" = 1'-0"

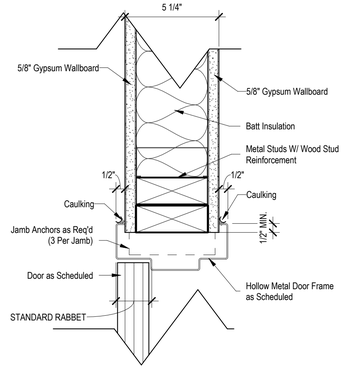


2 **Storefront Entrance - Bottom Rail**
3" = 1'-0"

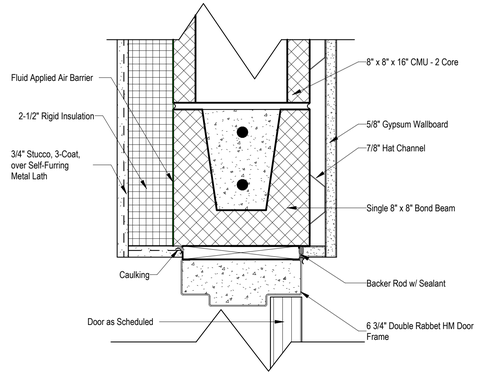
3 **Storefront Entrance - Jamb**
3" = 1'-0"



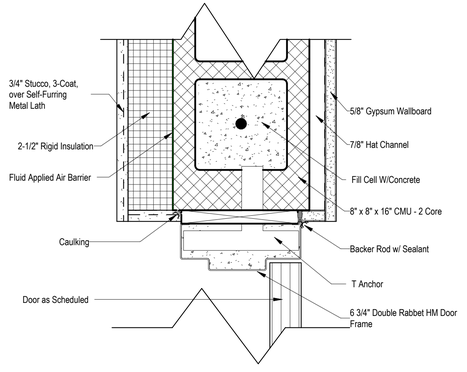
44 **Door Head - Interior - 4" Metal Stud Gyp**
3" = 1'-0"



5 **Door Jamb - Interior - 4" Metal Stud Wall**
3" = 1'-0"



6 **Door Head - Exterior - 8" CMU w/ Stucco Finish**
3" = 1'-0"



7 **Door Jamb - Exterior - 8" CMU w/ Stucco Finish**
3" = 1'-0"

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT ☆ GUILLERMO J. CAVAZOS, JR. ☆ 20150 ☆ STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

DOOR SCHEDULES, ELEVATIONS & DETAILS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-620

Scale: As indicated

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WINDOW SCHEDULE

Type Mark	Height	Width	Head Height	Sill Height	Frame Depth	Frame Thickness	Frame Material	Window Frame Finish	Glazing Type	Manufacturer	Model	Head	Jamb	Sill	Comments
W1	7' - 0"	2' - 9"	9' - 0"	2' - 0"	0' - 4 1/2"		Extruded Aluminum	Arch. Class I (.7 mils min.) Anodized	EG-2	Quaker Commercial	H450 Fixed Windows	6/R-301	4/R-301	5/R-301	
W2	9' - 0"	3' - 0"	9' - 0"	0' - 0"	0' - 4 1/2"		Extruded Aluminum	Arch. Class I (.7 mils min.) Anodized	EG-2	Quaker Commercial	H450 Fixed Windows	2/A-630	1/A-630	3/A-630	

GLAZING SCHEDULE

TYPE	DESCRIPTION
EG-2	1" THICK DOUBLE PANEL LOW-E INSULATED GLASS, TINTED, TEMPERED; RE: GLAZING SPECS
IG-1	1/4" CLEAR TEMPERED GLASS

WINDOW NOTES:

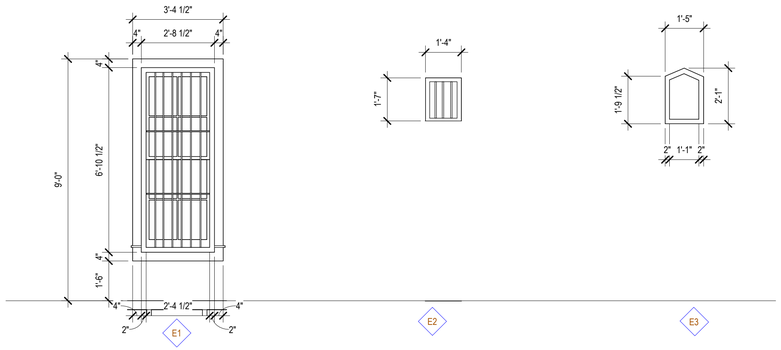
A. ALUMINUM WINDOW BASIS OF DESIGN: QUAKER FIXED WINDOWS: H450 DS SERIES OR ARCHITECT APPROVED EQUAL (RE: SPECS). COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURER FULL RANGE.

B. PROVIDE LEVOLOR FAUX WOOD BLINDS, OR AN ARCHITECT-APPROVED EQUAL, AT ALL WINDOWS & STOREFRONTS. COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF COLORS.

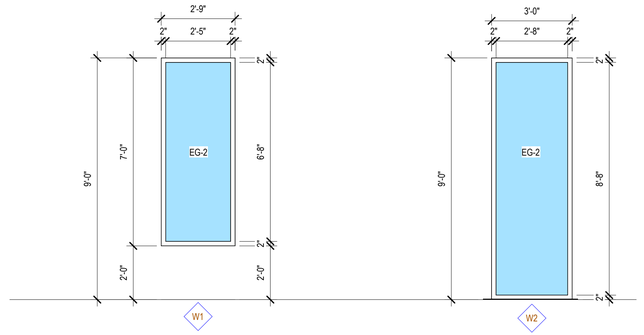
EXISTING WOOD WINDOW NOTE:

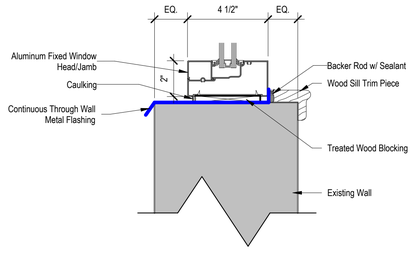
A. REPAIR ALL WOOD-FRAMED WINDOWS AND DOORS IN ACCORDANCE WITH HISTORIC REPAIR PROCEDURES. THIS INCLUDES SCRAPING LOOSE PAINT, FILLING SMALL AREAS OF DAMAGE, REPLACING PIECES THAT ARE SEVERELY DAMAGED, REMOVING AND REPLACING BROKEN GLASS LITES, AND CUTTING OUT AND REPLACING DEGRADED GLAZING PUTTY, THEN PRIMING AND PAINTING. PAINT ALL EXISTING WROUGHT IRON BURGLAR BARS TBD. RE: SPEC SECTION 08 59 00. PATCH & REPAIRED ALL DAMAGED HEAD, JAMB & SILL AS REQ.

EXISTING WOOD WINDOWS

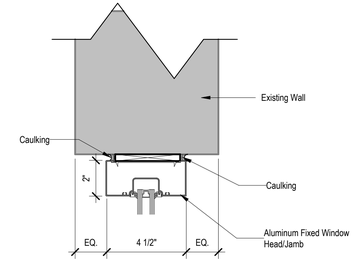


NEW ALUMINUM WINDOWS

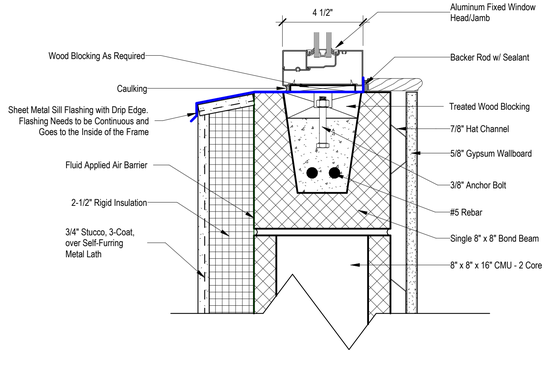




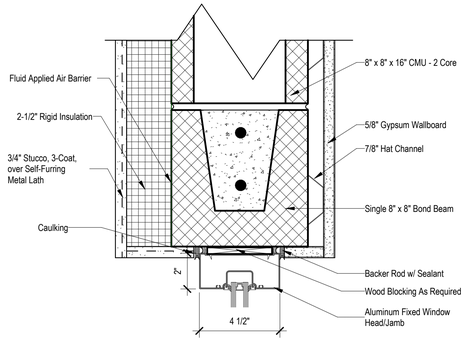
5 Window Sill - Exterior - Existing Wall
3" = 1'-0"



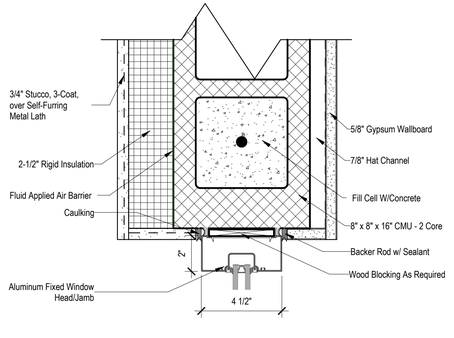
4 Window Head/Jamb - Exterior - Existing Wall
3" = 1'-0"



3 Window Sill - Exterior - 8" CMU w/ Stucco Finish
3" = 1'-0"



2 Window Head - Exterior - 8" CMU w/ Stucco Finish
3" = 1'-0"



1 Window Jamb - Exterior - 8" CMU w/ Stucco Finish
3" = 1'-0"

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT ☆ GUILLERMO J. CAVAZOS, JR. ☆ 20150 ☆ STATE OF TEXAS ☆

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

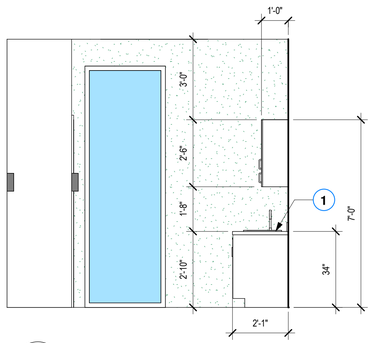
KEY PLAN

WINDOWS SCHEDULES, ELEVATIONS & DETAILS

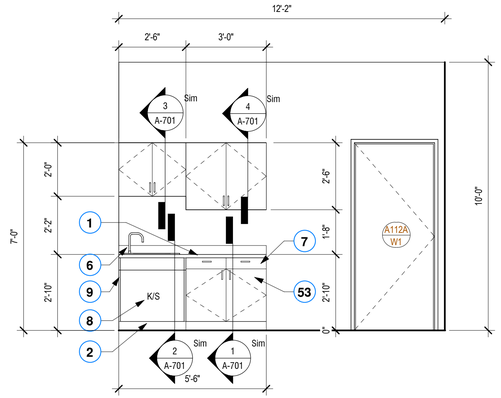
Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-630

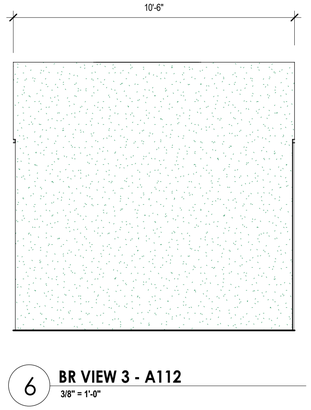
Scale: As indicated



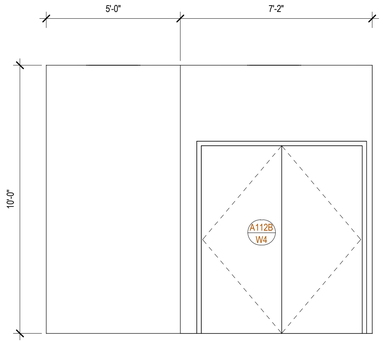
8 **BR VIEW 1 - A112**
3/8" = 1'-0"



7 **BR VIEW 2 - A112**
3/8" = 1'-0"



6 **BR VIEW 3 - A112**
3/8" = 1'-0"



5 **BR VIEW 4 - A112**
3/8" = 1'-0"

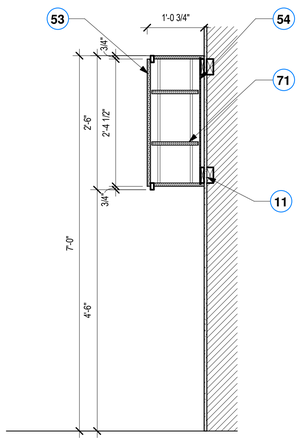
KEYNOTE LEGEND - MILLWORK

Number	Description
1	PLASTIC LAMINATE PREFORMED TOP W/SPLASH-RETURN
2	4" HIGH BASE - MATCH BASE IN ROOM
6	6" DEEP SINK; PLYWOOD SUBTOPS REQ'D AT SINK AREAS
7	PLASTIC LAMINATE-CLAD DRAWER FACE
8	PLASTIC LAMINATE-CLAD REMOVABLE ACCESS PANEL
9	PLASTIC LAMINATE-CLAD SUPPORTS
10	NAILER
11	PROVIDE BLOCKING AS REQ'D
51	CABINET BEYOND
53	3/4" PLASTIC LAMINATE-CLAD CABINET DOOR
54	1/4" PLYWOOD BACKING
71	3/4" PLYWOOD SHELVES W/KV 255 & 256 STANDARDS & RECESSED BRACKETS

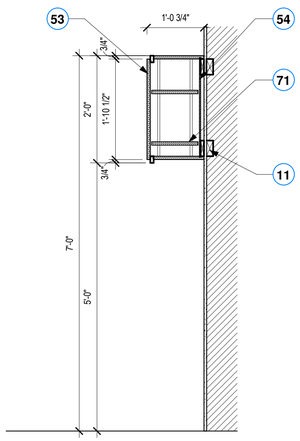
MILLWORK NOTES

A. PROVIDE PLASTIC LAMINATE AT ALL EXPOSED EDGES OF CABINETS, DRAWERS, SUPPORTS, AND EDGES.
B. REFER TO SPECS FOR MATERIALS REQUIRED AT ALL CABINET COMPONENTS (I.E., SUB-TOPS, FRONTS, SHELVES,ETC.).
C. ALL SHELVING TO BE GRADE A/C 3/4" PLYWOOD SHELVING, PLASTIC LAMINATE ON ALL EXPOSED EDGES, WITH 1/4" HARDBOARD BACKING VERTICALS TO BE EITHER 1 3/4" WITH EDGING PLYWOOD OR 2 3/4" PLYWOOD SHEETS, BACK TO BACK WITH A 1"x2" TRIM DEPENDING ON THE CONSTRUCTION METHOD PROPOSED. ALL ADJUSTABLE SHELVING STANDARDS SHALL BE RECESSED WITH STANDARDS THAT ARE BACK TO BACK ON ONE PLYWOOD SHEET TO BE ALTERNATELY LAPPED BY 1". SHELF STANDARDS ARE KV 255 & 256
D. ALL FIXED SHELVES SHALL BE A/C3/4" PLYWOOD WITH HARDWOOD EDGES, PLAM CLAD, WITH ALL HORIZONTAL AND VERTICAL SURFACES MEETING IN CLEAN WELL CRAFTED DADO JOINTS. GLUE AND/OR INVISIBLE TOE NAIL AT ALL SPLICES. RE: SPECS.
E. AT THE TOE SPACE OF ALL BASE CABINET UNITS, AS WELL AS FULL HEIGHT SHELVING UNITS. PROVIDE A FULL 4" TO ALLOW A 4" VINYL (RUBBER) BASE TO BE APPLIED. (A CONTINUOUS 1/2" PLYWOOD STRIP IN ADDITION TO THE 3 1/2" OF THE 2"x4" SHOULD SUFFICE).
F. REFER TO MILLWORK SPECS FOR DETAILED SPECIFICATIONS.
G. G.C. TO PROVIDE SHOP DRAWINGS FOR ARCHITECT'S APPROVAL.

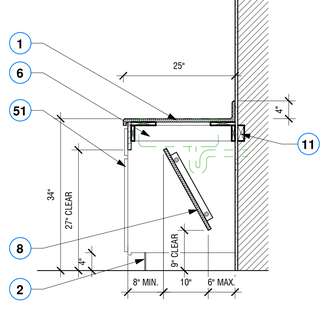
CABINET HARDWARE (FINISH)
CATCHES: MAGNETIC TYPE STANLEY SP46 US28 FINISH, 1 PER DOOR.
HINGES: 2 PER 3'-0" HGT. OF OPENING STANLEY 1592-1.
PULLS: HEAVY DUTY TYPE STANLEY #4484 US28 FINISH, 1 PER DOOR OR DRAWER.



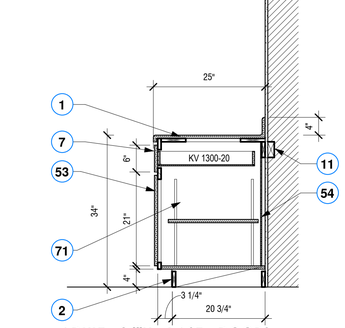
4 **ADULT - CABINET UPPER - 30"**
3/4" = 1'-0"



3 **ADULT - CABINET UPPER - 24"**
3/4" = 1'-0"



2 **ADULT - 34"H - BASE - SUNK W/ ADA K/S**
3/4" = 1'-0"



1 **ADULT - 34"H - BASE - DOORS W/DRAWER 24"D**
3/4" = 1'-0"

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CONSTRUCTION DOCUMENTS

REGISTERED ARCHITECT
GUILLERMO J. CAVAZOS, JR.
20150
STATE OF TEXAS

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

MILLWORK ELEVS & DETAILS

Drawn by:	JJMR
Checked by:	GJC JR
Project number:	23-15
Project Issue Date:	10/25/24

A-701

Scale: As indicated

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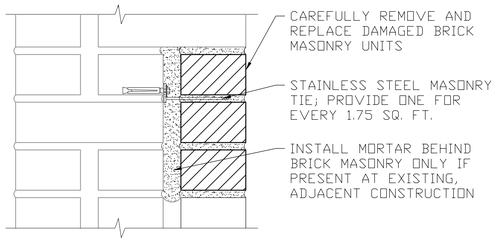
GENERAL NOTES:

1. PROFILES AND SIZES OF COMPONENTS ARE BASED ON VISUAL OBSERVATIONS AND SHOWN SCHEMATICALLY HEREIN. CONTRACTOR TO FIELD VERIFY GEOMETRIES OF ALL EXISTING, HISTORIC COMPONENTS PRIOR TO REMOVAL, SALVAGE, AND/OR REPLACEMENT. EVERY EFFORT SHOULD BE MADE TO SALVAGE AND REUSE HISTORIC MATERIALS.

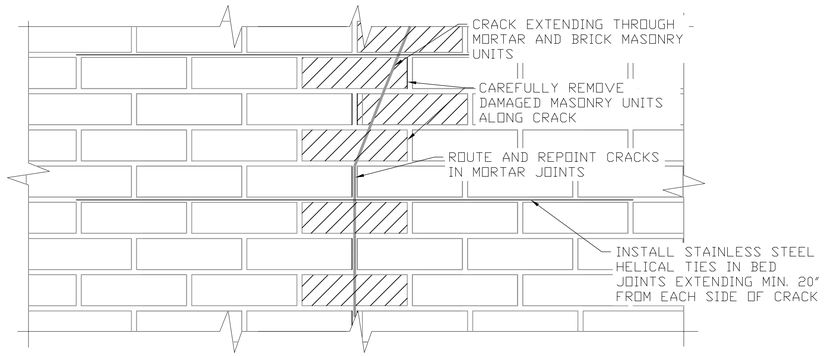
2. NOTIFY ARCHITECT/ ENGINEER FOR FURTHER DIRECTION IF DELETERIOUS CONDITIONS ARE ENCOUNTERED PRIOR TO REMOVING EXISTING MATERIALS.

3. PROJECT IS IN A NATIONAL REGISTER HISTORIC SITE. THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC BUILDINGS MUST BE FOLLOWED FOR ALL WORK ON HISTORIC MATERIALS TO REMAIN.

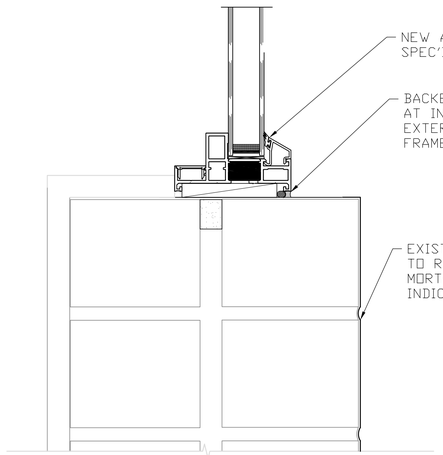
NOTE: REPLACEMENT OF 5% OF BRICK SHOULD BE ASSUMED FOR BID ALTERNATE. FOLLOW DETAILS PROVIDED FOR BOTH DISCRETE AND BID ALTERNATE REPAIRS.



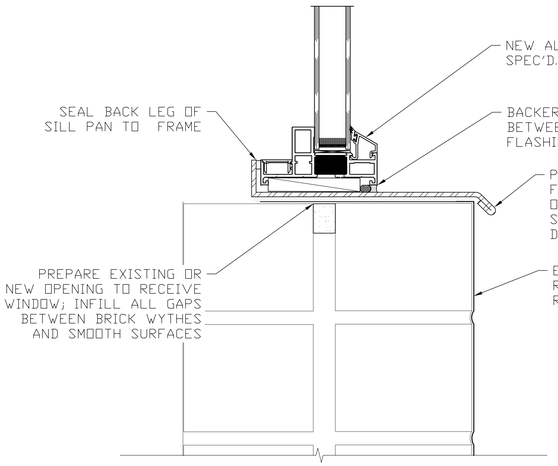
7 **MASONRY REPLACEMENT**
3" = 1'-0"



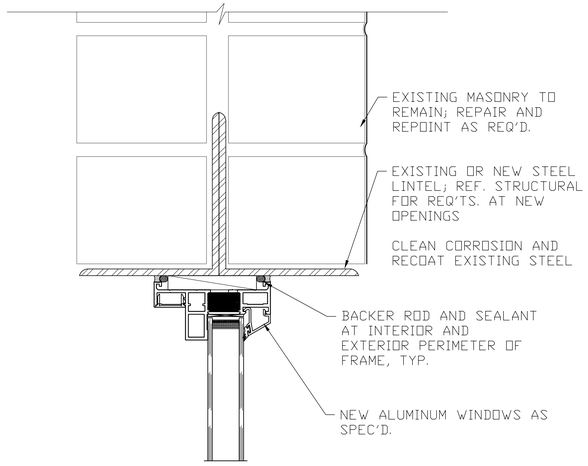
8 **MASONRY CRACK REPAIR**
NTS



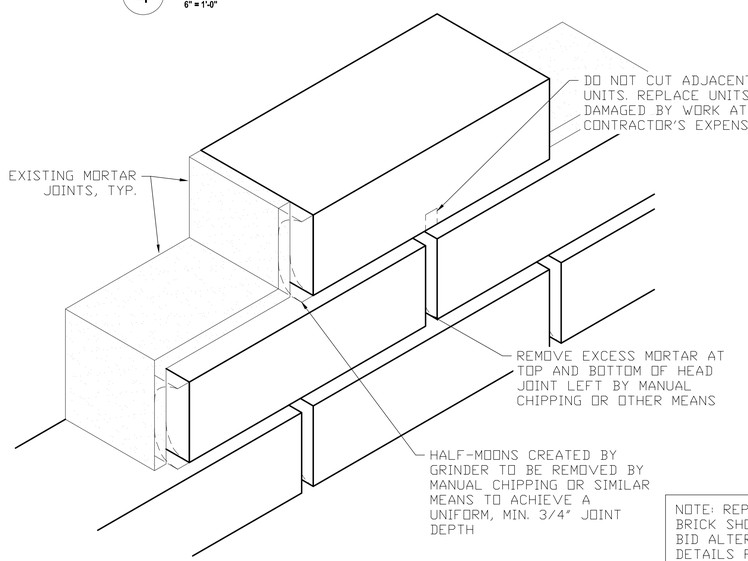
4 **NEW WINDOW IN MASONRY - JAMB**
6" = 1'-0"



5 **NEW WINDOW IN MASONRY - SILL**
6" = 1'-0"

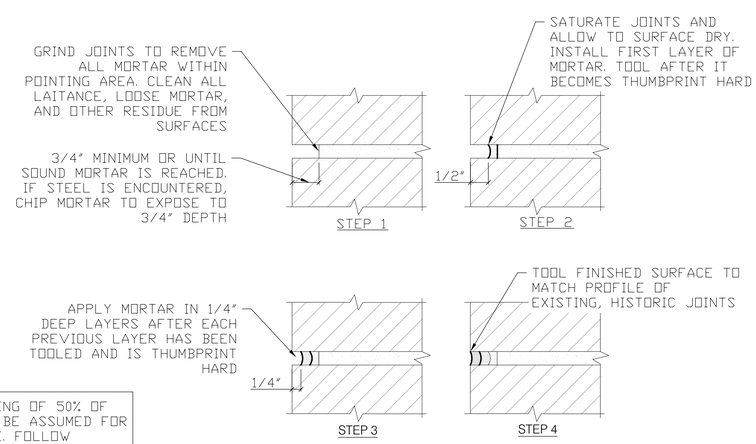


6 **NEW WINDOW IN MASONRY - HEAD**
6" = 1'-0"

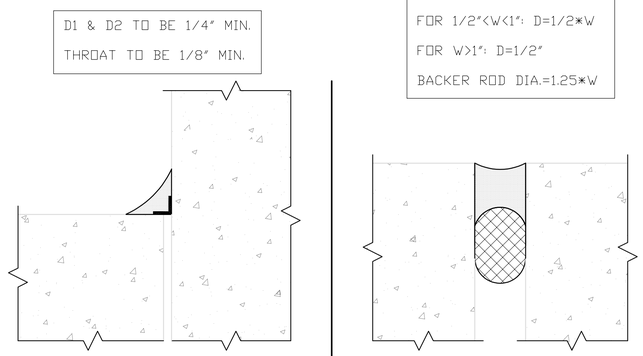


1 **MORTAR ROUTING**
NTS

NOTE: REPOINTING OF 50% OF BRICK SHOULD BE ASSUMED FOR BID ALTERNATE. FOLLOW DETAILS PROVIDED FOR BOTH DISCRETE AND BID ALTERNATE REPAIRS.



2 **MORTAR REPOINTING**
NTS



3 **SEALANT JOINT PROFILES**
NTS

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512.576.5347
www.actonpc.com

LC Veterans Center Renovations
Laredo College
West End Washington St., Laredo TX 78040

CD REVIEW SET

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ERIKA BONFANTI, PE
(Texas Registration No. 116824)
October 24, 2024

CD REVIEW SET

NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION

No.	Description	Date

KEY PLAN

MASONRY AND WINDOW DETAILS

Drawn by: AE
Checked by: EB
Project number: APC 2024.0185
Project Issue Date: 10-25-2024

R-301

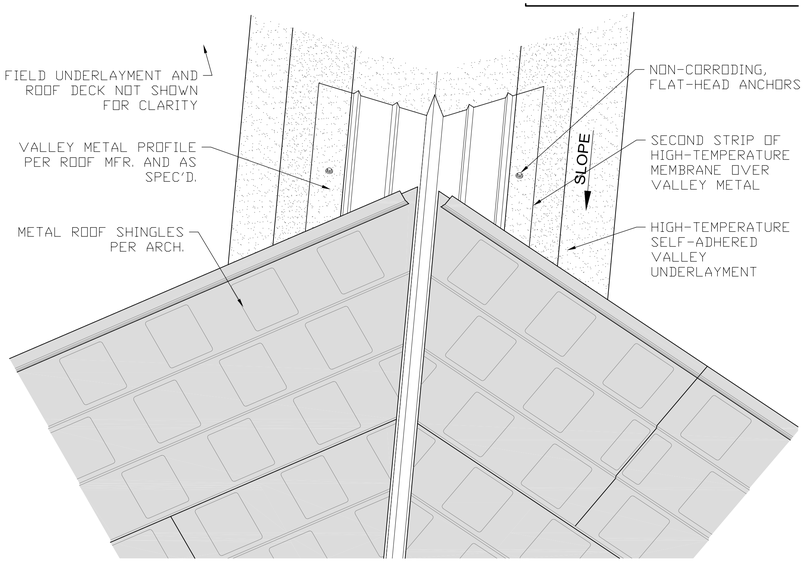
Scale: As indicated

GENERAL NOTES:

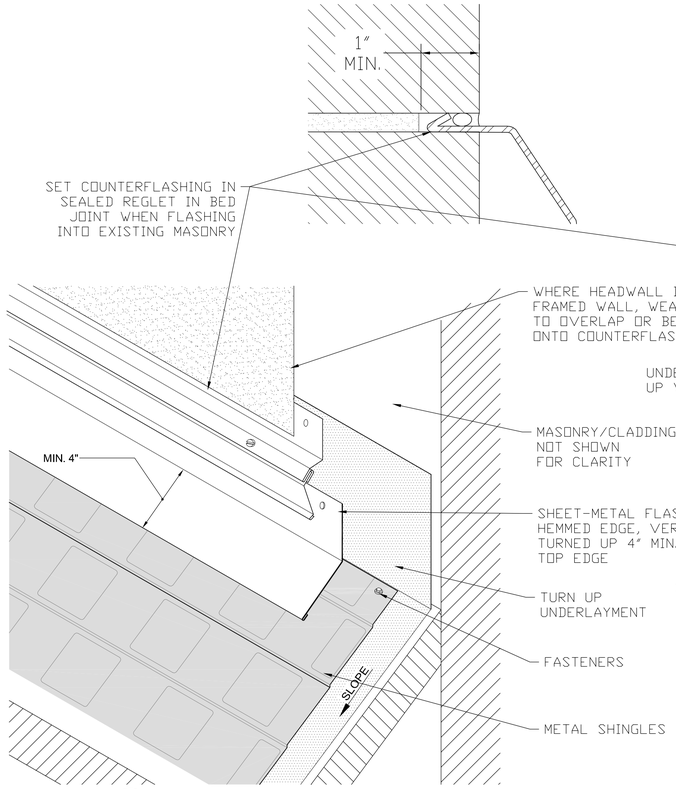
1. PROFILES AND SIZES OF COMPONENTS ARE BASED ON VISUAL OBSERVATIONS AND SHOWN SCHEMATICALLY HEREIN. CONTRACTOR TO FIELD VERIFY GEOMETRIES OF ALL EXISTING, HISTORIC COMPONENTS PRIOR TO REMOVAL, SALVAGE, AND/OR REPLACEMENT. EVERY EFFORT SHOULD BE MADE TO SALVAGE AND REUSE HISTORIC MATERIALS.

2. NOTIFY ARCHITECT/ ENGINEER FOR FURTHER DIRECTION IF DELETERIOUS CONDITIONS ARE ENCOUNTERED PRIOR TO REMOVING EXISTING MATERIALS.

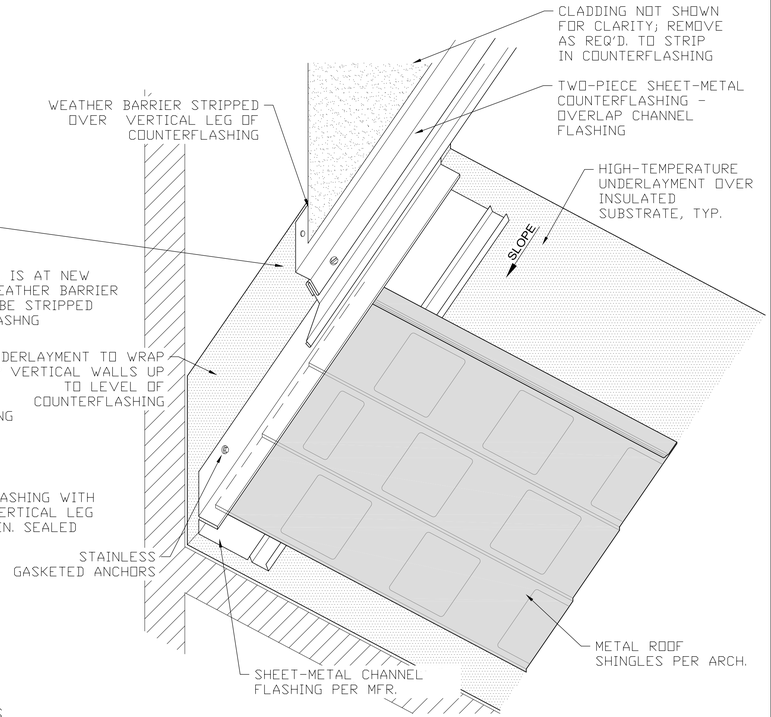
3. PROJECT IS IN A NATIONAL REGISTER HISTORIC SITE. THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC BUILDINGS MUST BE FOLLOWED FOR ALL WORK ON HISTORIC MATERIALS TO REMAIN.



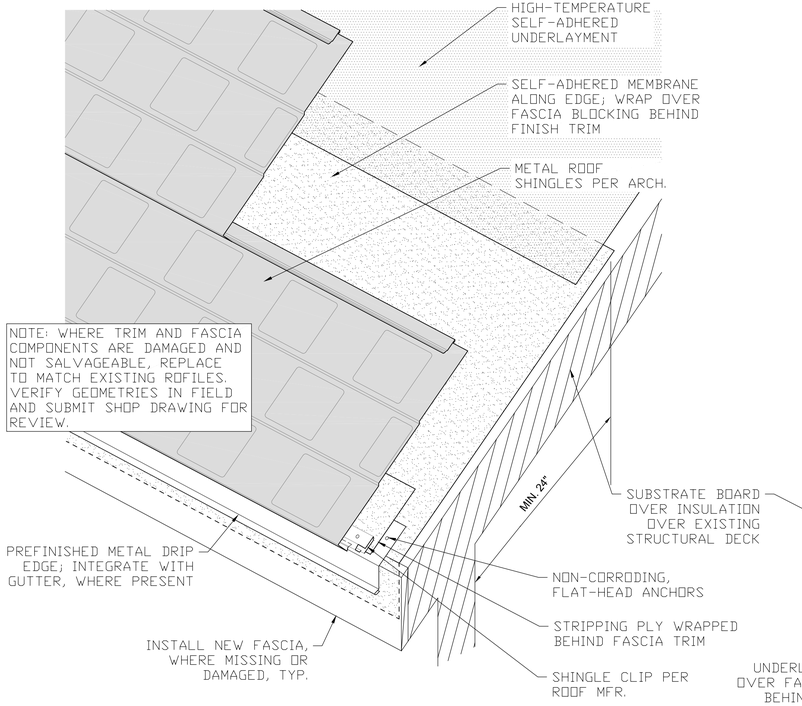
4 **METAL ROOF VALLEY**
NTS



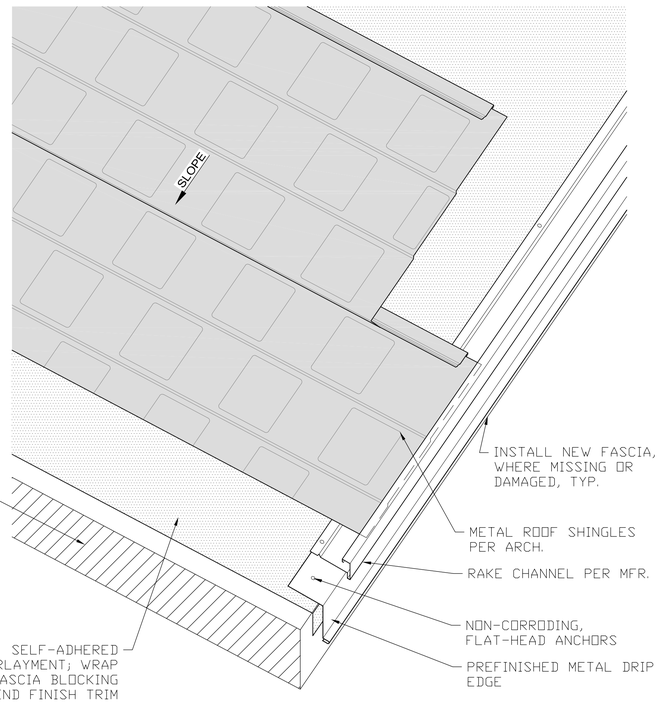
5 **HEADWALL FLASHING AT PORCH ROOF**
NTS



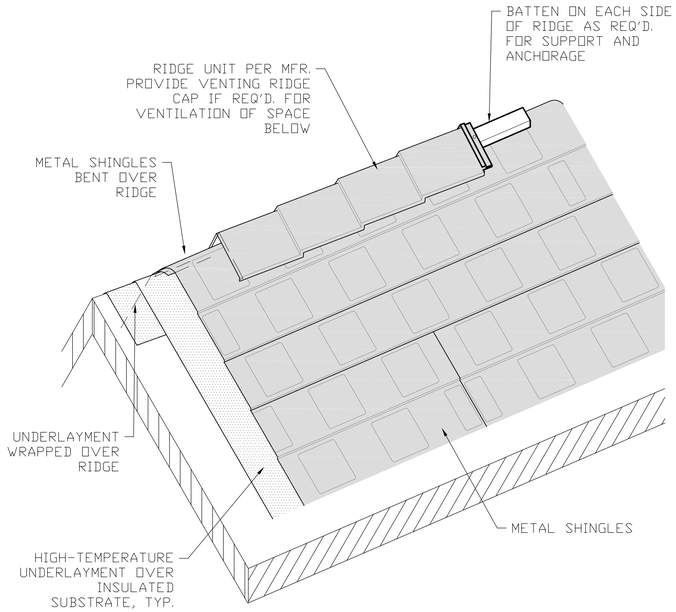
6 **SIDEWALL FLASHING AT DORMER**
NTS



1 **EAVE FLASHING**
NTS



2 **RAKE EDGE FLASHING**
NTS



3 **RIDGE FLASHING**
NTS

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October 24, 2024

CD REVIEW SET

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No.	Description	Date

KEY PLAN

ROOF DETAILS

Drawn by: AE
Checked by: EB
Project number: APC 2024.0185
Project Issue Date: 10-25-2024

R-302

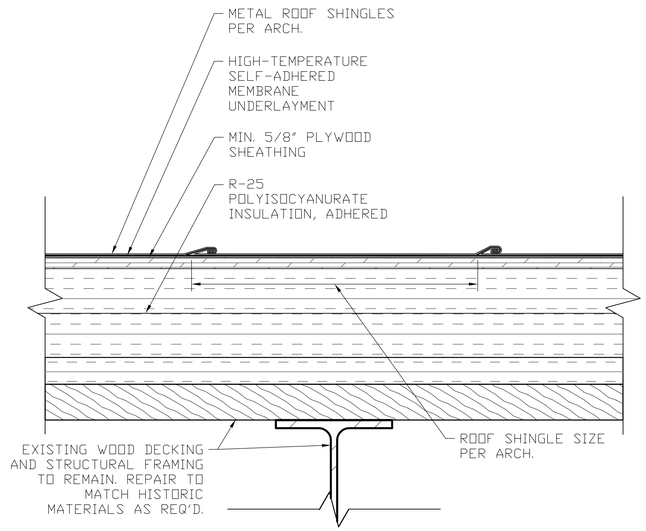
Scale: As indicated

GENERAL NOTES:

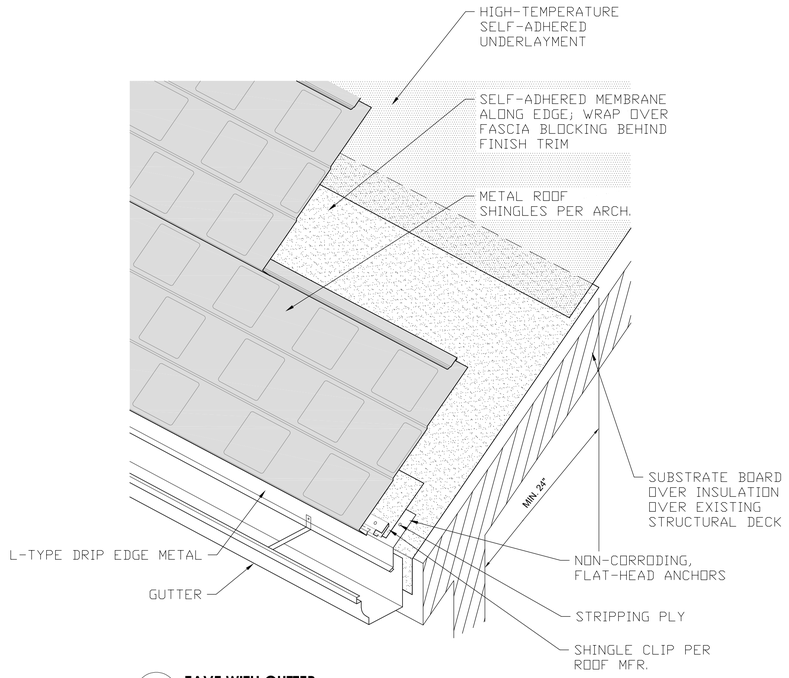
1. PROFILES AND SIZES OF COMPONENTS ARE BASED ON VISUAL OBSERVATIONS AND SHOWN SCHEMATICALLY HEREIN. CONTRACTOR TO FIELD VERIFY GEOMETRIES OF ALL EXISTING, HISTORIC COMPONENTS PRIOR TO REMOVAL, SALVAGE, AND/OR REPLACEMENT. EVERY EFFORT SHOULD BE MADE TO SALVAGE AND REUSE HISTORIC MATERIALS.

2. NOTIFY ARCHITECT/ ENGINEER FOR FURTHER DIRECTION IF DELETERIOUS CONDITIONS ARE ENCOUNTERED PRIOR TO REMOVING EXISTING MATERIALS.

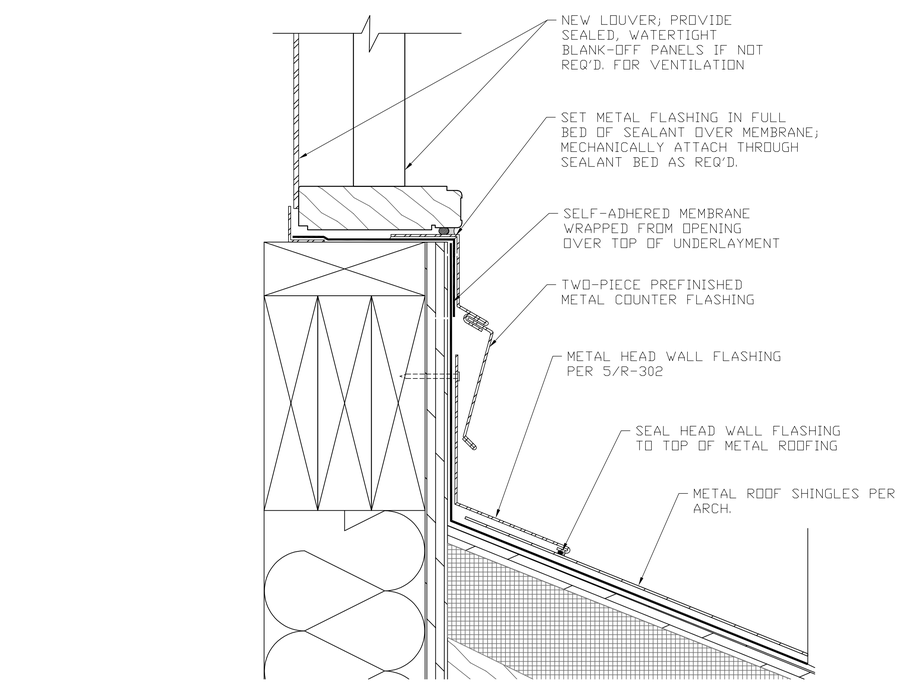
3. PROJECT IS IN A NATIONAL REGISTER HISTORIC SITE. THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC BUILDINGS MUST BE FOLLOWED FOR ALL WORK ON HISTORIC MATERIALS TO REMAIN.



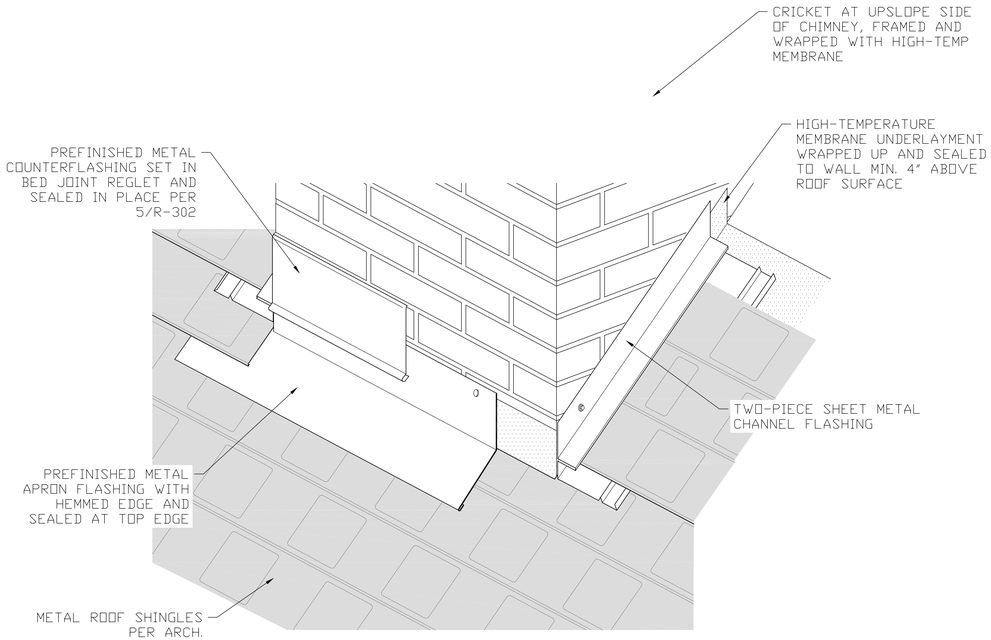
3 **METAL ROOF COMPOSITION**
3" = 1'-0"



4 **EAVE WITH GUTTER**
NTS



1 **FLASHING AT DORMER W/ FAUX LOUVER**
6" = 1'-0"



2 **APRON FLASHING AT CHIMNEY**
NTS

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No.	Description	Date

KEY PLAN

ROOF DETAILS

Drawn by: AE
Checked by: EB
Project number: APC 2024.0185
Project Issue Date: 10-25-2024

R-303

Scale: As indicated

L. SPECIAL INSPECTIONS

1. SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE 2018 INTERNATIONAL BUILDING CODE (IBC) BY A SPECIAL INSPECTOR HIRED BY THE OWNER TO PERFORM THE SPECIAL INSPECTIONS LISTED BELOW. THE SPECIAL INSPECTOR SHALL BE QUALIFIED BY AN APPROVED AGENCY ACCORDING TO THE CITY'S BUILDING OFFICIAL TO PERFORM THE SPECIAL INSPECTIONS FOR WHICH THEY WILL BE UNDERTAKING. THE CONTRACTOR SHALL COORDINATE WITH AND NOTIFY THE SPECIAL INSPECTOR OF ALL TESTS. THE SPECIAL INSPECTOR SHALL BE RESPONSIBLE TO VERIFY THAT THE ITEMS DETAILED IN THE CONSTRUCTION DOCUMENTS WERE BUILT ACCORDINGLY AND SHALL PREPARE, SIGN, AND FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND THE ARCHITECT FOR ALL TIME SPENT AT THE SITE. THE INSPECTOR SHALL BRING DISCREPANCIES TO THE IMMEDIATE ATTENTION OF THE GENERAL CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE ARCHITECT PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. THESE SPECIAL INSPECTIONS ARE IN ADDITION TO THE OTHER INSPECTIONS LISTED IN THESE STRUCTURAL NOTES OR PROJECT SPECIFICATIONS.
2. WHERE STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES ARE SHOP FABRICATED, THE SPECIAL INSPECTOR SHALL VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO THE CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS, UNLESS THE FABRICATOR IS REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION.

TABLE 1705.2.3
REQUIRED SPECIAL INSPECTIONS OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS

TYPE	INSPECTION FREQUENCY		REFERENCE STANDARD
	CONTINUOUS	PERIODIC	
1. INSTALLATION OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS			
A. END CONNECTIONS- WELDING OR BOLTED	--	X	SJI SPECIFICATIONS LISTED IN SECTION 2207.1
B. BRIDGING- HORIZONTAL OR DIAGONAL	--	--	
1. STANDAR BRIDGING	--	X	
2. BRIDGING THAT DIFFERS FROM SJI SPECIFICATIONS LISTED IN SECTION 2207.1	--	X	

TABLE 1705.3
REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	INSPECTION FREQUENCY		REFERENCED STANDARD	IBC REFERENCE
	CONTINUOUS	PERIODIC		
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	--	X	ACI 318: Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2. REINFORCING BAR WELDING: a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A 706; b. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND c. INSPECT ALL OTHER WELDS.	-- X	X X	AWS D1.4 ACI 318: 26.6.4	---
3. INSPECT ANCHORS CAST IN CONCRETE	--	X	ACI 318: 17.8.2	---
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a.	X	X	ACI 318: 17.8.2.4 ACI 318: 17.8.2	---
5. VERIFY USE OF REQUIRED DESIGN MIX.	--	X	ACI 318: Ch 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	--	ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	--	ACI 318: 26.5	1908.6. 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	--	X	ACI 318: 26.5.3-26.5.5	1908.9
9. INSPECT PRESTRESSED CONCRETE FOR: a. APPLICATION OF PRESTRESSING FORCES; AND b. GROUTING OF BONDED PRESTRESSING TENDONS.	X X	-- --	ACI 318: 26.10	---
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	--	X	ACI 318: 26.9	---
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	--	X	ACI 318: 26.11.2	---
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	--	X	ACI 318: 26.11.1.2(b)	---

TABLE 1705.6
REQUIRED SPECIAL INSPECTION AND TESTS OF SOILS

TYPE	INSPECTION FREQUENCY	
	CONTINUOUS	PERIODIC
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	--	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	--	X
3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.	--	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	--
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	--	X

TABLE 1705.7
REQUIRED SPECIAL INSPECTION AND TESTS OF DRIVEN DEEP FOUNDATION ELEMENTS

TYPE	INSPECTION FREQUENCY	
	CONTINUOUS	PERIODIC
1. VERIFY ELEMENT MATERIALS, SIZES AND LENGTH COMPLY WITH REQUIREMENTS.	X	--
2. DETERMINE CAPACITIES OF TESTS ELEMENTS AND CONDUCT ADDITIONAL LOAD TEST, AS REQUIRED.	X	--
3. INSPECT DRIVING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	X	--
4. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM TYPE AND SIZE OF HAMMER, RECORD NUMBER OF BLOWS PER FOOT OF PENETRATION, DETERMINE REQUIRED PENETRATIONS TO ACHIEVE DESIGN CAPACITY, RECORD TIP AND BUT ELEVATIONS AND DOCUMENT ANY DAMAGE TO FOUNDATION ELEMENT.	X	--
5. FOR STEEL ELEMENTS, PERFORM ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1705.2.	--	--
6. FOR CONCRETE ELEMENTS AND CONCRETE-FILLED ELEMENTS, PERFORM TEST AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1705.3.	--	--
7. FOR SPECIALTY ELEMENTS, PERFORM ADDITIONAL INSPECTIONS AS DETERMINED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.	--	--

TABLE 1705.8
REQUIRED SPECIAL INSPECTION AND TESTS OF CAST-IN-PLACE DEEP FOUNDATION ELEMENTS

TYPE	INSPECTION FREQUENCY	
	CONTINUOUS	PERIODIC
1. INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	X	--
2. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	X	--
3. FOR CONCRETE ELEMENTS, PERFORM TESTS AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1705.3.	--	--

25. SPECIAL PROVISIONS FOR WOOD STUD SHEAR WALLS WITH PLYWOOD ON BOTH SIDES:
   A. SILL PLATE SHALL BE 3 X 6 P.T. D.F.
   B. ALL STUDS AND BLOCKING AT PANEL EDGES SHALL BE 4 X 6.
   C. ALL OTHER INTERMEDIATE STUDS SHALL BE 3 X 6 @ 16"
   D. END POSTS (OR COLUMNS) SHALL BE AS SPECIFIED ON THE DRAWINGS.
   E. BOTH VERTICAL AND HORIZONTAL INTERIOR PANEL JOINTS ON OPPOSITE SIDES OF THE WALL SHALL BE STAGGERED.
   F. THE PLYWOOD ON ONE SIDE MUST BE NAILED BEFORE THE FRAME INSPECTION. THE PLYWOOD ON THE OTHER SIDE MUST BE INSTALLED AND INSPECTED PRIOR TO INSTALLATION OF WALL SURFACE COVERING.
   G. NO PENETRATIONS OR NOTCHES ARE PERMITTED OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS.
26. PROVIDE DOUBLE STUD TO SUPPORT ALL BEAMS UNLESS POSTS ARE SPECIFIED.
27. DOUBLE BLOCK UNDER ALL POSTS.
28. DOUBLE JOIST UNDER ALL PARALLEL PARTITIONS UNLESS OTHERWISE SPECIFIED.
29. TOP PLATES OF ALL WOOD STUD WALLS SHALL BE 2-2X (SAME WIDTH AS STUDS), LAP 48" (MIN.), WITH AT LEAST 16-16d NAILS AT EACH SIDE OF LAP AND NOT MORE THAN 12" BETWEEN. 2x TOP PLATES ON CURVED STUD WALLS TO BE 8'-0" LONG PIECES (MIN.), CUT FROM 2x DEPTH AS REQUIRED BASED ON CURVATURE.
30. CUTTING, NOTCHING, OR DRILLING OF BEAMS OR JOISTS SHALL BE PERMITTED ONLY AS DETAILED OR APPROVED BY THE ENGINEER AND/OR PER SBCCI
31. MOISTURE CONTENT OF WOOD AT TIME OF PLACEMENT SHALL NOT EXCEED 19%.

J. SUBMITTALS

1. SHOP DRAWINGS
   A. THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER REVIEW SHOP DRAWING FOR THE FOLLOWING ITEMS:
      1. CONCRETE MIX DESIGNS
      2. REINFORCING STEEL
      3. STRUCTURAL STEEL
      4. MISCELLANEOUS STEEL
      5. STEEL DECK
      6. BAR JOISTS
      7. GUARD RAILS AND HAND RAILS (*)
      8. STEEL STAIRS (*)
      9. TILT WALL (LIFTING/BRACING/ERECTION) (*,#)
      10. LIGHT-GAGE STEEL (*,#)
      11. CONCRETE MASONRY PRODUCT DATA
      12. CURTAIN WALL (*,#)
      13. ALUMINUM CANOPIES (*,#)
      14. FORM WORK (*,#)
      15. GRATING
      16. FIRE SPRINKLER SYSTEM (#)

      ITEMS MARKED (*) SHALL HAVE SHOP DRAWING SEALED BY A REGISTERED ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED. ITEMS MARKED (#) SHALL BE SUBMITTED TO ENGINEER FOR OWNER'S RECORD ONLY AND WILL NOT HAVE ENGINEER'S SHOP DRAWING STAMP.
   B. ALL SHOP DRAWINGS MUST BE REVIEWED AND SEALED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL.
   C. THE OMISSION FROM THE SHOP DRAWING OF ANY MATERIAL REQUIERES BY THE CONTRACTOR DOCUMENTS TO BE FURNISHED SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF FURNISHING AND INSTALLING SUCH MATERIALS, REGARDLESS OF WHETHER THE SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED.
2. MANUFACTURER'S LITERATURE
   A. SUBMIT MANUFACTURER'S LITERATURE FOR ALL MATERIALS AND PRODUCTS USED IN CONSTRUCTION ON THE PROJECT.
3. REPRODUCTION
   A. THE USE OF REPRODUCTIONS OF THESE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OF MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES HIS ACCEPTANCE OF ALL INFORMATION SHOWN HEREIN AS CORRECT, AND OBLIGATES HIMSELF TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERROR THAT MAY OCCUR HEREON.

K. SITE OBSERVATION BY STRUCTURAL ENGINEER

1. GENERAL
   A. THE CONTRACTOR STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, AND PROCEDURES, TECHNIQUES, AND SEQUENCE.

   B. THE ENGINEER SHALL NOT HAVE CONTROL OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSON PERFORMING ANY OF THE WORKS, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

   C. PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES ARE SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR.

H. PREFABRICATED WOOD TRUSSES

1. STRUCTURAL DESIGN, DIMENSIONS, TRUSS CONFIGURATION AND QUANTITY IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER. VERIFY PLAN DIMENSIONS, ROOF PITCHES AND CEILING PROFILES WITH ARCHITECTURAL PLANS.
2. ROOF TRUSS PROFILES ARE SHOWN FOR FRAMING INTENT TO TRANSFER TRUSS LOADS TO BEARING POINTS ONLY.
3. TRUSSES TO BE DESIGNED FOR THE FOLLOWING LOADS:

   ROOF:
   LIVE LOAD — 20 PSF (REDUCIBLE)
   DEAD LOAD- TOP CHORD — 10 PSF
   - BOTTOM CHORD — 10 PSF

4. DESIGN OF PLATE CONNECTED TRUSSES SHALL CONFORM TO THE LATEST EDITIONS OF NATIONAL DESIGN STANDARDS (NDS), TRUSS PLATE INSTITUTE CRITERIA (TPI), AND INTERNATIONAL BUILDING CODE 2018. STEEL GUSSET PLATES SHALL BE A MINIMUM 20 GAGE, ASTM-A-446 GRADE A, APPROVED BY ICBO.
5. MAXIMUM MOISTURE CONTENT AT TIME OF FRABRICATION SHALL BE 19% MAX.
6. TRUSS DESIGN AND LAYOUT SHALL BE SEALED BY A PROFESSIONAL ENGINEER LICENSE IN THE STATE OF TEXAS AND SUBMITTED TO ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION.
7. TRUSS FABRICATION SHALL COMPLY WITH TPI QUALITY CONTROL STANDARDS (QCM-LATEST EDITION). TRUSS PLANT SHALL BE INSPECTED BY THIRD PARTY CERTIFIED AGENCY.
8. THE TRUSSES SHALL BE ERECTED, BRACED AND BLOCKED IN ACCORDANCE WITH COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLING AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES (HIB-91) BY TPI.
9. ALL TRUSSES, UNLESS NOTED OTHERWISE, SHALL BE CONNECTED TO BEARING PLATE WITH SIMPSON H1 OR H2.5A TIES OR REVIEWED EQUIVALENT.
10. UNLESS NOTED OTHERWISE, ATTACH TOP OF NON-BEARING WALLS TO TRUSS BOTTOM CHORD WITH SIMPSON STC CLIPS OR REVIEWED EQUIVALENT.
11. IF TRUSS-BEARING CONDITIONS VARY FROM THOSE INDICATED ON PLANS, NOTIFY ARCHITEC/ENGINEER PRIOR TO CONSTRUCTION OF FOUNDATION SO REVISIONS TO THE FOUNDATION CAN BE MADE.
12. ROOF TRUSS BRACING: PROVIDE PERMANENT 2x4 LATERAL "X" BRACING IN THE PLANE OF THE WEBS AND FRAME AT A 45 DEG. ANGLE. ALL CONNECTIONS SHALL BE MADE WITH A MINUMUM OF (2) 16d NAILS. THE "X" BRACING SHALL BE ALIGN WITH THE BOTTOM CHORD LATERAL BRACING AND OCCUR AT EACH END OF THE BUILDING END AT 20' INTERVALS.
13. FLOOR TRUSS BRACING: PROVIDE 2x4 CONTINUOUS STRONGBACK AND "X" BRACING AS REQUIRED BY TRUSS DESIGN.

I.WOOD NOTES

1. SAWN WOOD MEMBERS SHALL BE SOUTHERN PINE, S4S, AND SHALL BE GRADE MARKED BY A RECOGNIZED GRADING AGENCY, REFER TO PROJECT BOOK SPECIFICATIONS DIVISION 6 FOR MORE INFORMATION.
2. WOOD GRADES, U.N.O., SHALL BE AS FOLLOWS:

MEMBERS	GRADE
WALLS 2X4 (8'-0")	CONSTRUCTION
WALLS 2X4 (8'-1" TO 14'-0")	#1
WALLS 2X6	#2
STRUCTURAL JOISTS & RAFTERS	#2
BEAMS AND STRINGERS	#1
POSTS AND TIMBERS	#1
TOP PLATE	#1

3. ALL SILLS OR PLATES BEARING ON CONCRETE SHALL BE PRESSURE TREATED SOUTHERN PINE (P.T.D.F.).
4. ALL SILLS OR PLATES BEARING ON CONCRETE SHALL HAVE ANCHOR BOLTS. U.O.N.
   A. PLACED 9 INCHES FROM EACH END (OR FROM A NOTCH)
   B. SPACED AS SHOWN ON THE DRAWINGS (BETWEEN BOLTS NOTED IN A.).
5. PLYWOOD SHALL CONFORM TO THE REQUIREMENTS OF THE U.S. PRODUCT STANDARD PS1-83, APA PERFORMANCE STANDARDS, AND UBC STANDARD 25-9, AND SHALL BE OF THE FOLLOWING GRADES AND PANEL IDENTIFICATION INDEXES (U.N.O. ON DRAWING):
   ROOF SHEATHING — STRUCTURAL 1 — 24/16
   SHEAR PANELS — STRUCTURAL 1 — 24/0
6. GLUED LAMINATED TIMBERS SHALL BE FABRICATED IN ACCORDANCE WITH ANSI/AITC A190.1-1983 "STRUCTURAL GLUED LAMINATED TIMBER". USING SOUTHERN PINE PANEL GRADE IDENTIFICATION INDEX I INDUSTRIAL APPEARANCE (U.N.O. PER PLAN AS ARCHITECTURAL GRADE) GRADE WOOD AND EXTERIOR GLUE WITH INTENDED DRY USE CONDITION PER SECT. 2511(c), UBC, COMBINATIONS AND USE SHALL BE AS FOLLOWS:
   COMBINATION No. — USE
   24F-V5 — TYPICAL
7. GLUED LAMINATED TIMBERS SHALL BE MARKED WITH A QUALITY MARK AND IN ADDITION, A CERTIFICATE OF CONFORMANCE SHALL BE PROVIDED TO INDICATE CONFORMANCE WITH ANSI/AITC A190.1-1983, "STRUCTURAL GLUED LAMINATED TIMBER".

8. LAMINATED VENNER LUMBER:
   USE LOUSIANA PACIFIC GANG-LAM S LAMINATED VENEER LUMBER (LVL) 2950 Fb-2.0E SOUTHERN PINE

9. FRAMING ANCHORS, POST CAPS, COLUMN BASES, AND OTHER CONNECTORS SPECIFIED ON DRAWINGS SHALL BE AS MANUFACTURED BY "SIMPSON COMPANY" OR AN ENGINEER-APPROVED EQUAL.
10. BARS, PLATES, UNTHREADED BOLTS, WASHERS AND DRIFT BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 36.
11. BOLTS SHALL BE CONFORM TO ASTM A 307.
12. NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 563, GRADE A.
13. ALL BOLT HEADS, NUTS AND LAG SCREWS BEARING ON WOOD SHALL HAVE CUT WASHERS UNLESS NOTED.
14. BOLT HOLES IN WOOD SHALL BE DRILLED 1/32" LARGER THAN THE NOMINAL BOLT DIAMETER.
15. NAILING OF SAWN WOOD MEMBERS, U.N.O. ON THE DRAWINGS, SHALL CONFORM TO THE SBCCI AND THE FOLLOWING

CONNECTION	NAILING*	
JOIST TO SILL OR GIRDER	TOENAIL	2-10d
BLKG. BETWEEN JSTS. TO TOP PL	TOENAIL	3-8d
BLKG. BETWEEN STUDS, EA END	TOENAIL OR FACE NAIL	2-10d, 2-16d
BRIDGING TO JOIST	TOENAIL EA. END	2-10d
2" T & G TO JST. OR GIRDER	BLIND & FACE NAIL	2-16d
SOLE PLATE TO JOIST OR BLKG.	FACE NAIL	16d @ 16"
TOP PLATE TO STUD	END NAIL	2-16d
STUD TO SOLE PLATE	TOENAIL OR END NAIL	4-8d 2-16d
DOUBLE STUDS	FACE NAIL	16d @ 24"
DOUBLE TOP PLATES	FACE NAIL	16d @ 16"
TOP PLATE INTERSECTIONS	FACE NAIL	2-16d
CONT.HEADER,TWOPIECES	FACENAILSEA.EDGE	16d @ 16"
CEILING JOIST TO PLATE	TOENAIL	3-8d
CONTINUOUS HEADER TO STUD	TOENAIL	4-8d
CLG. JSTS., LAPS OVER PARTITONS	FACE NAIL	3-16d
CLG. JSTS. TO PARALLEL RAFTERS	FACE NAIL	3-16d
RAFTER TO PLATE	TOENAIL	3-8d
1" BRACE TO EACH STUD & PLATE	FACE NAIL	2-8d
BUILT-UP CORNER STUDS	FACE NAIL	16d @ 24"
BUILT-UP GIRDERS & BEAMS	STGRD. ALONG EA. EDGE AT ENDS & EA. SPLICE	20d @ 32" 2-20d

   *WHENEVER POSSIBLE NAILS DRIVEN PERPENDICULAR TO THE GRAIN SHALL BE USED INSTEAD OF TOENAILS.
17. USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOBSITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER AND THE BUILDING OFFICIAL. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD. IF NAILHEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.
18. NAILS UNLESS NOTED OTHERWISE SHALL BE COMMON NAILS. (NOT BOX NAILS)
19. SPECIAL CONNECTORS FOR CONNECTING WOOD OR GLUED LAMINATED TIMBER SHALL BE FABRICATED FROM STEEL CONFORMING TO ASTM A36. WELDS SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.1-85.
20. DIAPHRAGM NAILING SPACING SHALL CONFORM TO THE PLANS WITH NOMENCLATURE DEFINED AS FOLLOWS:
   BN= NAILING AT DIAPHRAGM BOUNDARIES, CONTINUOUS PANEL EDGES, AND AT EDGES OF OPENING.
   EN =EDGE NAILING
   FN =FIELD NAILING
21. WHERE THE DIAPHRAGM BLOCKING IS SPECIFIED, USE 2x4 FLAT BLOCKING (WITH "Z" CLIPS). U.O.N.
22. SIMPLE SPAN WOOD MEMBERS, NOT SHOP CHAMBERED, SHALL BE ERECTED WITH THE NATURAL CAMPER UP. FOR CANTILEVERED WOOD MEMBERS, CONSULT WITH ENGINEER.
23. LEAD HOLES FOR LAG SCREWS IN WOOD SHALL BE BORED AS FOLLOWS:
   FOR SHANK: SAME DIAMETER AND LENGTH AS UNTHREADED SHANK.
   FOR THREADED PORTION: 60% TO 75% OF SHANK DIAMETER & LENGTH EQUAL TO THE THREADED PORTION.
24. ALL NAILS LARGER THAN 16d AND ALL NAILING TENDING TO CAUSE SPLITTING OF WOOD MEMBERS, SHALL BE INSTALLED IN PREDRILLED HOLES.

REINFORCEMENT TENSION LAPS AND EMBEDMENT
(fy=60,000 PSI f'c=3,000 PSI)

BAR SIZE	BAR DIA. (IN)	EMBEDMENT AND CLASS A LAP (IN)				CLASS B LAP (IN)			
		TOP BAR		OTHER BARS		TOP BAR		OTHER BARS	
		CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2
#3	3/8	22	32	14	25	28	42	22	32
#4	1/2	29	43	22	33	37	56	29	43
#5	5/8	36	54	28	41	47	74	36	54
#6	3/4	43	64	33	50	56	84	43	64
#7	7/8	63	94	48	72	81	122	63	94
#8	1	72	107	55	82	93	134	72	107
#9	1-1/8	81	121	62	93	105	157	81	121
#10	1-1/4	91	136	70	105	118	177	91	136
#11	1-3/8	101	151	78	116	131	196	101	151

NOTES:
1. TABLE REPRESENTS LENGTHS OF TENSION DEVELOPMENT LENGTHS AND TENSION LAP SPLICES LENGTHS BASED ON AC1 318-08 SECTION 12.2.2.
2. CLASS A LAP LENGTHS APPLY WHEN BARS LAPS ARE STAGGERED TO LAP HALF THE BARS AT THE SAME LOCATION OR WHEN BARS ARE LAPPED AT A LOCATION WHERE THE REINFORCEMENT AREA PROVIDED IS AT LEAST TWICE THAT REQUIRED.
3. CLASS B LAP LENGTHS APPLY WHEN ALL BARS ARE SPLICED AT A LOCATION OF MAXIMUM STRESS IN THE BARS.
4. CASE 1 LENGTHS APPLY TO BEAMS AND COLUMNS WITH CONCRETE COVER EQUAL OR GREATER THAN THE BAR DIAMETER, CLEAR BAR SPACING EQUAL OR GREATER THAN THE BAR DIAMETER AND WITH STIRRUPS OR TIES NOT LESS THAN THE CODE MINIMUM THROUGHOUT THE LENGTH IN THE TABLE, AND FOR OTHER ELEMENTS WITH CONCRETE COVER EQUAL OR GREATER THAN THE BAR DIAMETER AND CLEAR SPACING EQUAL OR GREATER THAN TWO TIMES THE BAR DIAMETER.
5. CASE 2 LENGTHS APPLY TO BEAMS AND COLUMNS WITH CONCRETE COVER LESS THAN THE BAR DIAMETER, AND CLEAR BAR SPACING LESS THAN THE BAR DIAMETER, AND FOR OTHER ELEMENTS WITH CONCRETE COVER LESS THAN THE BAR DIAMETER AND CLEAR BAR SPACING LESS THAN TWO TIMES THE BAR DIAMETER.
6. TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12 INCHES OF CONCRETE IS CAST BELOW THE REINFORCEMENT.
7. MULTIPLY LENGTHS SHOWN BY 0.87 FOR 4000 PSI CONCRETE.
8. MULTIPLY LENGTHS SHOWN BY 1.3 FOR LIGHTWEIGHT AGGREGATE CONCRETE.
9. MULTIPLY LENGTHS SHOWN BY 1.3 FOR EPOXY-COATED BARS.

E. MASONRY

1. MATERIALS:
   A. CONCRETE BLOCK: LIGHTWEIGHT ASTM C90 (HOLLOW) ASTM C145 (SOLID) f'm=1,900 PSI
   B. MORTAR: ASTM C270 TYPE S, MINIMUM COMPRESSIVE STRENGTH: 1,800 PSI (PROPERTY SPECIFICATIONS) MORTAR TITE AS MANUFACTURED BY ADDIMENT.
   C. BOND BEAM AND CORE FILL: ASTM C476, COARSE TYPE f'c=2,000 PSI
   D. JOINT REINFORCING: MILL GALVANIZED FINISH, 9 GAGE MINIMUM SIDE WIRES AND CROSS WIRES (LADUR TYPE) (DUR-O-WALL).
   E. BAR REINFORCING: ASTM A615, GRADE 60 (UNLESS NOTED OTHERWISE).
2. REINFORCED MASONRY, WHERE VERTICAL BARS ARE TO BE GROUTED INTO CORES, THE FOLLOWING REQUIREMENTS APPLY:
   A. PROVIDE DOWELS FROM WALL, SAME SIZE AND SPACING AS WALL BARS. LAP 48 DIAMETERS MINIMUM WITH WALL BAR.
   B. PROVIDE A CONTINUOUS VERTICAL CAVITY, AT LEAST 2" X 3" IN SIZE, FREE OF MORTAR DROPPINGS.
   C. PROVIDE REBAR ALIGNMENT DEVICES AT A MAXIMUM SPACING OF 96 BAR DIAMETERS (MINIMUM OF 2 PER BAR).
   D. AT SPLICES IN VERTICAL BARS, PROVIDE MECHANICAL COUPLERS OR 48 DIAMETER LAP.
   E. ALL REINFORCEMENT MUST BE INSTALLED AND SECURELY ANCHORED IN PLACE PRIOR TO PLACEMENT OF GROUT.
   F. MAXIMUM HEIGHT OF GROUT LIFT = 4'-0". UNLESS HIGH LIFT GROUTING PROCEDURES ARE EMPLOYED IN ACCORDANCE WITH ASI 530-99
3. MISCELLANEOUS:
   A. FILL CORE SOLID AROUND ANCHOR BOLTS.
   B. PROVIDE 100% SOLID BLOCKS OR SOLIDLY FILLED HOLLOW BLOCKS AT ALL EXPANSION BOLT LOCATIONS.
   C. SET WELD PLATES IN BOND BEAMS AFTER THE GROUT IS PLACED, BUT WHILE IT IS STILL PLASTIC.
   D. HOLLOW MASONRY UNITS TO BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. WEBS SHALL ALSO BE BEDDED IN ALL COURSES OF PIERS, COLUMNS, AND PILASTERS, AND IN THE STARTING COURSE ON FOOTINGS, AND WHEN ADJACENT TO CELLS OR CAVITIES TO BE REINFORCED OR FILLED WITH CONCRETE OR GROUT. SOLID UNITS TO BE LAID WITH FULL HEAD AND BED JOINTS.
   E. PROVIDE JOINT REINFORCING AT 16 INCHES, EXCEPT AS NOTED.
   F. LAP JOINT REINFORCING 6 INCHES FOR STANDARD, 15 INCHES FOR HEAVY WEIGHT.
   G. VERTICAL CONTROL JOINTS SHALL BE PROVIDED FULL JHEIGHT OF MASONRY WALLS AS LOCATED ON THE DRAWINGS. THE JOINT SHALL BE PROVIDED AS A CONTINUOUS HEAD JOINT WITH MORTAR RAKED BACK 3/4" AT BOTH FACES AND
   1. 50% OF THE HORIZONTAL JOINT REINFORCING CUT AT THE JOINT. BOND BEAM REINFORCING AND GROUT SHALL CONTINUE THROUGH THE JOINT. AFTER THE MORTAR IS SET, THE JOINT SHALL BE CAULKED WITH A FLEXIBLE MASTIC.
   H. FILL ALL VOIDS AND CELLS WITHIN 12" EITHER SIDE OF CENTERLINE OF BEAM AND/OR COLUMN BEARING LOCATIONS WITH A #4 REINFORCING BAR AND GROUT U.N.O.

F. LINTELS:

1. PROVIDE LINTELS OVER ALL OPENINGS IN WALLS. REFER TO ARCHITECTURAL AND HVAC DRAWINGS FOR LOCATION, NUMBER AND SIZES OF OPENINGS NOT SHOWN ON STRUCTRAL SHEETS.

G. STEEL STUDS/JOIST

1. MATERIALS:
2. A. STUDS AND TRACKS: AS PER SCHEDULE BELOW TO BE ASTM A446 GRADE D, Fy = 50 KSI. SPECIFICATIONS: WELDING PERSONNEL AND PROCEDURES ARE TO BE QUALIFIED PER AWS. DESIGN, FABRICATION AND ERECTION TO BE GOVERNED BY LATEST REVISIONS OF:
   A. AISC SPECIFICATION OF THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS.
   B. STRUCTURAL WELDING CODE, AWS D1.3 OF THE AMERICAN WELDING SOCIETY.
   PROPERTIES:
   C. LIGHTGAGE FRAMING MEMBER SIZES INDICATED ON DRAWINGS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:

DESIGNATION	MEMBER DEPTH	FLANGE WIDTH	GAGE	Ix (IN4)	USE	SPACING OF STUDS	MAXIMUM HEIGHT
362S137-43	3-5/8"	1-3/8"	18	0.617	INTERIOR	16" O.C.	18'-3"
600S137-43	6"	1-3/8"	18	2.043	INTERIOR	16" O.C.	27'-2"
600S162-43	6"	1-5/8"	18	2.317	EXTERIOR	16" O.C.	16'-10"
600S200-54	6"	2"	16	3.321	EXTERIOR	16" O.C.	19'-10"

   ALL JOISTS TO BE MANUFACTURED BY DIETRICH INDUSTRIES OR EQUIVALENT EQUAL

   D. LOAD BEARING HEADER SCHEDULE. MAX. ALLOWABLE LOAD 1,250 PLF.

MAX CLEAR SPAN	WALL THICKNESS	HEADER MEMBERS*
3'-4"	6"	(2) 600S200-43
6'-4"	6"	(2) 600S200-68
8'-0"	6"	(2) 800S200-68
10'-0"	6"	(2) 1000S200-97
12'-0"	6"	(2) 1000S250-97
14'-0"	6"	(3) 1200S200-97

   * PROVIDE TOP AND BOTTOM TRACK SAME GAGE AS HEADER MEMBER

3. CONNECTIONS:
   A. ALL CONNECTIONS TO BE FIELD SCREWS.
4. FINISH:
   A. ALL MATERIALS TO BE GALVANIZED COATED IN ACCORDANCE WITH ASTM A525 G-60.
   B. TOUCH UP FIELD WELDS WITH ZINC RICH PAINT.
5. MISCELLANEOUS:
   A. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
   B. ALL STUDS USED FOR EXTERIOR WALL FRAMING SHALL BE 6" STEEL STUDS, MINIMUM 16 GAGE AT 16" O.C. MAXIMUM, U.N.O. ON PLAN.
   C. ALL STUD MEMBERS AND THEIR CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR FOR A HORIZONTAL WIND LOAD OF AS NOTED IN SECTION B. PROVIDE CALCULATIONS STAMPED BY A REGISTERED STRUCTRAL ENGINEER IN THE STATE OF TEXAS.
   D. DEFLECTION LIMIT = L/240 (EXCEPT L/360 AT PLASTER APPLICATION).
   E. OPENINGS 10'-0" OR LESS IN WIDTH SHALL BE FRAMED WITH LIGHTGAGE FRAMING MEMBERS. HEADS OR OPENINGS SHALL CONSIST OF STUD OR JOIST SECTIONS SUFFICIENT TO CARRY THE WEIGHT OF THE WALL ABOVE. JAMB SECTIONS SHALL CONSIST OF HEAVIER GAGE STUDS, MULTIPLE STUDS, OR BOTH, AS REQUIRED TO CARRY THE WIND LOAD OF THE ADJACENT OPENING.
   F. ALL FIELD CUTTING TO BE PERFORMED WITH A SAW.
   G. WELD SIZE TO BE 3/32" WITH AWS TYPE 6013 OR 7014 ROD.
   H. TRACKS TO BE SECURELY ANCHORED TO SUPPORTING STRUCTURE WITH WELD AT EACH SIDE OF TRACKS OR POWER DRIVEN FASTENERS.
   I. PROVIDE CONTINUOUS HORIZONTAL BRIDGING AT 4'-0" O.C. MAXIMUM FOR WALLS.
   J. PROVIDE DOUBLE STUDS UNDER BEAM AND LINTEL BEARING, UNLESS SHOWN OTHERWISE.
   K. BRIDGING FOR ROOF JOISTS SHALL BE AT 8'-0" OR MAXIMUM BETWEEN SUPPORTS.

A. GENERAL

1. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE DOWNS WHICH MIGHT BE NECESSARY. SUCH MATERIAL SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THE COMPLETION OF THE PROJECT.
2. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
3. EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF THE INVOLVED TRADES BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK. EXCESS COST RELATED TO VARIATION IN THESE REQUIREMENTS TO BE BORNE BY THE APPROPRIATE CONTRACTOR.
4. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

B. ENGINEERING DESIGN CRITERIA

BUILDING CODE: INTERNATIONAL BUILDING CODE (IBC) 2021.
SECTION 1603: CONSTRUCTION DOCUMENTS
1603.1.1 FLOOR LIVE LOAD:
   A. PUBLIC AREAS, LOBBIES — 100 PSF
   B. RESTROOMS — 50 PSF
   C. OFFICES — 50 PSF
   D. CORRIDORS — 100 PSF
   E. STACK ROOMS — 150 PSF
   F. MECHANICAL ROOMS — 125 PSF
1603.1.2 ROOF LIVE LOAD:
   A. MINIMUM ROOF LIVE LOAD = 20 PSF (REDUCIBLE)
1603.1.3 ROOF SNOW LOAD:
   A. FLAT ROOF SNOW LOAD, Pf= 0 PSF
   B. SNOW EXPOSURE FACTOR, Ce= 0.9
   C. SNOW LOAD IMPORTANCE FACTOR, I= 1.0
   D. THERMAL FACTOR, Ct= 1.0
1603.1.4 WIND DESIGN DATA:
   A. ULTIMATE WIND SPEED (3-SECOND GUST), Vult = 108 MPH
      NOMINAL DESIGN WIND SPEED (3-SECOND GUST), Vasd = 82 MPH
   B. RISK CATEGORY= II
   C. WIND EXPOSURE= B
   D. INTERNAL PRESSURE COEFFICIENT, GCpi = +/- 0.18
   E. COMPONENTS AND CLADDING NET DESIGN WIND PRESSURE (PSF):

EFFECTIVE WIND AREA (FT^2)	ZONE									
	1, 2e, 2r		2n, 3r		3e		4		5	
	POS.	NEG.	POS.	NEG.	POS.	NEG.	POS.	NEG.	POS.	NEG.
10	+18.2	-33.3	+18.2	-36.6	+18.2	-44.9	+19.8	-21.5	+19.8	-26.6
20	+16.1	-28.2	+16.1	-32.6	+16.1	-39.8	+18.9	-20.6	+18.9	-24.8
50	+13.5	-21.5	+13.5	-27.6	+13.5	-33.1	+17.8	-19.4	+17.8	-22.4
100	+11.4	-16.5	+11.4	-23.7	+11.4	-27.9	+16.9	-18.5	+16.9	-20.6

1603.1.5 EARTHQUAKE DESIGN DATA:
   A. RISK CATEGORY = II
   B. SEISMIC IMPORTANCE FACTOR, Ie = 1.00
   C. MAPPED SPECTRAL RESPONSE ACCELERATION, Ss=0.048g AND S1=0.015g
   D. SITE CLASS= D
   E. SPECTRAL RESPONSE COEFFICIENTS, Sds=0.0512g AND Sd1=0.024g
   F. SEISMIC DESIGN CATEGORY= A
   G. BASIC SEISMIC-FORCE-RESISTING SYSTEM(S)= ORDINARY REINFORCED MASONRY SHEAR WALLS
   H. DESIGN BASE SHEAR=
   I. SEISMIC RESPONSE COEFFICIENT(S), Cs=
   J. RESPONSE MODIFICATION FACTOR(S), R= 2.0
   K. ANALYSIS PROCEDURE USED= EQUIVALENT LATERAL FORCE PROCEDURE
1603.1.6 GEOTECHNICAL INFORMATION:
   A. ALLOWABLE SOIL BEARING CAPACITY= 2,000 PSF TOTAL LOAD ON SELECT FILL
1603.1.7 FLOOD DESIGN DATA:
   A. NOT APPLICABLE.
1603.1.8 SPECIAL LOADS:
   A. NOT APPLICABLE.
1603.1.9 SYSTEMS AND COMPONENTS REQUIRING SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE:
   A. NOT APPLICABLE.

C. GENERAL NOTES FOR SITE PREPARATION

1. REFER TO CIVIL AND ARCHITECTURAL PLANS FOR FINISH FLOOR ELEVATION.
2. BUILDING AREAS TO SUPPORT SELECT FILL SHOULD BE STRIPPED OF ALL EXISTING VEGETATION AND TOPSOIL EXTENDING AT LEAST 5 FT BEYOND BUILDING PERIMETER.
3. OVER-EXCAVATE A MINIMUM OF TWO (2) FEET FROM THE LOWEST EXISTING GRADE ELEVATION TO PROVIDE A LEVEL PLATFORM AND EXTEND AT LEAST FIVE (5) FEET FROM THE BUILDING FOOTPRINT. EXPOSED SUBGRADES SHOULD BE THOROUGHLY PROOFROLLED IN ORDER TO LOCATE AND DENSIFY ANY WEAK AND COMPRESSIBLE ZONES.
4. SCARIFY THE SUBGRADE AT LEAST EIGHT (8) INCHES AND MOISTURE CONDITION BETWEEN MINUS TWO (-2) TO PLUS THREE (+3) PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D698 (STD. PROCTOR)
5. USE THE STOCKPILED SOILS THAT MEET SELECT FILL CRITERIA AS SELECT FILL TO START THE BUILDING PAD.
6. STRUCTURAL FILL SHALL CONSISTS OF INORGANIC SANDY CLAYS, CLAYEY GRAVEL, CRUSHED LIMESTONE, OR CALICHE WITH A LIQUID LIMIT (LL) OF LESS THAN 35 (LL<35) AND A PLASTICITY INDEX (PI) BETWEEN SEVEN (7) AND FIFTEEN (15). THE FILL SHOULD BE PLACED IN COMPACTED LIFTS NOT TO EXCEED SIX (6) INCHES IN THICKNESS, MOISTURE CONDITIONED BETWEEN MINUS TWO (-2) TO PLUS THREE (+3) PERCENTAGE POINTS OF THE OPTIMUM MOISTURE AND COMPACTED TO A MINIMUM OF 97% OF THE MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D698 (STD. PROCTOR).
7. REFER TO GEOTECHNICAL ENGINEERING STUDY PREPARED BY CASTLE ENGINEERING & TESTING, LLC REPORT NO.: 24G034 DATED SEPTEMBER 12, 2024.
8. THE SOILS ENGINEER SHALL BE THE OWNERS REPRESENTATIVE TO CONTROL THE PLACEMENT OF COMPACTED FILL. THE SOILS ENGINEER SHALL APPROVE THE SUBGRADE PREPARATION, THE FILL MATERIALS, THE METHOD OF PLACEMENT AND COMPACTION, AND SHALL GIVE WRITTEN APPROVAL OF THE COMPLETED FILL.
9. PROVIDE DENSITY TESTING ON THE SUBGRADE SOILS AND THE SELECT FILL AT EVERY LIFT AND FOR EACH 2,500 SF OF SLAB AREA, OR A MINIMUM OF 3 DENSITY TEST PER TESTING INTERVAL, WHICHEVER IS GREATER. ANY AREAS NOT MEETING THE REQUIRED COMPACTION SHOULD BE RECOMPACTED AND RETESTED UNTIL COMPLIANCE IS MET.
10. OBSERVATION OF REINFORCEMENT PLACEMENT WILL NEED TO BE PROVIDED BY SYNERGY STRUCTURAL ENGINEERING, INC. BEFORE CONCRETE POUR. THE FOLLOWING ITEMS WILL NEED TO BE PROVIDED BY CONTRACTOR AND/OR OWNER BEFORE REBAR OBSERVATION:
   A. COMPACTION REPORTS OF SUBGRADE AND SUBSEQUENT LIFTS PERFORMED BY AN APPROVED TESTING LABORATORY.
   B. COMPACTION AND INSPECTION REPORTS BY AN APPROVED TESTING LABORATORY FOR THE BACKFILLING OF THE TRENCHES OF PLUMBING OR ELECTRICAL LINES.
   **FAILING TO PROVIDE COMPACTION REPORTS WILL VOID ANY WARRANTIES AND/OR LIABILITIES DESCRIBED IN THESE PLANS AND/OR PROPOSAL-AGREEMENT BETWEEN OWNER/CONTRACTOR AND SYNERGY STRUCTURAL ENGINEERING, INC.

D. REINFORCED CONCRETE

1. MATERIALS:
   A. SPECIFICATIONS: IN GENERAL, COMPLY WITH ACI 301-LATEST EDITION "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS."
   B. STRUCTURAL CONCRETE: ASTM C-150 TYPE I/II

CONCRETE TYPE	DESIGN STRENGTH	MAXIMUM SLUMP	MAXIMUM AGGREGATE	MAXIMUM W/C RATIO	
				AIR ENTR.	NO AIR ENTR.
FOUNDATION	3000 PSI	5"	1-1/2"	0.5	0.6

   * ALL MIXES SHALL HAVE A MINIMUM OF 5 SACKS OF CEMENT PER CUBIC YARD REGARDLESS OF STRENGTH OBTAINED.
   C. ALL DEFORMED REINFORCING BARS (ASTM A 615): FY = 60,000
   D. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A165-85. (SHEET FORM, NOT ROLLED)
2. FIELD MANUAL: PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.
3. CONTINGENCIES:
   A. PROVIDE SUPPORTS AS REQUIRED TO MAINTAIN ALIGNMENT OF SCHEDULED REINFORCING. SUCH SUPPORTS ARE TO BE REFLECTED IN THE BID.
4. FOOTINGS:
   A. DOWELS IN FOOTINGS TO MATCH VERTICAL WALL REINFORCING.
   B. PROVIDE LEAN CONCRETE (CLASS IV) UNDER FOUNDATIONS FOR ACCIDENTAL OVER-EXCAVATION, SOFT SPOTS AND TRENCHES.
5. SPLICES: UNLESS NOTED OTHERWISE, LAP SPLICES AND EMBEDMENTS SHALL BE AS SHOWN ON TABLE BELOW.
6. CONSTRUCTION JOINTS:
   A. CONSTRUCTION JOINTS PERMITTED ONLY WHERE SHOWN OR AS APPROVED BY THE STRUCTURAL ENGINEER. ALL CONSTRUCTION JOINTS ARE TO BE KEYED. KEYWAYS SHALL BE 1-1/2 INCHES DEEP X 1/3 MEMBER THICKNESS.
7. CONCRETE COVER: UNLESS NOTED OTHERWISE, DETAIL REINFORCING TO PROVIDE CONCRETE COVER AS FOLLOWS:
   A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: — 3 IN.
   B. CONCRETE EXPOSED TO EARTH OR WEATHER: #5 BARS AND SMALLER — 1 1/2 IN.
      OTHERS — 2 IN.
   C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER: SLABS, WALLS, AND #11 BARS & SMALLER — 3/4 IN.
      OTHERS — 1 1/2 IN.

CAVAZOS ARCHITECTS
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CONSTRUCTION DOCUMENTS

STATE OF TEXAS — VICTOR M. DeANDA JR. — 92641 — LICENSED PROFESSIONAL ENGINEER — 10/25/24

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY VICTOR M. DE ANDA JR., P.E. 92641 EXPIRES ON 09/30/2025.

SYNERGY
STRUCTURAL ENGINEERING, INC.
1119 Flores Ave. SUITE 300
Laredo, TX. 78040
(956) 753-5860 synergy@synergy-se.com
TBPE Reg. No.: F-7661

NOTES:

DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

GENERAL NOTES

Drawn by:	LP
Checked by:	VDA
Project number	SSE-24-119
Date	OCTOBER 25, 2024.

S001

Scale

DETAIL NOT USED | 17

DETAIL NOT USED | 18

DETAIL NOT USED | 19

DETAIL NOT USED | 20

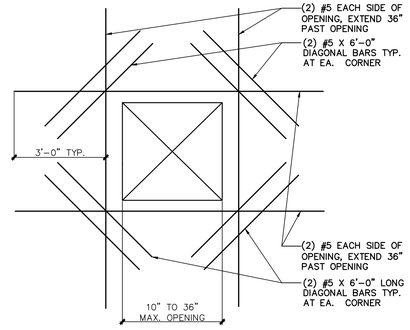
DETAIL NOT USED | 13

DETAIL NOT USED | 14

DETAIL NOT USED | 15

DETAIL NOT USED | 16

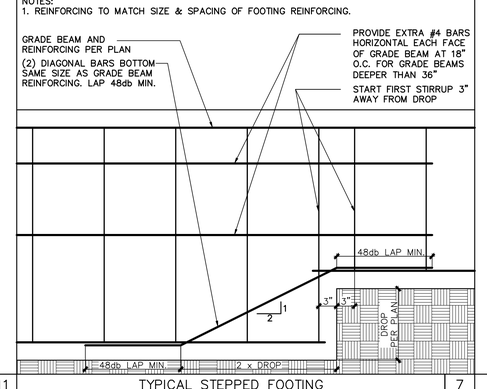
TYPICAL OPENING IN CONCRETE SLAB | 9



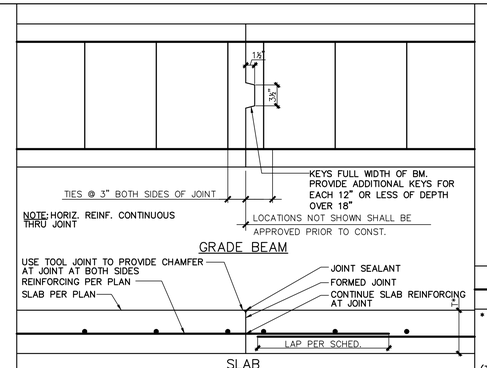
TYPICAL SLAB ON GRADE STAIRS | 10

DETAIL NOT USED | 11

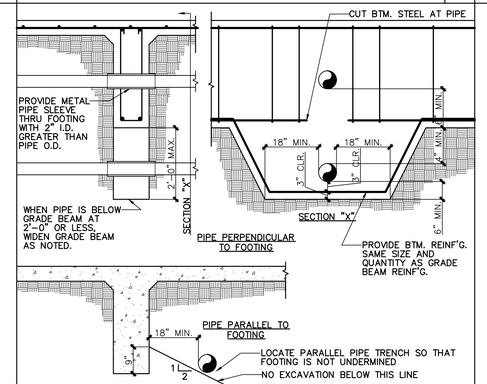
TYPICAL STEPPED FOOTING | 7



GRADE BEAM AND SLAB CONSTRUCTION JOINT | 5

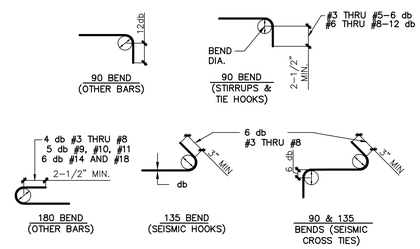


DETAIL OF PIPING SLEEVE AT FOOTING | 6



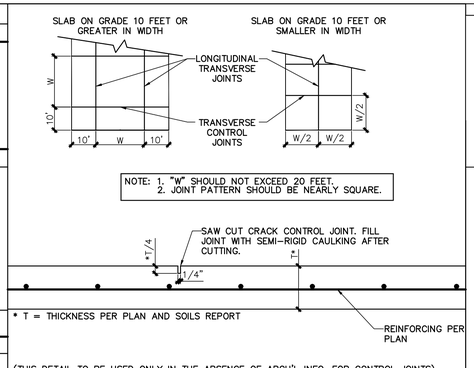
NOTES:
1. REINFORCING TO MATCH SIZE & SPACING OF FOOTING REINFORCING.

BARS DIAMETER OF BENDS | 8



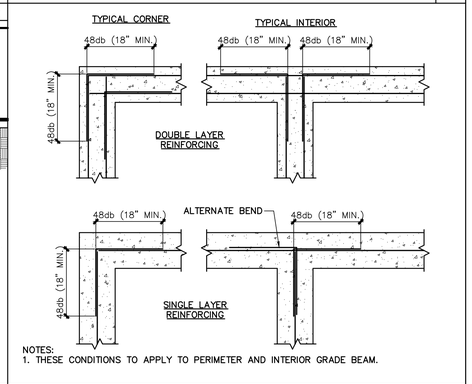
DIAMETER OF BENDS	
STIRRUPS AND TIES	4 db FOR #3 THRU #5 BARS
	6 db FOR #6 THRU #8 BARS
ALL OTHERS	6 db FOR #3 THRU #8 BARS
	8 db FOR #9 THRU #11 BARS
	10 db FOR #14 THRU #18 BARS

SLAB CONTROL JOINT DETAIL | 1



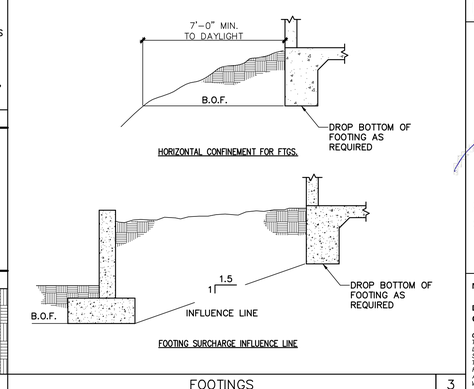
(THIS DETAIL TO BE USED ONLY IN THE ABSENCE OF ARCH'L INFO. FOR CONTROL JOINTS)

TYP. REINFORCING AT INT. OF CONCRETE FOOTINGS | 2

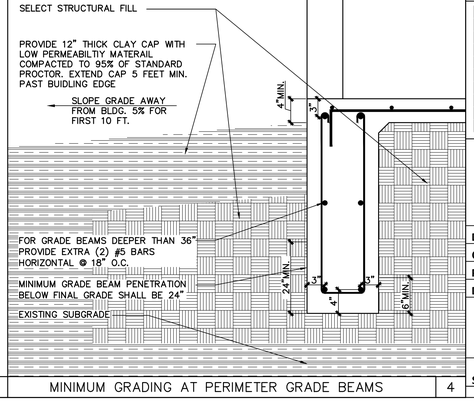


NOTES:
1. THESE CONDITIONS TO APPLY TO PERIMETER AND INTERIOR GRADE BEAM.

FOOTINGS | 3



MINIMUM GRADING AT PERIMETER GRADE BEAMS | 4



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CONSTRUCTION DOCUMENTS

STATE OF TEXAS
VICTOR M. DE ANDA JR.
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LICENSED PROFESSIONAL ENGINEER
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EXPIRES ON 09/30/2025.

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TBPE Reg. No.: F-7661

NOTES:

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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

TYP. FND. DETAILS

Drawn by:	LP
Checked by:	VDA
Project number	SSE-24-119
Date	OCTOBER 25, 2024.

S002

Scale

CMU LINTEL SCHEDULE

TYPICAL CMU LINTELS AT NON–BEARING WALLS

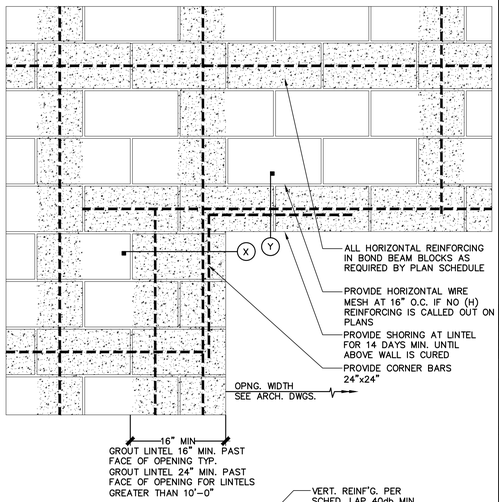
MARK	MAX. CLEAR SPAN	BLOCK WIDTH (IN)	LINTEL DEPTH (IN.)	HORIZONTAL REINFORCING	SHEAR STIRRUPS	REMARKS
LN1	3'–4"	6	8	(1) #5		
LN2	6'–8"	6	16	(1) #5 T&B		
LN3	3'–4"	8	8	(1) #5		
LN4	6'–8"	8	16	(2) #5 T&B		
LN5	8'–0"	8	24	(2) #5 T&B		
LN6	10'–0"	8	24	(2) #6 T&B		
LN7	3'–4"	12	8	(2) #5		
LN8	6'–8"	12	16	(2) #5 T&B		
LN9	8'–0"	12	24	(2) #5 T&B		
LN10	10'–0"	12	24	(2) #6 T&B		

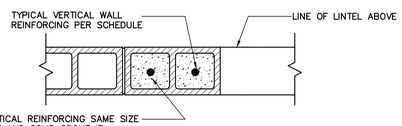
TYPICAL CMU LINTELS AT BEARING WALLS

MARK	MAX. CLEAR SPAN	BLOCK WIDTH (IN)	LINTEL DEPTH (IN.)	HORIZONTAL REINFORCING	SHEAR STIRRUPS	REMARKS
LN11	3'–4"	8	16	(2) #5 T&B	#3 @ 8" O.C.	
LN12	6'–8"	8	16	(2) #5 T&B	#3 @ 8" O.C.	
LN13	8'–0"	8	24	(2) #5 T&B	#3 @ 8" O.C.	
LN14	10'–0"	8	32	(2) #5 EA.	#3 @ 8" O.C.	
LN15	12'–0"	8	40	(2) #5 T&B	#3 @ 8" O.C.	
LN16	14'–0"	8	48	(2) #5 EA.	#3 @ 8" O.C.	
LN17	18'–0"	8	24	(2) #6 EA.	#3 @ 8" O.C.	SPECIAL INSPECTION
LN18	22'–8"	8	56	(2) #6 EA.	#4 @ 8" O.C.	SPECIAL INSPECTION
LN19	28'–0"	8	32	(2) #6 EA.	#4 @ 8" O.C.	SPECIAL INSPECTION
LN20	3'–4"	12	8	(2) #5		
LN21	6'–8"	12	16	(2) #5 T&B		
LN22	8'–0"	12	24	(2) #6 T&B		
LN23	10'–0"	12	32	(4) #6 T&B		2 BARS IN 2 COURSES
LN24	12'–0"	12	40	(4) #6 T&B		2 BARS IN 2 COURSES
LN25	20'–0"	12	48	(4) #6 T&B		2 BARS IN 2 COURSES

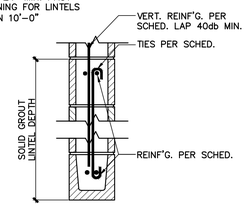
NOTES:
(1) LOCATE FIRST STIRRUP AT 1/2 OF THE REQUIRED SPACING AWAY FROM THE FACE OF WALL SUPPORT. (I.E.: AT 8" O.C. SPACING, LOCATE 1ST STIRRUP NOT FURTHER THAN 4" FROM THE FACE OF WALL).
(2) SPECIAL INSPECTION REQUIRED BY STRUCTURAL ENGINEER OF RECORD AS NOTED ON ON SCHEDULE.
(3) SOLID GROUT FULL DEPTH OF LINTEL AND AT LEAST 8" PAST OPENING FOR LINTELS LESS THAN 8'–0" LONG AND 16" PAST OPENING FOR LINTEL LONGER THAN 8'–0".

CMU LINTEL SCHEDULE | 14



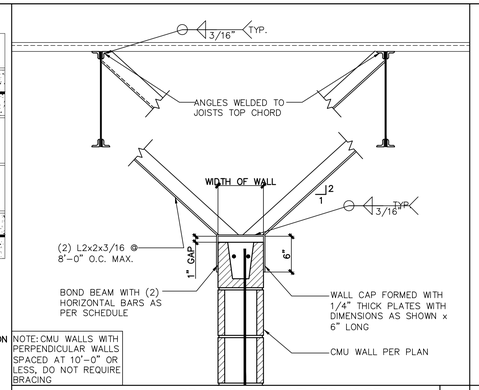


X LINTEL JAMB

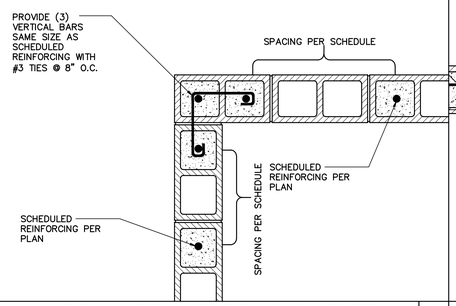


Y LINTEL SECTION

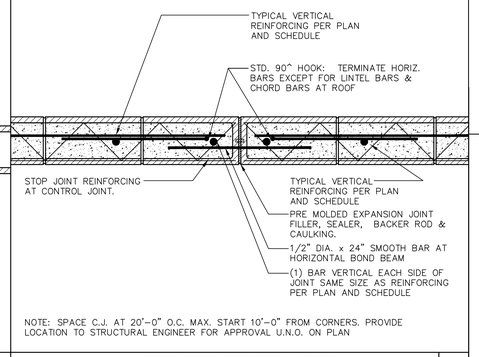
CMU WALL BRACING PARALLEL TO JOIST | 9



TYPICAL VERTICAL REINFORCING AT CORNERS | 5

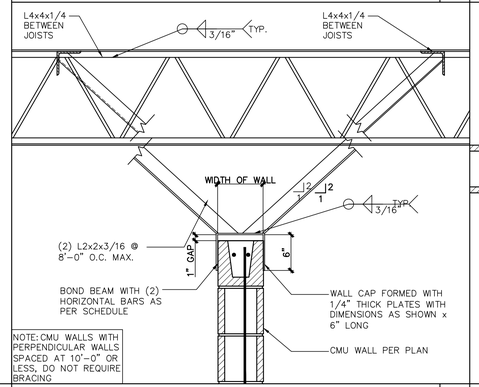


CMU WALL CONTROL JOINT | 1

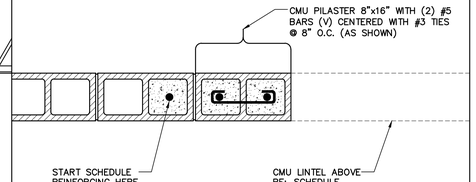


NOTE: SPACE C.J. AT 20'–0" O.C. MAX. START 10'–0" FROM CORNERS. PROVIDE LOCATION TO STRUCTURAL ENGINEER FOR APPROVAL U.N.O. ON PLAN

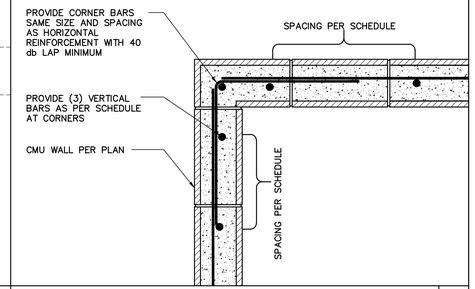
CMU WALL BRACING PERPENDICULAR TO JOIST | 10



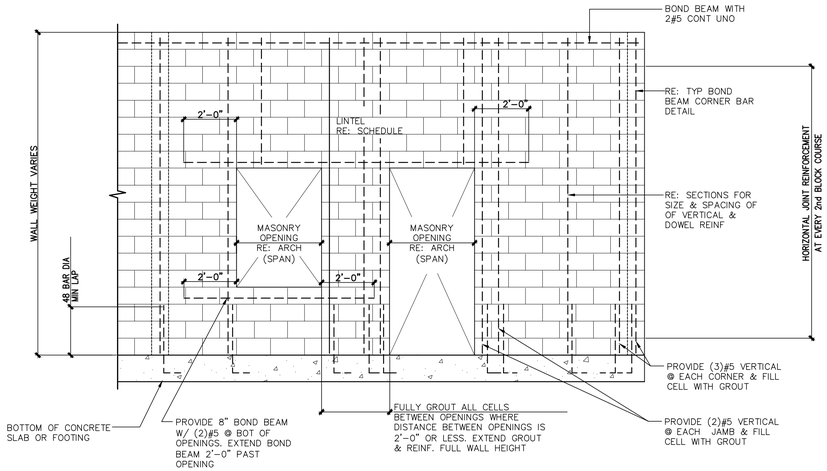
CMU WALL PILASTER AT JAMB OPENING | 6



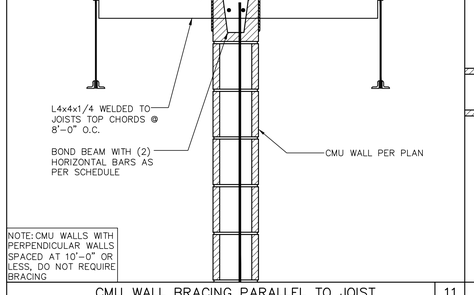
TYPICAL CORNER BARS AT BOND BEAMS | 2



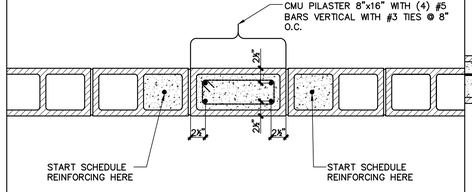
TYPICAL CMU WALL CONSTRUCTION | 16



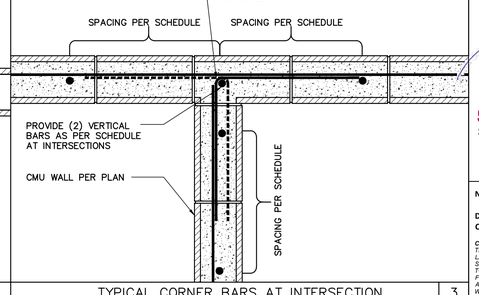
CMU WALL BRACING PARALLEL TO JOIST | 11



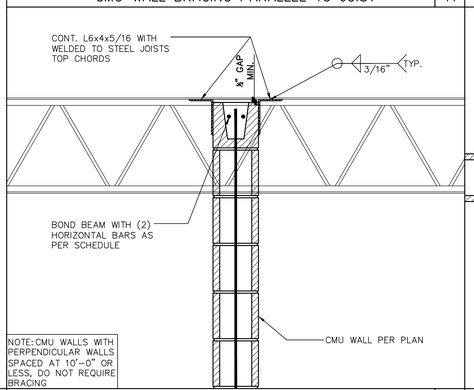
FLUSH WALL PILASTER 8x16 | 7



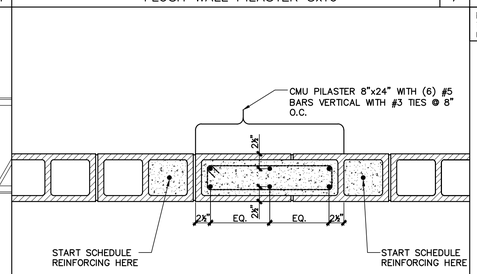
TYPICAL CORNER BARS AT INTERSECTION | 3



CMU WALL BRACING PERPENDICULAR TO JOIST | 12

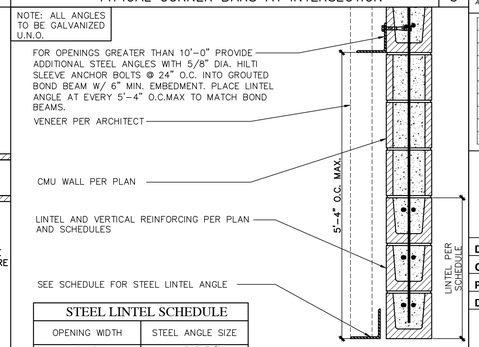


FLUSH WALL PILASTER 8x24 | 8



LINTEL ANGLE AT OPENINGS | 4

NOTE: ALL ANGLES TO BE GALVANIZED U.N.O.



STEEL LINTEL SCHEDULE

OPENING WIDTH	STEEL ANGLE SIZE
6'–0"<	L5x5x3/8
10'–0"<	L6x6x3/8
>10'–0"	CONTACT EOR

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TBPE Reg. No.: F-7661

NOTES:

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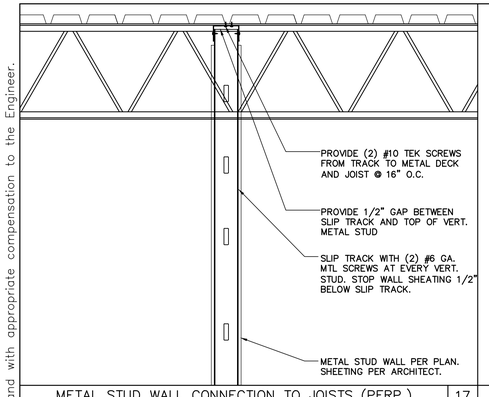
No.	Description	Date

TYPICAL CMU WALL DETAILS

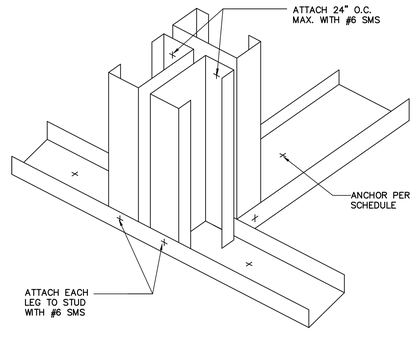
Drawn by:	LP
Checked by:	VDA
Project number	SSE-24-119
Date	OCTOBER 25, 2024.

S003

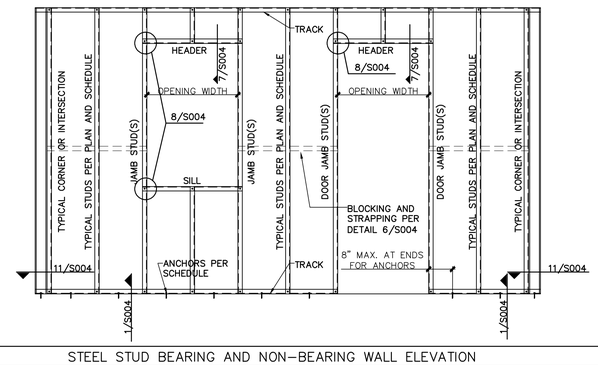
Scale



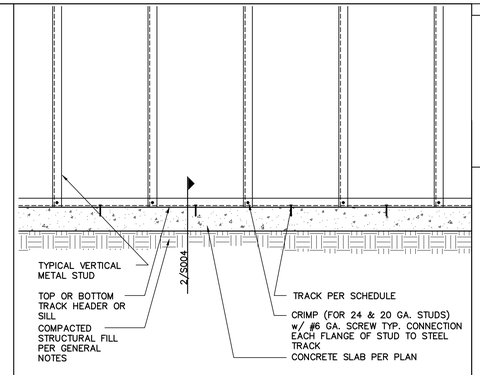
METAL STUD WALL CONNECTION TO JOISTS (PERP.) | 17



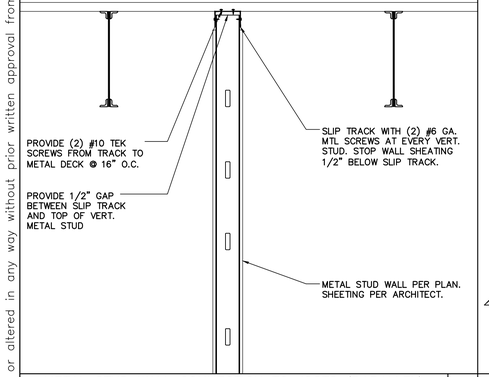
TYPICAL INTERSECTION | 13



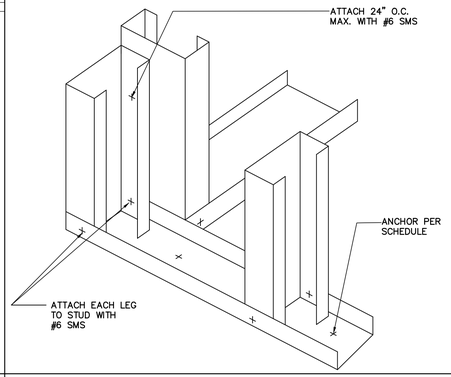
STEEL STUD BEARING AND NON–BEARING WALL ELEVATION | 5



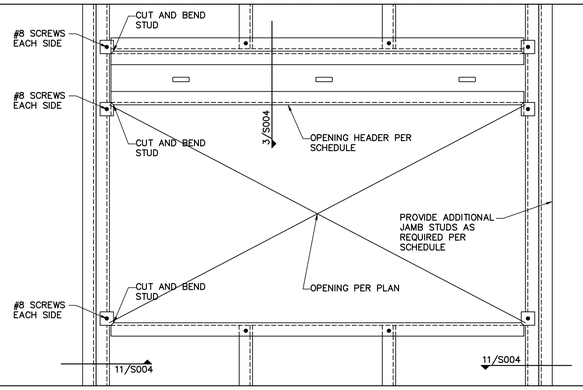
MTL STUD TO TRACK AT TOP OR BOTTOM OF WALL | 1



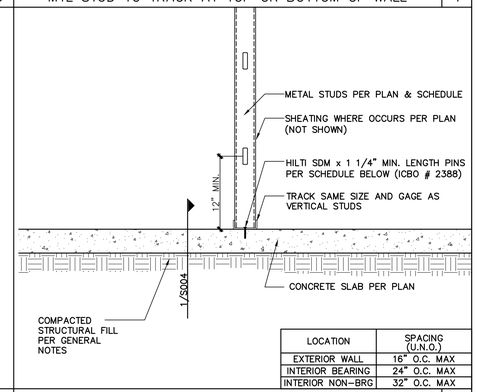
METAL STUD WALL CONNECTION TO JOSTS (PARALLEL) | 18



TYPICAL CORNER | 14

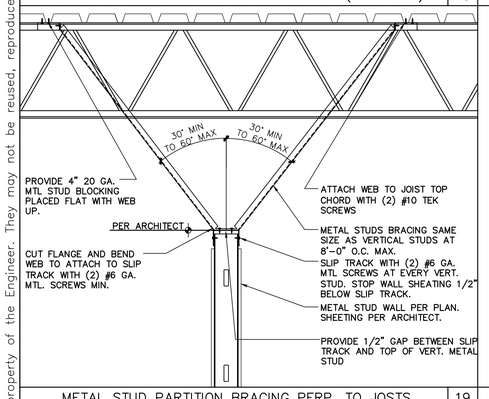


SILL AND HEADER DETAIL | 6

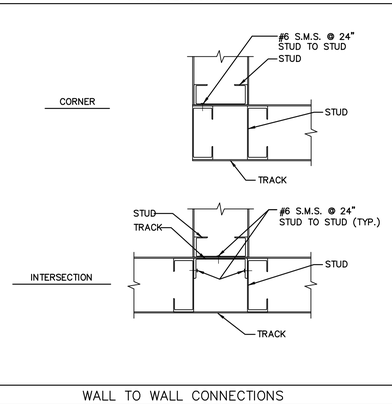


LOCATION	SPACING (U.N.O.)
EXTERIOR WALL	16" O.C. MAX
INTERIOR BEARING	24" O.C. MAX
INTERIOR NON–BRG	32" O.C. MAX

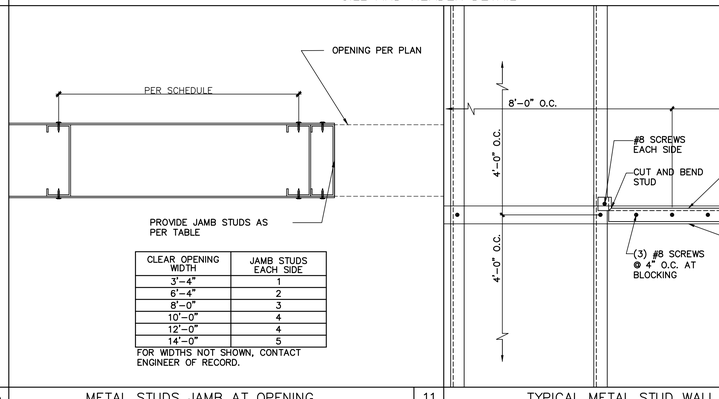
METAL STUD AT CONCRETE SLAB–ON–GRADE | 2



METAL STUD PARTITION BRACING PERP. TO JOSTS | 19



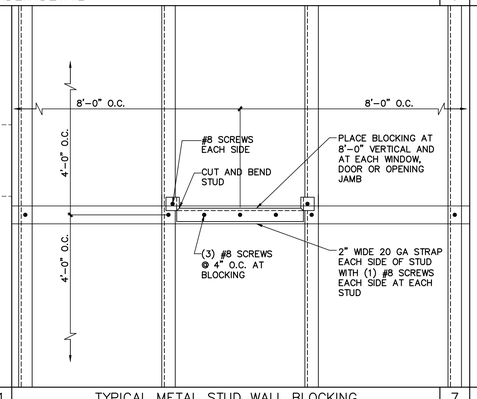
WALL TO WALL CONNECTIONS | 15



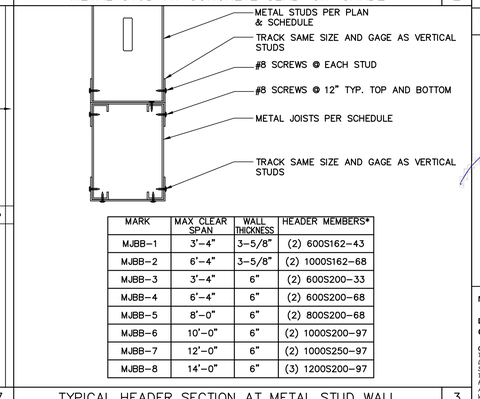
CLEAR OPENING WIDTH	JAMB STUDS EACH SIDE
3'–4"	1
6'–4"	2
8'–0"	3
10'–0"	4
12'–0"	4
14'–0"	5

FOR WIDTHS NOT SHOWN, CONTACT ENGINEER OF RECORD.

METAL STUDS JAMB AT OPENING | 11

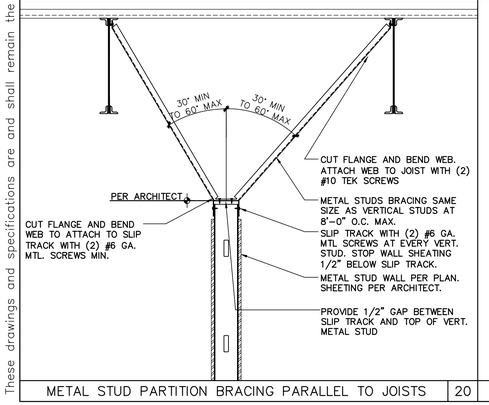


TYPICAL METAL STUD WALL BLOCKING | 7

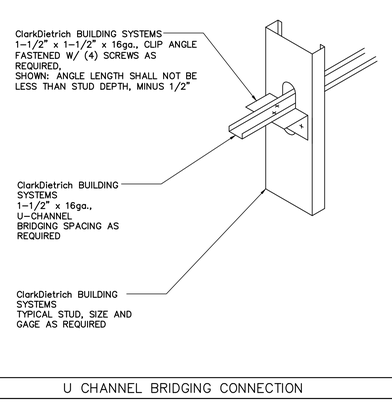


MARK	MAX CLEAR SPAN	WALL THICKNESS	HEADER MEMBERS*
MJBB–1	3'–4"	3–5/8"	(2) 600S162–43
MJBB–2	6'–4"	3–5/8"	(2) 1000S162–68
MJBB–3	3'–4"	6"	(2) 600S200–33
MJBB–4	6'–4"	6"	(2) 600S200–68
MJBB–5	8'–0"	6"	(2) 800S200–68
MJBB–6	10'–0"	6"	(2) 1000S200–97
MJBB–7	12'–0"	6"	(2) 1000S250–97
MJBB–8	14'–0"	6"	(3) 1200S200–97

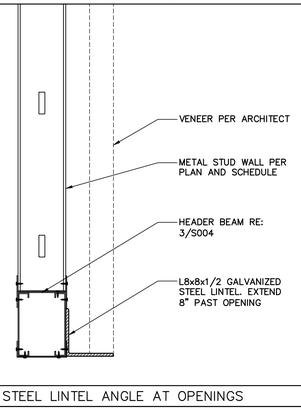
TYPICAL HEADER SECTION AT METAL STUD WALL | 3



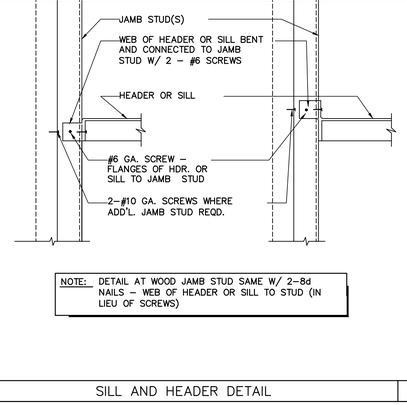
METAL STUD PARTITION BRACING PARALLEL TO JOISTS | 20



U CHANNEL BRIDGING CONNECTION | 16

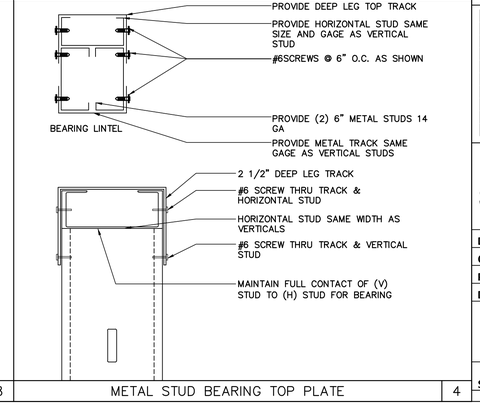


TYPICAL STEEL LINTEL ANGLE AT OPENINGS | 12



NOTE: DETAIL AT WOOD JAMB STUD SAME W/ 2–8d NAILS – WEB OF HEADER OR SILL TO STUD (IN LIEU OF SCREWS)

SILL AND HEADER DETAIL | 8



METAL STUD BEARING TOP PLATE | 4

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CONSTRUCTION DOCUMENTS

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NOTES:

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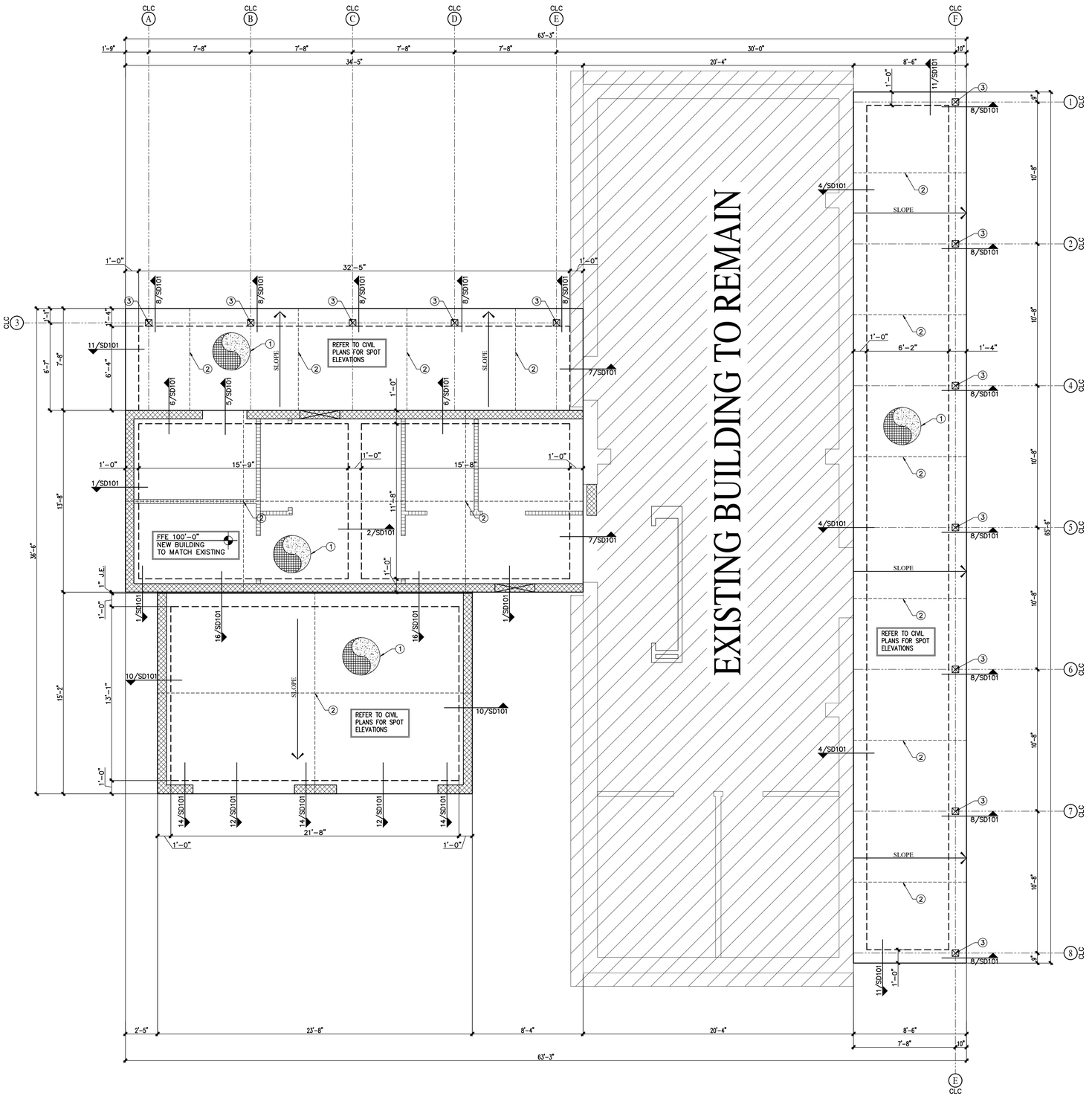
No.	Description	Date

TYPICAL METAL STUD WALL DETAILS

Drawn by:	LP
Checked by:	VDA
Project number	SSE-24-119
Date	OCTOBER 25, 2024.

S004

Scale



1 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

FOUNDATION NOTES

1. SEE SHEET S001 FOR GENERAL NOTES.
2. SEE SHEET S002 FOR TYPICAL FOUNDATION DETAILS.
3. SEE SHEET S003 FOR TYPICAL CMU WALL DETAILS.
4. SEE SHEET S004 FOR TYPICAL METAL STUD WALL DETAILS.
5. CONTRACTOR IS RESPONSIBLE FOR LOCATION OF ALL FLOOR DRAINS (F.D.) AND FLOOR DEPRESSIONS WHETHER OR NOT THEY ARE NOTED ON THE STRUCTURAL NOTES OR PLANS.
6. DIMENSIONS SHOWN ARE FOR GENERAL INFORMATION, COORDINATE WITH ARCHITECTURAL PLANS.
7. CONTRACTOR/SUBCONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS WITH ARCHITECTURAL PLANS BEFORE COMMENCING ANY WORK. THE CONTRACTOR/ SUBCONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER BEFORE THE WORK HAS BEGUN.
8. WALL LEGEND:
   - INDICATES EXISTING WALL TO REMAIN
   - INDICATES 8" CMU WALL
   - INDICATES 6" METAL STUD WALL
   - INDICATES 3-5/8" METAL STUD WALL

   REFER TO CMU WALL SCHEDULE FOR REINFORCING.
9. ABBREVIATIONS:
   CLC=CENTER LINE COLUMN
   CLW=CENTER LINE WALL
   FOC=FACE OF COLUMN
   FOW=FACE OF WALL
   FFE=FINISH FLOOR ELEVATION
10. ALL ELEVATIONS REFERENCED HEREIN, ARE FROM THE BUILDING FINISH FLOOR ELEVATION OF 100'-0". REFER TO CIVIL PLANS FOR FINAL BUILDING ELEVATION.
11. REFER TO DETAIL 1/S003 FOR CMU CONTROL JOINTS. UNLESS NOTED OTHERWISE, CONTROL JOINTS SHALL START AT 10 FT FROM EDGES OR CORNERS AND 20 FT O.C. IN BETWEEN. PROVIDE LOCATION OF CONTROL JOINTS FOR ENGINEER OF RECORD TO APPROVE BEFORE ERECTION OF WALLS.
12. REFER TO CIVIL PLANS FOR RAMPS, STAIRS & SIDEWALKS.

KEYED FOUNDATION NOTES

1. 5" THICK SLAB ON GRADE WITH #4 BARS @ 15" O.C. EACH WAY AT MID-DEPTH OF SLAB OVER 10 MIL VISQUEEN MOISTURE BARRIER OVER APPROVED COMPACTED FILL.
2. SLAB CONTROL JOINTS, SEE DETAIL 1/S002
3. 6x6 SPRUCE PINE FIR SOUTH WOOD POST.

CMU WALL REINFORCING SCHEDULE

WALL TYPE	t	REINFORCING- SEE FOOT NOTE (1)	FOOT NOTE	SPEC. INSP.
WL-1	6"	#4 BARS (V) @ 48" O.C. CTR. & (1) #5 BAR (H) AT 10'-0"	(2)	NO
WL-2	8"	#5 BARS (V) @ 48" O.C. CTR. & (1) #5 BAR @ 5'-4" O.C. (H)	(3)	NO

(1) ALL HORIZONTAL (H) REINFORCEMENT TO OCCUR IN CONTINUOUS BOND BEAMS SPACED AS INDICATED IN THE SCHEDULE ABOVE.
(2) TYP. 6" CMU INTERIOR NON-BEARING WALL U.N.O.
(3) TYP. 8" CMU EXTERIOR BEARING WALL U.N.O.

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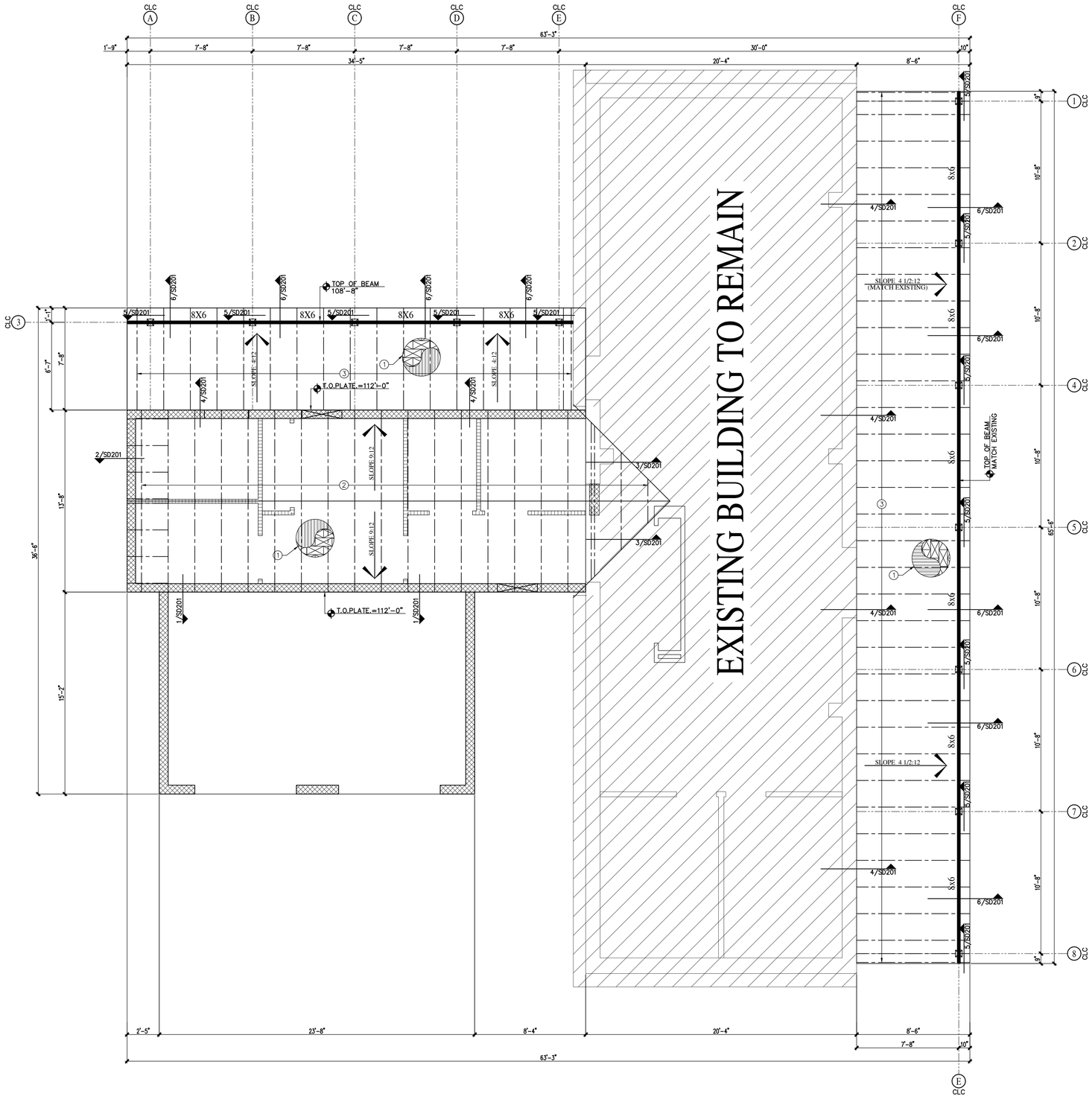
No.	Description	Date

FOUNDATION PLAN

Drawn by:	LP
Checked by:	VDA
Project number	SSE-24-119
Date	OCTOBER 25, 2024.

S101

Scale



EXISTING BUILDING TO REMAIN

FRAMING GENERAL NOTES

1. SEE SHEET S001 FOR GENERAL NOTES.
2. SEE SHEET S002 FOR TYPICAL FOUNDATION DETAILS.
3. SEE SHEET S003 FOR TYPICAL CMU WALL DETAILS.
4. SEE SHEET S004 FOR TYPICAL METAL STUD WALL DETAILS.
5. REFER TO MECHANICAL AC DRAWINGS FOR LOCATION AND SIZE OF REFRIGERANT PIPING AND DUCT WORK, MECHANICAL UNITS, WEIGHTS, & SUPPORTS.
6. DIMENSIONS SHOWN ARE FOR GENERAL INFORMATION, COORDINATE WITH ARCHITECTURAL PLANS.
7. JOISTS MANUFACTURER TO REFER TO MECHANICAL DRAWINGS FOR MECHANICAL EQUIPMENT LOCATION AND WEIGHTS.
8. WALL LEGEND:
   - INDICATES EXISTING WALL TO REMAIN
   - INDICATES 8" CMU WALL
   - INDICATES 6" METAL STUD WALL
   - INDICATES 3-5/8" METAL STUD WALL
   - REFER TO CMU WALL SCHEDULE FOR REINFORCING.
9. ABBREVIATIONS:
   - CLC=CENTER LINE COLUMN
   - CLW=CENTER LINE WALL
   - FOC=FACE OF COLUMN
   - FOW=FACE OF WALL
   - FFE=FINISH FLOOR ELEVATION
   - TOS=TOP OF STEEL
   - JBE=JOIST BEARING ELEVATION
10. REFER TO DETAILS 9 THRU 12/S003 FOR TYPICAL INTERIOR PARTITION TOP OF WALL BRACING
11. ALL ELEVATIONS REFERENCED HEREIN, ARE FROM THE BUILDING FINISH FLOOR ELEVATION OF 100'-0". REFER TO CIVIL PLANS FOR FINAL BUILDING ELEVATION.

KEYED FRAMING NOTES

1. ROOFING PER ARCHITECT OVER 5/8" THICK PLYWOOD STRUCTURAL #1 (SPAN RATING 48/24) WITH 10d NAILS @ 12" O.C. FOR FIELD NAILING, 6" O.C. FOR EDGE & BOUNDARY NAILING.
2. PREFABRICATED WOOD TRUSSES @ 24" O.C.
3. 2x6 WOOD ROOF JOISTS @ 24" O.C. SPRUCE PINE FIR SOUTH NO. 2 OR BETTER

1 ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

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ROOF FRAMING PLAN

Drawn by:	LP
Checked by:	VDA
Project number	SSE-24-119
Date	OCTOBER 25, 2024.

S201

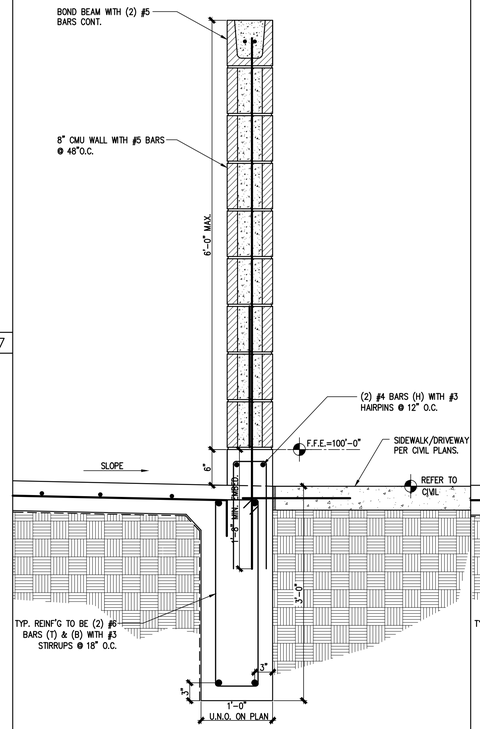
Scale

DETAIL NOT USED | 17

DETAIL NOT USED | 18

DETAIL NOT USED | 19

DETAIL NOT USED | 20



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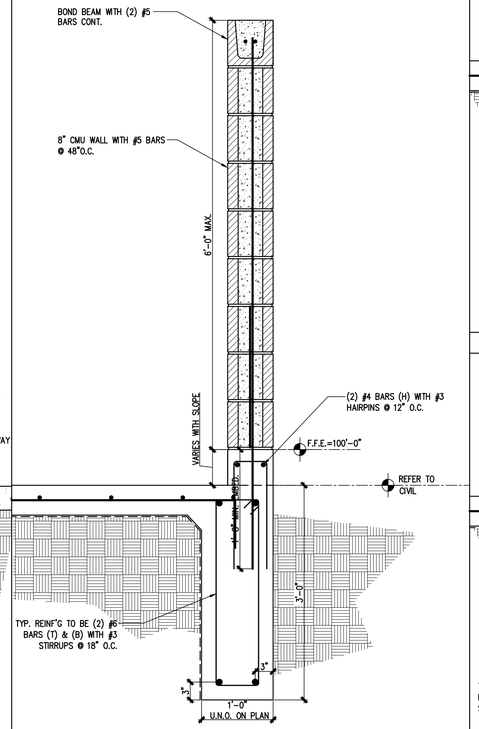

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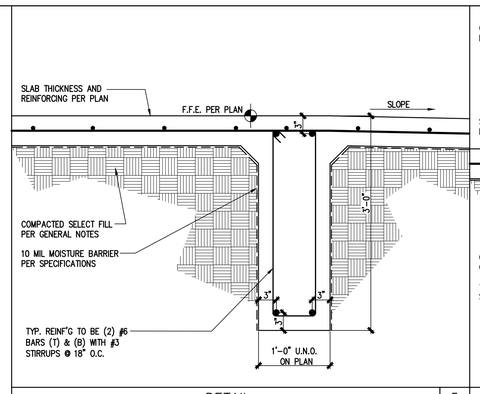
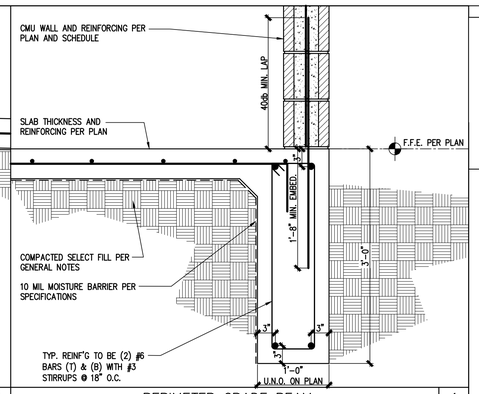
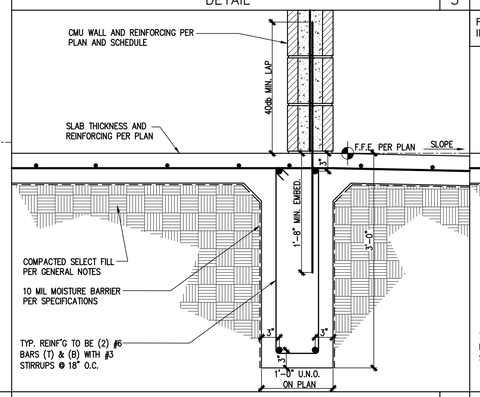


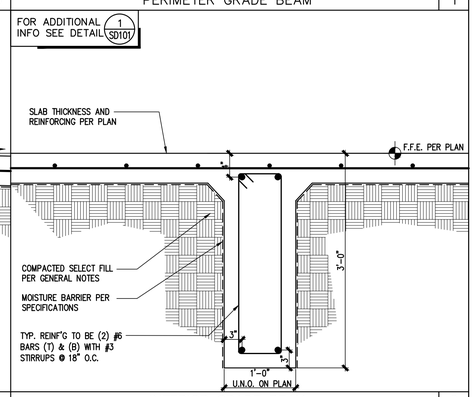
DETAIL | 5



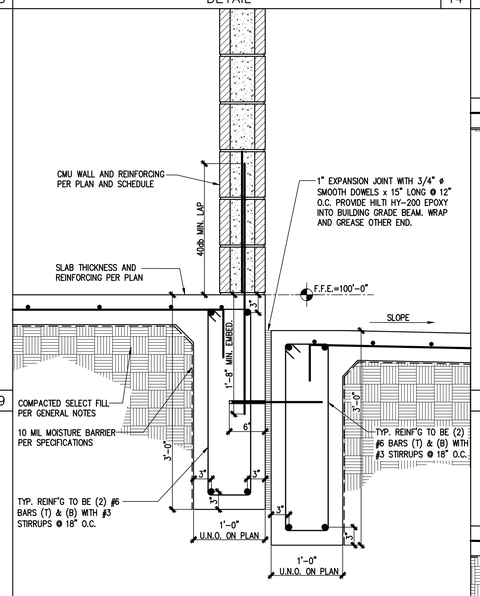
PERIMETER GRADE BEAM | 1



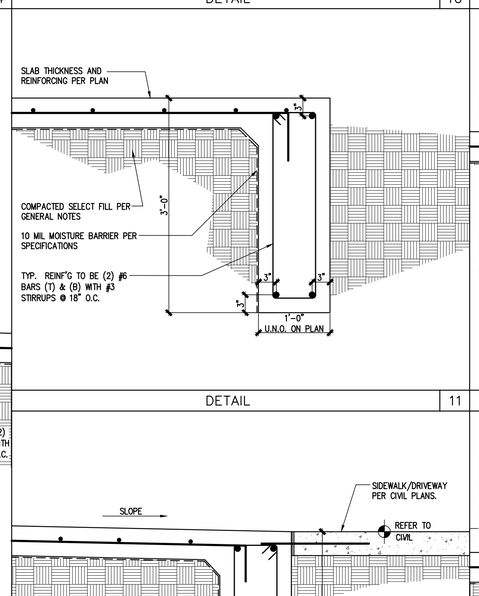
DETAIL | 6



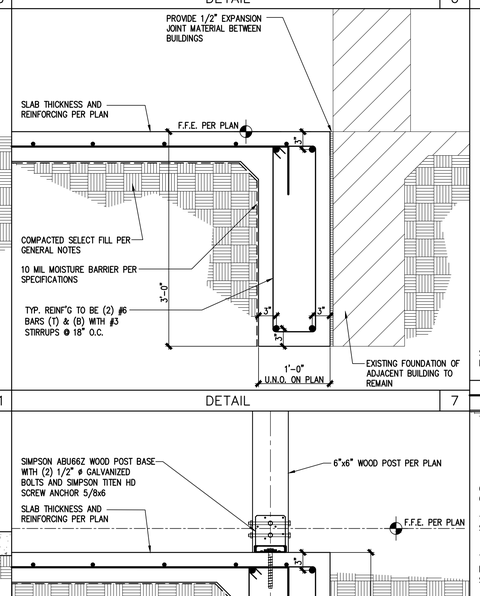
INTERIOR GRADE BEAM | 2



DETAIL | 16



DETAIL | 11



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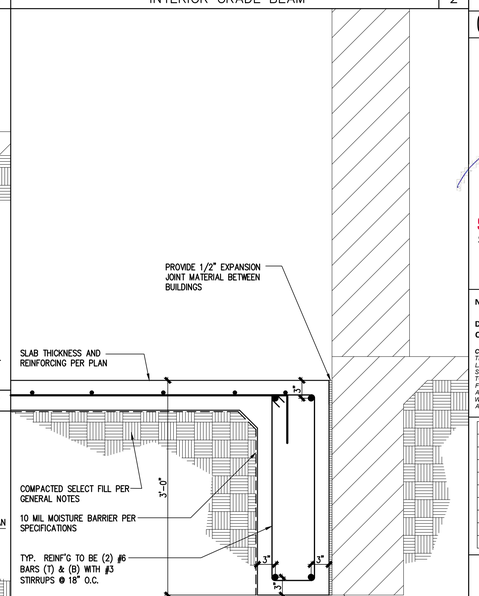

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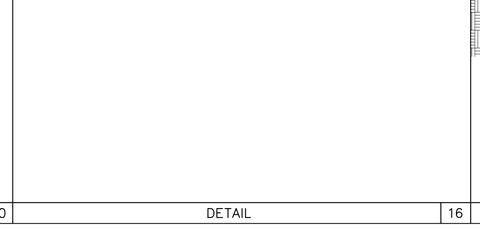

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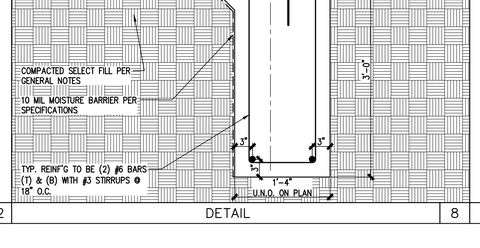

DETAIL | 8

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Date	OCTOBER 25, 2024.

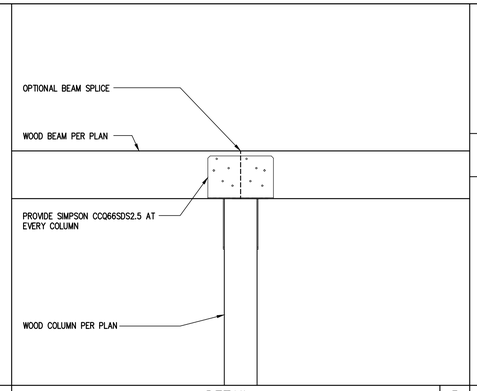
SD101

Scale

DETAIL 17

DETAIL 13

DETAIL 9



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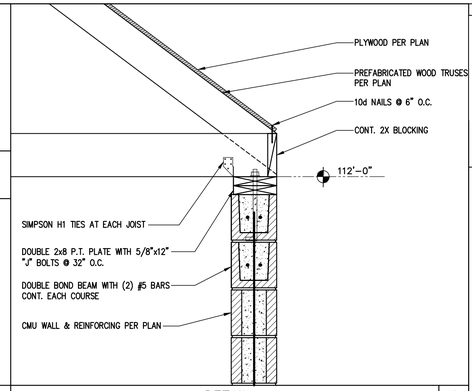
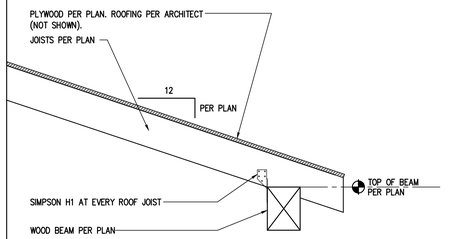


DETAIL 1

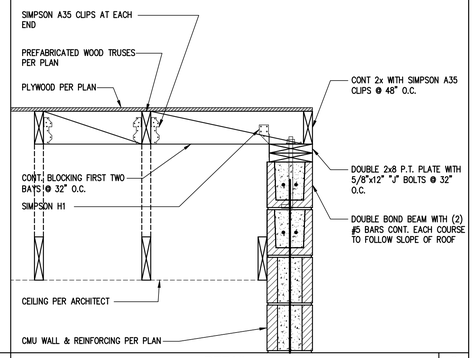
DETAIL 18

DETAIL 14

DETAIL 10



ROOF JOISTS BEARING ON WOOD BEAM 6



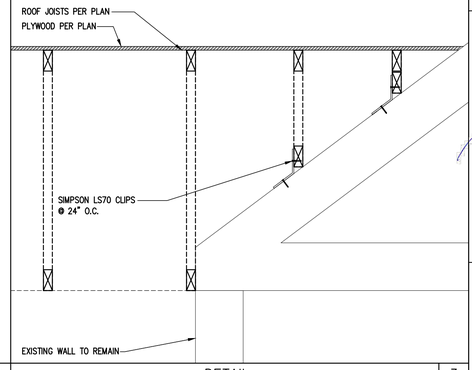
DETAIL 2

DETAIL 19

DETAIL 15

DETAIL 11

DETAIL 7



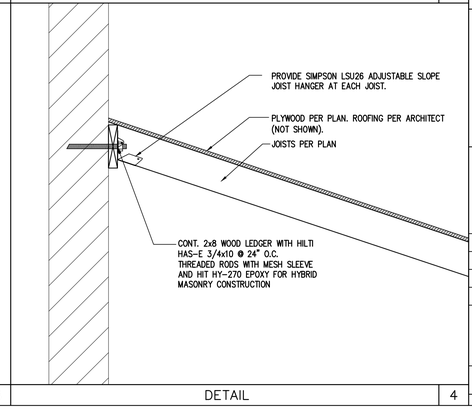
DETAIL 3

DETAIL 20

DETAIL 16

DETAIL 12

DETAIL 8



DETAIL 4

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SD201

Scale

GENERAL NOTES - MECHANICAL:

(1) THE MECHANICAL CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING THE WORK IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES UNDER THIS SECTION OF THE CONTRACT. IF THE CONTRACTOR DETERMINES THAT THE CONTRACT DOCUMENTS AND PLANS ARE NOT IN COMPLIANCE WITH THE APPLICABLE LOCAL CODES, HE/SHE SHALL INFORM THE ARCHITECT PRIOR TO CONSTRUCTION START FOR DIRECTION. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO MEET APPLICABLE LOCAL CODES, AND RE-WORK SHALL BE AT CONTRACTOR'S EXPENSE.

(2) CONTRACTOR SHALL HANG AND INSTALL ALL DUCTWORK FLUSH WITH THE BUILDING STRUCTURE TO ACCOMMODATE NEW CEILINGS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION WORK WITH ARCHITECTURAL AND ELECTRICAL DESIGN. ALL DUCTWORK SHALL BE MODIFIED AS NECESSARY AND REQUIRED TO FIT AROUND BUILDING STRUCTURES, ARCHITECTURAL BUILD-OUT AND ELECTRICAL CABLE TRAY INSTALLATIONS. MECHANICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK SCOPE OF OTHER TRADES AND PARTICIPATE IN COORDINATING ALL CONSTRUCTION EFFORTS.

(3) CONNECT EACH DIFFUSER TO THE MAIN DISTRIBUTION DUCTS WITH A FLEX-DUCT SECTION; CONNECTIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE DETAIL. EACH FLEX-DUCT CONNECTION SHALL INCLUDE A BUTTERFLY DAMPER TO BE INSTALLED AT THE TRUNK DUCT.

(4) CONTRACTOR SHALL PROVIDE ALL DUCTWORK REQUIRED TO COMPLETE THE HVAC SYSTEM. TIE IN BRANCH DUCTS TO MAIN DUCTS WITH SHEET METAL FLANGES. FLANGE CONNECTION SHALL BE FASTENED WITH CRIMPED SHEET METAL STRIPS AND SEALED WITH SILICONE CAULK.

(5) CONTRACTOR SHALL SUPPLY AND INSTALL FIRE DAMPERS AND ACCESS DOORS IN THE HORIZONTAL DUCTS WHERE THEY PENETRATE FIRE WALLS & BARRIERS.

(6) ALL OPENINGS CUT IN MASONRY AND PLASTER WALLS OR CONCRETE FLOORS SHALL BE CORE DRILLED OR SAWED WHEN POSSIBLE. CONTRACTOR SHALL CHECK BUILDING CONSTRUCTION BEFORE MAKING PENETRATIONS TO AVOID CUTTING THROUGH STRUCTURAL BEAMS AND REINFORCING. CONTRACTOR SHALL INFORM THE ENGINEER IF REINFORCING IS CUT OR DAMAGED WHILE MAKING OPENINGS. CONTRACTOR SHALL REINFORCE ALL OPENINGS AS REQUIRED BY DRAWINGS AND SPECIFICATIONS. PATCH AND SEAL OPENINGS WITH 8000 PSI CEMENT GROUT. INSTALL DECORATIVE TRIM (EQUIPMENT FLANGES, FRAMING OR ESCUTCHEONS) AROUND OPENINGS IN FINISHED AREAS. COORDINATE ALL CUTTING AND PATCHING WITH THE OTHER TRADES

(7) ON ANY WORK SHOWN ON MECHANICAL DRAWINGS REQUIRING DEMOLITION OF EXISTING OR NEW BUILDING STRUCTURES AND FINISHES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE THE NECESSARY DEMOLITION. CONTRACTOR SHALL PATCH AND REPAIR ALL DEMOLITION WORK. PATCHING SHALL BE COMPLETED WITH THE SAME MATERIALS AS THE SURROUNDING AREAS, OR WITH ARCHITECT-APPROVED PATCHING MATERIALS. REPAIRS SHALL BE COMPLETED ACCORDING TO ARCHITECTURAL SPECIFICATIONS. ALL REFINISHING SHALL BE APPROVED BY THE ARCHITECT.

(8) CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE INSTALLATION OF THE AIR DISTRIBUTION SYSTEM SHOWN. DUCTWORK, DUCT ACCESSORIES AND CONTROLS SHOWN AND REQUIRED SHALL BE SUPPLIED AND INSTALLED. ALL INSTALLATION WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE CODES, INCLUDING NFPA 90A AND 90B.(NFPA 90A: STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATING SYSTEMS.(NFPA 90B: STANDARD FOR THE INSTALLATION OF WARM AIR HEATING AND AIR-CONDITIONING SYSTEMS)

(9) CONTRACTOR SHALL BALANCE ALL AIR DISTRIBUTION SYSTEMS TO ACHIEVE THE AIR VOLUME REQUIREMENTS INDICATED. BALANCING SHALL INCLUDE ADJUSTMENT OF ALL MANUAL VOLUME DAMPERS, SHUTTER DAMPERS, ZONE DAMPERS (IF REQUIRED), BUTTERFLY DAMPERS AND INDIVIDUAL DIFFUSER VOLUME DAMPERS (FINAL BALANCING ONLY). CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A COMPLETE BALANCING REPORT WHICH INCLUDES, VOLUME, ROOM REFERENCE AND ZONE VOLUME TOTALS.

(10) MOUNT ALL THERMOSTATS (SENSORS) 48" ABOVE THE FINISHED FLOOR LEVEL. THERMOSTATS SHOWN SHALL BE IN CONTROL OF THE ZONE SYSTEM WHICH IS SUPPLYING AIR TO THE AREA WHERE THE THERMOSTAT IS LOCATED. CONTRACTOR SHALL SUPPLY AND INSTALL ALL CONTROL VOLTAGE WIRING AND CONDUIT FOR THERMOSTAT (DDC CONTROL) INSTALLATION.

(11) CONTRACTOR SHALL INSTALL NEW REFRIGERANT PIPING FLUSH WITH THE BUILDING STRUCTURE AND MECHANICAL ROOM BOUNDARIES AS SHOWN. CONTRACTOR SHALL COORDINATE ALL INSTALLATION WORK WITH DUCTS AND ELECTRICAL CONDUIT. MECHANICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK SCOPE OF OTHER TRADES AND PARTICIPATE IN COORDINATING ALL CONSTRUCTION EFFORTS.

(12) ALL PIPING SHALL BE INSULATED AND JACKETED. REFER TO THE SPECIFICATIONS. THE CONDENSING AND ROOF TOP CONDENSER COILS ARE TO BE COATED IN ACCORDANCE WITH THE SPECIFICATIONS.

(13) PROVIDE EACH HVAC SYSTEM OF 2000 CFM & GREATER W/ DUCT SMOKE DETECTOR(S) IN COMPLIANCE WITH IBC 907.2.13.1.2 & 907.3.1 IN RETURN AIR DUCTWORK TO SHUTDOWN CONTROLS ON AIR HANDLERS AND SUPPLY FANS. SMOKE DETECTORS SHALL BE PROVIDED BY MECHANICAL & INSTALLED BY ELECTRICAL (OR REGISTERED FIRE ALARM COMPANY WHERE APPLICABLE). COORDINATE W/ EQUIPMENT MANUFACTURER & AUTHORITY HAVING JURISDICTION FOR RECOMMENDED MOUNTING LOCATION AND METHOD. COORDINATE TO PROVIDE A COMPLETE SYSTEM. PROVIDE BOTH SUPPLY AND RETURN SIDE DEVICES.

(14) PROVIDE SEVEN DAY PROGRAMMABLE THERMOSTAT, 24 HOUR SINGLE/MULTI STAGE COMMERCIAL THERMOSTAT. DUAL SET POINTS, OCCUPIED AND UNOCCUPIED PERIODS, UNIT OPTIMIZATION, AUTO HEATING/COOLING AND AUTO CHANGE OVER. SUB-BASE BACK-UP BATTERY AND TEMPORARY OVER-RIDE. 24 VAC CONTROL VOLTAGE. PROVIDE PLASTIC SEE THRU PROTECTIVE COVER WITH KEY LOCK.

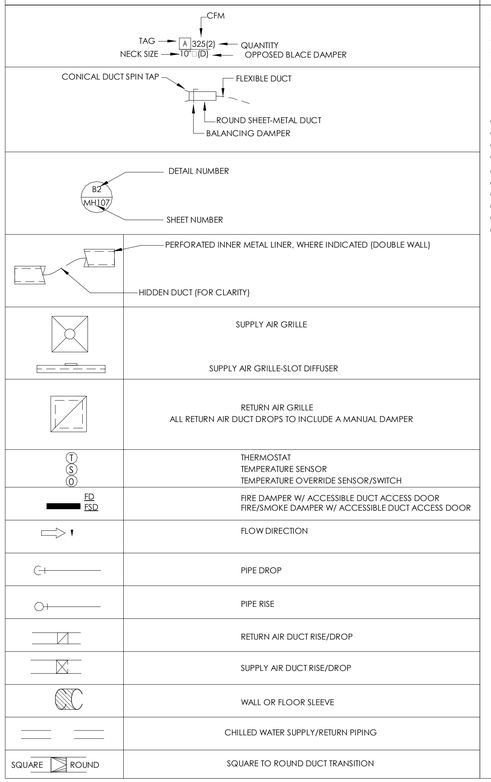
(15) **FILTER INSTALLATION AND REPLACEMENT**
- A. INSTALL CONSTRUCTION RETURN FILTER AT EACH RETURN GRILLE BEFORE OPERATING PERMANENT AIR HANDLERS DURING CONSTRUCTION.
- B. REPLACE FILTERS AFTER COMPLETING CONSTRUCTION AND BEFORE CONDUCTING BUILDING FLUSH-OUT.
  1. REPLACE CONSTRUCTION RETURN FILTERS WITH FLUSH-OUT RETURN FILTERS.
  2. REPLACE SUPPLY FILTERS.

(16) **PRIOR TO START UP**
- A. CONTRACTOR SHALL FOLLOW THE AIR CONDITIONING EQUIPMENT MANUFACTURER'S STARTUP CHECKLIST.
  1. CONTRACTOR SHALL MAKE SURE THAT ALL DUCTWORK IS CLEAN AND THAT FILTERS ARE PROVIDED FOR EACH UNIT. IF INTERIOR CONDITIONS ARE NOT CLEAN AND AIR BORN DUST IS STILL PRESENT, TEMPORARY FILTERS SHALL BE PROVIDED AT EVERY RETURN AIR GRILLE.

APPLICABLE BUILDING CODE

2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL PLUMBING ELECTRICAL CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL ENERGY CONSERVATION CODE
2018 INTERNATIONAL EXISTING BUILDING CODE
2017 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION
2018 INTERNATIONAL FIRE CODE
2012 TEXAS ACCESSIBILITY STANDARDS

MECHANICAL SYMBOL LEGEND



MECHANICAL ABBREVIATIONS

A/C	AIR CONDITIONED
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
BDD	BACK DRAFT DAMPER
BHP	BRAKE HORSEPOWER
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHP	CHILLED WATER PUMP
CLG	CEILING
CWP	CONDENSER WATER PUMP
CO	CLEANOUT
CT	COOLING TOWER
CU	CONDENSING UNIT
C/W	COLD WATER
CL	CENTER LINE
DB	DRY BULB
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
ELEC	ELECTRICAL
ELEV	ELEVATION
F	DEGREES FAHRENHEIT
FC	FAN COIL
FD	FIRE DAMPER W/ DUCT ACCESS DOOR
FLEX	FLEXIBLE
FLG	FLANGE
FLR	FLOOR
FPM	FEET PER MINUTE
FT	FEET, FOOT
FS	FLOW SWITCH
GAL	GALLON
GALV	GALVANIZED
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HP	HORSEPOWER
HR	HEAT PUMP (WATER SOURCE)
HR	HOUR
HVAC	HEATING/VENTILATING/ AIR CONDITIONING
HWP	HOT WATER PUMP
HZ	HERTZ
ID	INSIDE DIAMETER
IE	INVERT ELEVATION (FLOW LINE)
IN	INCHES
INSUL	INSULATION
IN WG	INCHES OF WATER
KW	KILOWATT(S)
LAT	LEAVING AIR TEMPERATURE
LB	POUND
L	LOUVER
MAX	MAXIMUM
MBD	MANUAL BALANCING DAMPER
MD	MOTORIZED DAMPER
MECH	MECHANICAL
MIN	MINIMUM
MS	MOTOR STARTER
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAH	OUTSIDE AIR INTAKE HOOD
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
P	PUMP
PBD	PARALLEL BLADE DAMPER
PP	PRIMARY CHILLED WATER PUMP
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSIG	POUNDS PER SQUARE INCH (GAUGE)
R	RETURN (AIR DEVICE)
RA	RETURN AIR
RE: 4M7.01	REFER TO DETAIL 4, SHEET M7.01
RET	RETURN
RH	RELATIVE HUMIDITY
RHD	RELIEF HOOD
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
S	SUPPLY (AIR DEVICE)
SA	SUPPLY AIR
SCH	SCHEDULE
SCHP	SECONDARY CHILLED WATER PUMP
SD	SMOKE DAMPER
SEC	SECOND
SF	SUPPLY FAN
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SF	SQUARE FOOT
STD	STANDARD
TEMP	TEMPERATURE
T'STAT	THERMOSTAT
TYP	TYPICAL
UF	UNDER FLOOR
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES
VEL	VELOCITY
VENT	VENTILATE
VF	VENTILATION FAN
VOL	VOLUME
VOLT	VOLTAGE
W	WIDE, WIDTH
W/	WITH
WB	WET BULB
W/O	WITHOUT

INDEX OF SHEETS MECHANICAL

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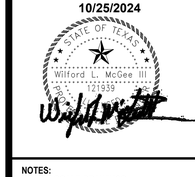

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KEY PLAN

MECHANICAL NOTES AND LEGEND

Drawn by:	Author
Checked by:	Checker
Project number:	23.4.37
Project Issue Date:	10/25/2024

MG-101

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

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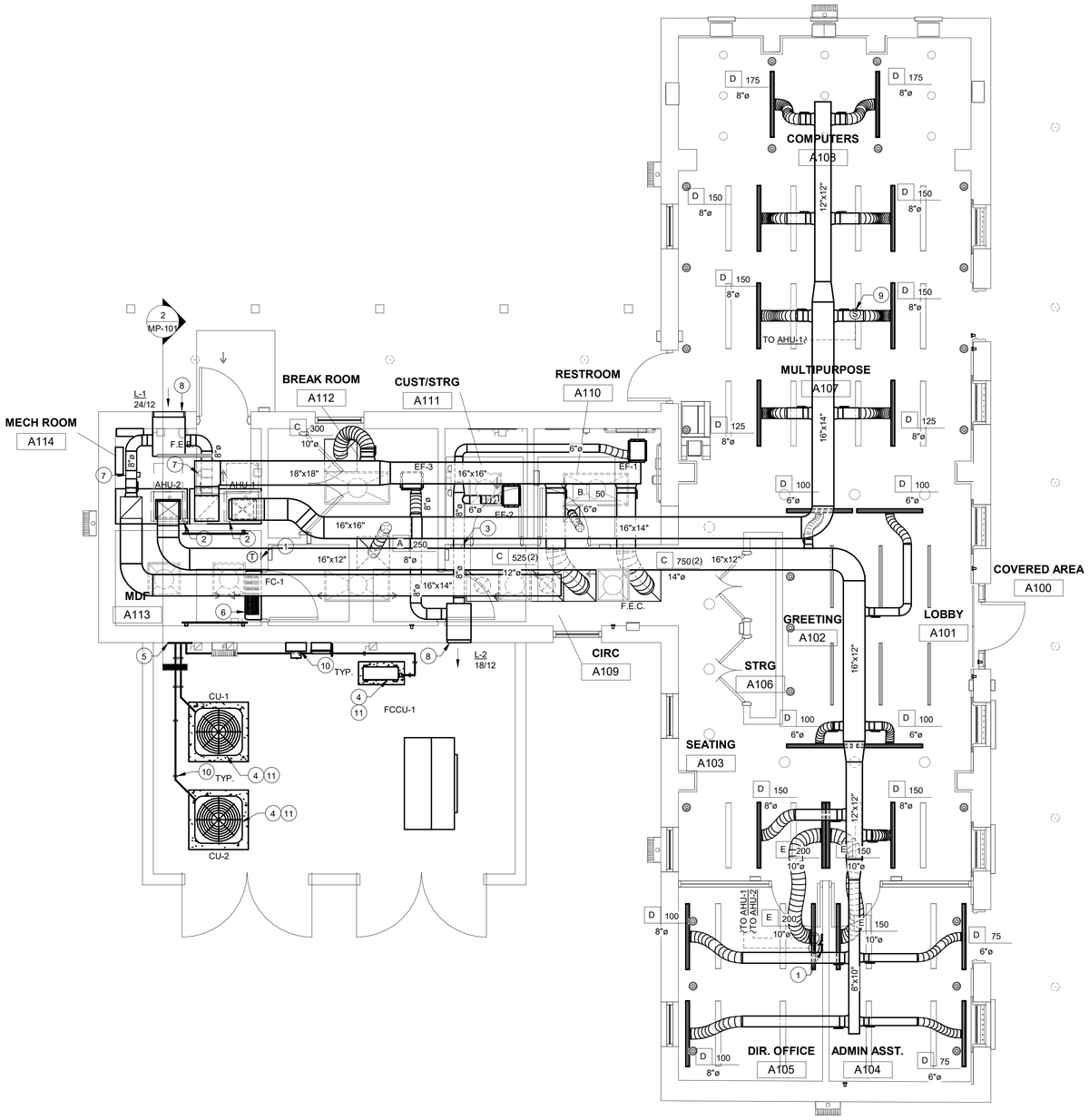
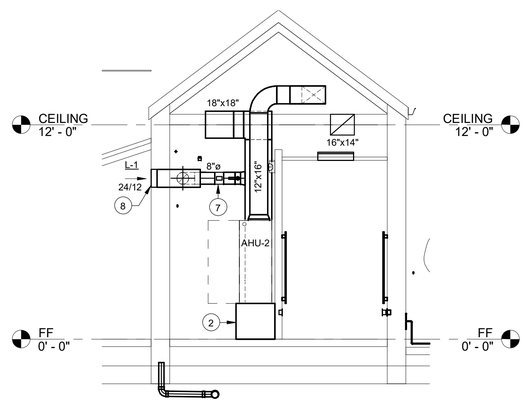


1 MECHANICAL FLOOR PLAN - FIRST FLOOR
1/4" = 1'-0"

MECHANICAL KEYED NOTES	
1	CONTROLS FOR A/C UNIT WILL BE BY MEANS OF A HVAC CONTROLS THERMOSTAT SHOWN ON A DIGITAL DISPLAY. MOUNT THERMOSTAT AT 48" ABOVE FINISHED FLOOR. PROVIDE WITH KEYED CLEAR PLASTIC COVER. EXISTING CONTROLS BY TRANE.
2	UNIT TO BE MOUNTED ON A 24" HIGH PLATFORM CONSTRUCTED OF 1-1/2" ANGLE IRON/1" SQUARE METAL TUBING. WRAP PLATFORM IN GALVANIZED SHEET METAL. LINE INTERIOR OF PLATFORM W/ 1" DUCT BOARD, W/ FOIL FACING AIRSTREAM. COAT INSIDE W/ MASTIC (TO FACILITATE CLEANING) & SEAL AIR TIGHT.
3	ROUND EXHAUST DUCT OUT TO LOUVER.
4	PLACE CONDENSING UNIT ON CONCRETE PAD. ANCHOR UNIT TO CONCRETE PAD AS SHOWN ON DETAIL.
5	PROVIDE W/ REFRIGERANT LINE WALL PENETRATION HOUSING/PANEL EQUAL TO "WALL VAULT" MADE BY "ROOF PENETRAITION HOUSINGS, LLC". WALL PANEL TO BE SIZED TO ACCOMMODATED REFRIGERANT LINES & CONDUIT, COORDINATE W/ ELECTRICAL. REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE SECURED WITH LOCK-TYPE TAMPER-RESISTANT CAPS OR SHALL BE OTHERWISE SCORED TO PREVENT UNAUTHORIZED ACCESS. PROVIDE ALUMINUM JACKETING ON ALL LINES EXTERIOR TO THE BUILDING.
6	MOUNT AIR CONDITIONING UNIT CENTERED ABOVE DOOR. REFER TO PLUMBING PAGES FOR CONDENSATE ROUTING.
7	PROVIDE W/ MOTORIZED DAMPER W/ OPEN/CLOSE OPERATION. DAMPER TO BE ACTUATED TO MAX ONLY WHEN COMPRESSOR OR HEATER IS ENERGIZED & ACTUATED TO THE CLOSED POSITION @ ALL OTHER TIMES. PROVIDE W/ ADDITIONAL MANUAL BALANCING DAMPER TO BALANCE CFM AMOUNTS OF OUTSIDE AIR. MECHANICAL CONTRACTOR TO PROVIDE W/ ANY ELECTRICAL HARDWARE TO POWER DAMPER.
8	COORDINATE LOCATION OF LOUVERS TO NOT CONFLICT WITH CONTROL JOINTS AND DOWNSPOUTS.
9	REMOTE TEMPERATURE SENSOR MOUNTED ON CEILING.
10	PROVIDE ALUMINUM PIPING SUPPORTS AT EVERY 4' FEET. PROVIDE ALUMINUM JACKETING ON ALL LINES EXTERIOR TO THE BUILDING.
11	COORDINATE FINAL LOCATION WITH EXISTING UTILITY EASEMENTS.



2 MECHANICAL ROOM SECTION
1/4" = 1'-0"

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KEY PLAN

MECHANICAL FLOOR PLAN

Drawn by:	Author
Checked by:	Checker
Project number:	23.4.37
Project Issue Date:	10/25/2024

MP-101

Scale: 1/4" = 1'-0"

AIR HANDLING UNIT SCHEDULE

TAG	AHU-1	AHU-2
TYPE	SNGL ZN VAV	SNGL ZN VAV
FLOW CONFIGURATION	VERTICAL	VERTICAL
AREA SERVED	MULTI/ COMPUTERS	DIR. GREETING
INDOOR UNIT FAN		
SUPPLY CFM	1550	1050
MIN. OUTSIDE AIR (CFM)	150	150
EXT. STATIC INCHES WC	0.5	0.5
MIN FAN POWER	3/4 HP - ECM	3/4 HP - ECM
INDOOR UNIT COOLING COIL		
ENTERING AIR DB/WB (°F)	76.8/63.1	78.3/63.9
LEAVING AIR DB/WB (°F	54.4/53	56/53.9
MIN. TOTAL/SENSIBLE CAPACITY (MBH)	39.8/33.6	30.1/24.9
DESIGN RETURN AIR DB/WB (°F)	73/61	73/61
DESIGN OUTSIDE AIR DB/WB (°F)	111/79	111/79
INDOOR UNIT HEATING SELECTION		
HEATER TYPE/AMBIENT DESIGN DB (°F)	ELEC/30	ELEC/30
HEAT INPUT/STAGES	10.8 KW/1	7.2 KW/1
ENTERING/LEAVING DB (°F)	66/88	64/86
DETAILS AND ACCESSORIES		
VOLTAGE/PHASE	208/1	208/1
MCA/MOCP	73/80	48/50
MANUFACTURER	TRANE	TRANE
MODEL	GAM5B0C48	GAM5B0C48
NOMINAL UNIT SIZE TONNAGE	4.0 TONS	3.0 TONS
MAX WEIGHT (lbs)	175 LBS	175 LBS
NOTES	1-8	1-8

CONDENSING UNIT SCHEDULE

TAG	CU-1	CU-2
OUTDOOR UNIT ELECTRICAL		
VOLTAGE/PHASE	208/1	208/1
MCA/MOCP	28/45	18.4/30
DETAILS AND ACCESSORIES		
MIN COOL/HEAT EFFICIENCY	16 SEER/-	16 SEER/-
COMPRESSOR QTY/STAGE QTY	1/2	1/2
COOL/HEAT AMBIENT DB (°F)	108/30	108/30
MANUFACTURER	TRANE	TRANE
MODEL	4TTR6048	4TTR6036
NOMINAL UNIT SIZE TONNAGE	4.0 TONS	3.0 TONS
MAX WEIGHT	325 lbs	325 lbs
NOTES	6-10	6-10

NOTES:
01. MECHANIC ADJUSTING CONTRACTOR TO PROVIDE ADDITIONAL BELTS & PULLEYS AS NECESSARY SUCH THAT TESTING & BALANCING CAN BE PERFORMED TO THE DESIGN AIR VOLUMES SPECIFIED IN SCHEDULE ABOVE.
02. PROVIDE W/ 2" EZ FILTER RACK BENEATH UNIT.
03. PROVIDE W/ LIQUID LINE FILTER-DRIER, SIZED AT TWICE THE SIZE OF MINIMUM SIZE RECOMMENDATION. LOCATE FILTER-DRIER INSIDE OF AHU/MECH RM, WITHIN 3' OF AHU METERING DEVICE. PROVIDE W/ SIGHT GLASS BETWEEN FILTER-DRIER & METERING DEVICE.
04. PROVIDE AUXILIARY DRAIN PAN W/ CUTOFF FLOAT SWITCH WIRED TO T-STAT. PROVIDE W/ SINGLE POINT POWERED CONDENSATE PUMP. REFER TO PLUMBING SHEETS FOR CONDENSATE ROUTING.
05. PROVIDE W/ FACTORY DUCT SMOKE DETECTOR. REFER TO MANUFACTURER'S INTALLATION MANUAL FOR INSTRUCTIONS. TO BE MOUNTED & WIRED BY MECH CONTRACTOR.
06. PROVIDE W/ SINGLE POINT PWR; TRANE, CARRIER, LENNOX, ACCEPTABLE MFGs.
07. CLEARANCES & SA/RA COLLARS SHOWN ON PLANS ARE FOR SCHEDULED MAKE/MODEL. IF A SUBSTITUTION IS MADE, CONTRACTOR TO BE RESPONSIBLE FOR PROVIDING SA/RA DUCTWORK & CLEARANCES AS PER SUBSTITUTED MANUFACTURER'S REQUIREMENTS.
08. PROVIDE W/ SINGLE ZONE VAV CONTROL.
09. PROVIDE CONDENSER W/ FACTORY HAIL GUARDS & RUBBER ISOLATOR MOUNTING KIT.
10. PROVIDE CONDENSER COIL W/ FACTORY APPROVED E-COAT.

DX MINI-SPLIT SCHEDULE

INDOOR UNIT TAG	FC-1
SERVES	MDF ROOM
LOCATION	WALL
UNIT TYPE	COOLING ONLY
FAN PROPERTIES	
MIN SUPPLY (CFM)	400
MINIMUM O/A (CFM)	0
UNIT CAPACITIES	
ENTERING AIR (DB/WB)	74/62
TOTAL CAPACITY (BTUH	9,000
HEATING CAPACITY (BTUH)	0
UNIT DETAILS	
VOLTAGE/PHASE	208/1
MANUFACTURER	DAIKIN
MODEL NO.	FTK09NMVJU
MAX WEIGHT (LBS)	25
CONDENSING UNIT TAG	**FCCU-1**
DETAILS	
VOLTAGE/PHASE	208/1
MCA/MOCP	13/15
AMB. AIR TEMP. (CLG°F/HTG°F)	100/33
REFRIGERANT	R-410A
COOLING MODE OPER. RANGE	15°F - 110°F
HEATING MODE OPER. RANGE	N/A
MANUFACTURER	DAIKIN
MODEL NO.	RK09NMVJU
MAX WEIGHT (LBS)	75
MIN COOL/HEAT EFFICIENCY	19 SEER/-
MIN EQUIV. LINE LENGTH (FT)	65
MIN VERTICAL RISE (FT)	45
CONTROL TYPE	WL-RC
NOTES	ALL

NOTES:
01. ELECTRICAL CONTRACTOR TO PROVIDE SINGLE CIRCUIT POWER FROM SERVICE TO OUTDOOR UNIT & WIRE TO INDOOR UNIT.
02. PROVIDE W/ WIRED WALL MOUNTED THERMOSTAT W/ OFF-AUTO-ON FUNCTIONALITY. FAN COIL TO BE SET TO AUTO (TURNS FAN OFF WHEN SET-POINT IS REACHED).
03. PROVIDE INDOOR UNITS WITH MOUNTING BRACKETS IF REQUIRED.
04. SEE PLUMBING FOR CONDENSATE ROUTING.
05. CONTRACTOR TO PROVIDE ROOF CURB TO ANCHOR CONDENSER TO.
06. CONTRACTOR TO PROVIDE LINE SETS.
07. SIGHT GLASSES, FILTER DRYERS, & FIELD SUPPLIED EXPANSION VALVES ARE NOT TO BE USED ON THIS EQUIPMENT.
08. INSTALL PER MANUFACTURERS INSTRUCTIONS & PIPING RECOMMENDATIONS.
09. PROVIDE W/ SINGLE POINT POWERED CONDENSATE PUMP. REFER TO PLUMBING SHEETS FOR ROUTING.

FAN SCHEDULE

TAG	EF-1	EF-2	EF-3
SERVICE	RR	CUSTODIAL	BREAKROOM
LOCATION	CEILING	CEILING	CEILING
FAN PROPERTIES			
CFM	75	50	150
FAN RPM	900	613	1287
EXT SP (IN WG)	0.15	0.2	0.25
FAN MOTOR SIZE	18 W	12 W	37 W
VOLTS/PHASE	120/1	120/1	120/1
SOUND LEVEL	0.6 SONE	0.7 SONES	1.5 SONES
MOUNTING	CEILING	CEILING	CEILING
MANUFACTURER	GREENHECK	GREENHECK	GREENHECK
MODEL	SP-B80	SP-B70	SP-A190
MAX WEIGHT	25 lbs	25 lbs	50 lbs
NOTES	1-5	1-5	1-3,6

NOTES:
01. PROVIDE WITH FACTORY INSTALLED DISCONNECT.
02. PROVIDE W/ FAN SPEED CONTROLLER
03. PROVIDE W/ BACKDRAFT DAMPER.
04. INTERLOCK FAN W/ LIGHTS.
05. PROVIDE W/ TIMED DELAY SHUTOFF
06. PROVIDE W/ WALL MOUNTED ROTARY TIMED DIAL SWITCH, 0-60 MINS, LABELED "VENT FAN".

LOUVER SCHEDULE

TAG	L-1	L-2
TYPE	INTAKE	EXHAUST
SERVICE	AHU-1,2	EF-1-3
DETAILS AND ACCESSORIES		
MAX CFM	300	275
LENGTH/HEIGHT (IN)	24/12	18/12
FREE AREA (SQ FT)	0.56	0.42
MAX VELOCITY (FPM)	540	660
MAX PRESSURE DROP (IN. H2O)	0.05	0.06
FINISH	1.2 mils 70% PVDF	1.2 mils 70% PVDF
INCLUDED SCREENS	BIRD	BIRD
ACTUATION TYPE	NONE	NONE
BORDER STYLE	2" FLANGE	2" FLANGE
MAUNUFACTURER	GREENHECK	GREENHECK
MODEL	EHH-401	ESD-202
NOTES	1,2	1,2

NOTES:
01. LOUVER OPENINGS TO BE SAW CUT.
02. SEAL OPENING WEATHER TIGHT.

AIR DEVICE SCHEDULE

TAG	A	B	C	D	E
SERVICE TYPE	SUPPLY	SUPPLY	RETURN	SUPPLY	RETURN
PHYSICAL PROPERTIES					
FACE SIZE	24"x24"	12"x12"	24"x24"	ONE 48"X2" SLOT	ONE 48"X2" SLOT
NECK SIZE	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS
MOUNTING SURFACE	CEILING	CEILING	CEILING	CEILING	CEILING
DETAILS AND ACCESSORIES					
DAMPER TYPE	OPPOSED BLADE	OPPOSED BLADE	OPPOSED BLADE	BUTTERFLY DAMPER	BUTTERFLY DAMPER
ACCESSORY	INSUL BACKPAN	INSUL BACKPAN	INSUL BACK PAN	INSUL PLENUM	INSUL PLENUM
COLOR FINISH	WHITE	WHITE	WHITE		
MATERIAL	STEEL	ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM
MANUFACTURER	PRICE	PRICE	PRICE	PRICE	PRICE
MODEL	SCD	ASCD	80	ASPI	SDR
NOTES				1,2	1,2

NOTES:
01. PROVIDE W/ FACTORY FULLY INSULATED ENGINEERED PLENUM. FIELD INSULATE END CAPS. PROVIDE W/ HARDWARE FOR MOUNTING ON SURFACE INDICATED ON PLANS.
02. COORDINATE COLOR OF AIR DEVICE & FRAME W/ ARCHITECT.

OUTSIDE AIR CALCULATIONS

BASED ON IMC 2018, SECTION 403, TABLE 403.3.1.1

AREA	OCCUPANT QUANTITY	REQ'D OA CFM/OCC	TOTAL OCC OA REQ'D	SQFT	REQ'D OA CFM/SQFT	TOTAL SQFT OA REQ/D	RM TOTAL OA REQ'D	TOTAL OA SUPPLIED
A108 COMPUTERS	7	5	35	240	0.06	14.4	49	
A107 MULTIPURPOSE	10	5	50	325	0.06	19.5	70	
A109 CIRC	0	0	0	75	0.06	4.5	5	
A110 RESTROOM	1	0	0	55	0	0	0	
A112 BREAKROOM	3	5	15	105	0.06	6.3	21	
TOTAL AHU-1	**21**			**800**			**145**	**150**

AREA	OCCUPANT QUANTITY	REQ'D OA CFM/OCC	TOTAL OCC OA REQ'D	SQFT	REQ'D OA CFM/SQFT	TOTAL SQFT OA REQ/D	RM TOTAL OA REQ'D	TOTAL OA SUPPLIED
A102 GREETING	4	5	20	145	0.06	8.7	29	
A103 SEATING	4	5	20	170	0.06	10.2	30	
A104 ADMIN ASST.	1	5	5	107	0.06	6.42	11	
A105 DIR. OFFICE	1	5	5	107	0.06	6.42	11	
TOTAL AHU-2	**10**			**529**			**82**	**150**

AIR BALANCE SCHEDULE

MARK	O.A. IN (+)	E.A. OUT (-)	BALANCE (+/-)
AHU-1	150		
AHU-2	150		
EF-1		75	
EF-2		50	
EF-3		150 (INTERMITTENT)	
TOTAL	**300**	**125**	**(+) 175**

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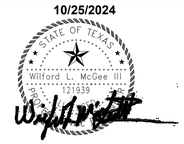

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Texas Registered Engineering Firm - F10362
Project number: 23.4.37

KEY PLAN

MECHANICAL SCHEDULES

Drawn by:	Author
Checked by:	Checker
Project number:	23.4.37
Project Issue Date:	10/25/2024

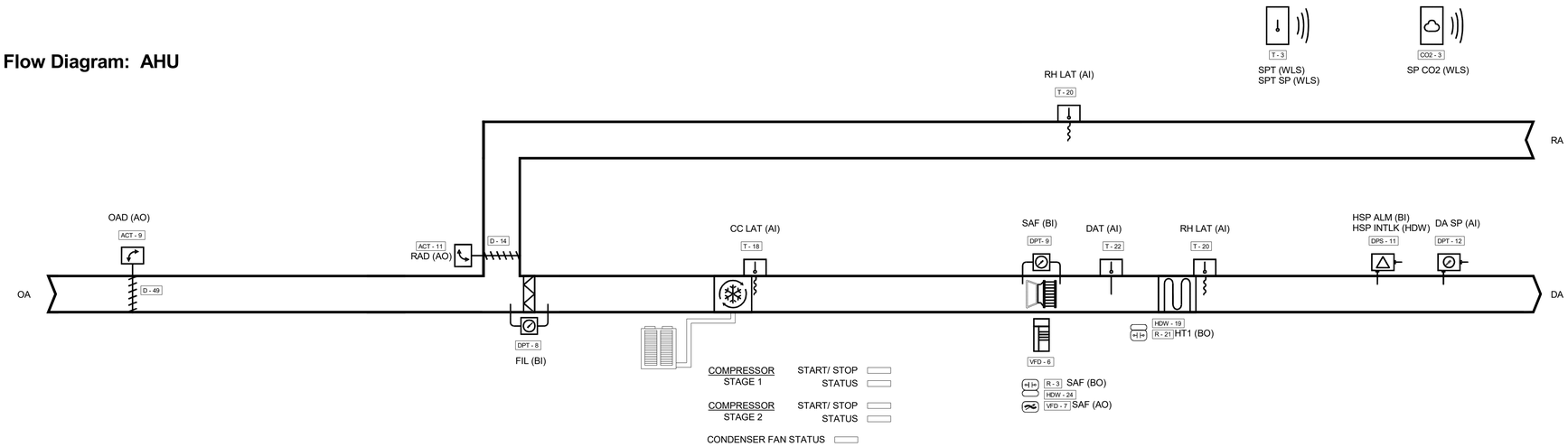
MS-101

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

Autodesk Docs://LC Veterans Center/23.4.37_LC Veterans Center_MEP CLOUD 2025.rvt

10/31/2024 4:39:04 PM

Flow Diagram: AHU



Sequence of Operation: AHU

Building Automation System Interface:

The Building Automation System (BAS) shall send the controller Occupied Bypass, Morning Warm-up/Pre-Cool, Occupied/Unoccupied and Heat/Cool modes. If a BAS is not present, or communication is lost with the BAS the controller shall operate using default modes and setpoints.

Occupied:

During occupied periods, the supply fan shall be commended on/ off switch with a call for cooling/ heating and the mixed air dampers shall open to maintain minimum ventilation requirements.

The DX cooling and the electric heat shall control to maintain the active discharge air temperature setpoint. The discharge air temperature setpoint shall be dynamically reset based on the deviation of actual space temperature from the active space temperature setpoint. If the discharge air temperature sensor fails, the DX cooling and the electric heat shall control to maintain the active space temperature setpoint and an alarm shall annunciate at the BAS. If the discharge air temperature sensor and the space temperature sensor fail, the DX cooling and electric heat shall be disabled and an alarm shall annunciate at the BAS.

Unoccupied:

When the space temperature is below the unoccupied heating setpoint of 60.0 deg. F (adj.) the supply fan shall start, the outside air damper shall remain closed and the electric heat shall be enabled. When the space temperature rises above the unoccupied heating setpoint of 60.0 deg. F (adj.) plus the unoccupied differential of 4.0 deg. F (adj.) the supply fan shall stop and the electric heat shall be disabled.

When the space temperature is above the unoccupied cooling setpoint of 85.0 deg. F (adj.) the supply fan shall start, the outside air damper shall remain closed and the DX cooling shall be enabled. When the space temperature falls below the unoccupied cooling setpoint of 85.0 deg. F (adj.) minus the unoccupied differential of 4.0 deg. F (adj.) the supply fan shall stop, the DX cooling shall be disabled and the outside air damper shall remain closed.

Optimal Start:

The BAS shall monitor the scheduled occupied time, occupied space setpoints and space temperature to calculate when the optimal start occurs.

Optimal Stop:

The BAS shall monitor the scheduled unoccupied time, occupied setpoints and space temperature to calculate when the optimal stop occurs. When the optimal stop mode is active the unit controller shall maintain the space temperature to the space temperature offset setpoint. Outside air damper shall remain enabled to provide minimum ventilation.

Occupied Bypass:

The BAS shall monitor the status of the ON and CANCEL buttons of the space temperature sensor. When an occupied bypass request is received from a space sensor, the unit shall transition from its current occupancy mode to occupied bypass mode and the unit shall maintain the space temperature to the occupied setpoints (adj.).

Heat/Cool Mode:

When the space temperature rises above the occupied cooling setpoint the mode shall transition to cooling. When the space temperature falls below the occupied heating setpoint the mode shall transition to heating. When the space temperature is above the occupied cooling setpoint or below the occupied heating setpoint the mode shall remain in its last state. If the space temperature sensor fails the mode shall remain in its last state and an alarm shall annunciate at the BAS. If the local and communicated setpoints fail the controller shall disable the supply fan and an alarm shall annunciate at the BAS.

Morning Warm-Up Mode:

During optimal start, if the space temperature is below the occupied heating setpoint a morning warm-up mode shall be activated. When morning warm-up is initiated the unit shall enable the heating and fan(s). The outside air damper shall remain closed. When the space temperature reaches the occupied heating setpoint (adj.), the unit shall transition to the occupied mode.

Daytime Warm-Up Control:

During Occupied periods, when the space temperature is below the Daytime Warm-up Initiate setpoint, a daytime warm-up sequence shall be activated. The outside air damper shall modulate to maintain minimum ventilation requirements, and the heating shall enable to maintain the discharge air temperature heating setpoint. Daytime Warm-up shall terminate when the average space temperature reaches the Occupied heating setpoint.

Pre-Cool Mode:

During optimal start, if the space temperature is above the occupied cooling setpoint, pre-cool mode shall be activated. When pre-cool is initiated the unit shall enable the fan and cooling. The outside air damper shall remain closed. When the space temperature reaches occupied cooling setpoint (adj.), the unit shall transition to the occupied mode.

Demand Control Ventilation:

Using a space CO2 input (local sensor or network communicated value), the controller shall monitor and compare the measured space CO2 to the space CO2 concentration setpoint (adj.). When the measured space CO2 concentration reaches the setpoint (adj.), the outside air damper shall modulate open incrementally until the space CO2 level is satisfied or the outside air damper reaches the full open position. If the measured CO2 concentration falls, the outside air damper shall modulate toward minimum outdoor air position setpoint.

Discharge Air Temperature Reset Control:

On a rise in space temperature (+2.0 deg. F adj. or greater) above the space cooling setpoint (74.0 deg. F adj.); the supply fan speed shall modulate from minimum (50% adj.) to maximum (or design) air flow to maintain space cooling temperature setpoint while keeping the discharge air temperature setpoint at minimum (55.0 deg. F adj.).

As space temperature decreases below 76.0 deg. F (space cooling setpoint 74.0 deg. F + 2.0 deg. F); the fan speed shall be locked at minimum air flow and the discharge air temperature setpoint remains at minimum.

When space temperature decreases to 75.0 deg. F (cooling setpoint of 74.0 deg. F adj. + 1.0 deg. F) or below for a period of time (default 1 min. adj.); the fan speed shall remain at minimum, the discharge air temperature setpoint remains at minimum, and control enters into discharge air temperature setpoint reset mode.

As space temperature continues to drop below 75.0 deg. F (space temperature cooling setpoint + 1.0 deg. F); the fan speed shall remain at minimum and the discharge air temperature setpoint shall be reset from minimum (55.0 deg. F adj.) to maximum (65.0 deg. F adj.) as space temperature drops from 75.0 deg. F to 74.0 deg. F to maintain the space cooling temperature setpoint.

On a continued drop of space temperature below the space cooling temperature setpoint (74.0 deg. F adj.) through (71.0 deg. F adj.) the space temperature control shall be within its deadband; the fan speed remains at minimum and discharge air setpoint of (65.0 deg. F adj.) for cooling.

As space temperature decreases towards the heating setpoint (71.0 deg. F adj.) the control shall switch to the heating discharge air temperature reset. In the heating mode, the heat shall be enabled; the supply fan shall remain at minimum air flow and the discharge air temperature setpoint shall be reset from 70.0 deg. F to 90.0 deg. F as the space temperature drops from 71.0 deg. F to 70.0 deg. F.

As space temperature continues to decrease towards the heating setpoint (71.0 deg. F adj.) - 1.0 deg. F; the discharge air temperature setpoint shall remain at maximum (90.0 deg. F adj.), the fan shall be modulated from minimum to maximum air flow to maintain the space temperature heating setpoint.

When the space temperature increases the reverse control shall be implemented.

Supply Fan:

The unit controller shall vary the supply fan speed to optimize minimum fan speed in all cooling and heating modes.

Building Pressure Control (Relief Air):

After the fan startup delay expires, building static pressure shall be controlled by modulating the Outside Air Damper. As building pressure increases over the building pressure setpoint (adj.), the damper shall modulate closed. If the building pressure falls below the setpoint, the damper shall modulate open.

Mixed Air Low Limit:

The initial damper opening rate shall be limited to 2% per minute (adj.) until the damper has reached its minimum ventilation position. The outside air damper shall modulate to a position less than the minimum damper position if the mixed air temperature drops below 50.0 deg. F (adj.). If the mixed air temperature sensor fails an alarm shall annunciate at the BAS and the outside air damper shall return to the minimum position.

Condensate Overflow Monitoring:

If the condensate level reaches the trip point, a condensate overflow diagnostic shall annunciate at the BAS. To prevent the condensate drain pan from overflowing and causing water damage to the building the fan shall be disabled and the DX cooling shall be disabled.

Filter Status:

A differential pressure switch shall monitor the differential pressure across the filter(s) when the fan is running. If the switch closes during normal operation a dirty filter alarm shall annunciate at the BAS.

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10/25/2024

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NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

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KEY PLAN

MECHANICAL CONTROLS

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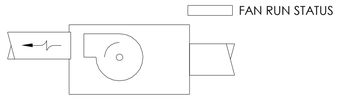
MC-101

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

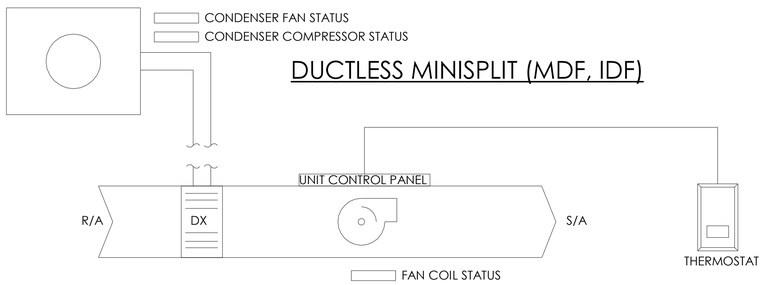
EXHAUST FANS



EXHAUST FAN CONTROLS:

A. EXHAUST FAN OPERATION SHALL BE DICTATED BY THE BAS SYSTEM UNDER A TIME OF DAY SCEHDULE UNLESS INTERLOCKED WITH AN AIR HANDLER SYSTEM IN WHICH CASE THE AIR HANDLER OF OPERATION SHALL DICTATE OPERATION. THE FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, AFTER THE DAMPER STATUS HAS PROVEN (IF APPLICABLE), UNLESS SHUTDOWN ON SAFETIES. THE BAS SHALL MONITOR THE FAN STATUS.

B. ANY EXHAUST FAN CURRENTLY ON SWITCHES TO REMAIN, BUT NO TO BE DISABLED OUTSIDE OF OCCUPIED SCHEDULE.



DUCTLESS MINISPLIT (MDF, IDF)

SEQUENCE OF OPERATIONS: COMPUTER ROOM MONITORING

A. SPACE TEMPERATURE MONITORING: THE BAS CONTROLLER SHALL MONITOR THE COMPUTER ROOM SPACE TEMPERATURE AND GENERATE ALARM IF THE SPACE TEMPERATURE GOES OUT ± 2°F FROM NORMAL OPERATING SET POINT INITIALLY AT 72° F (ADJ.) VIA BMS SYSTEM.

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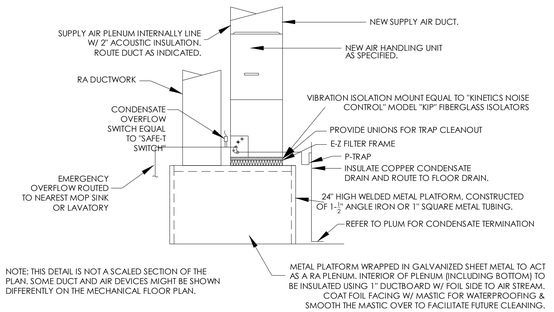
MC-102

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

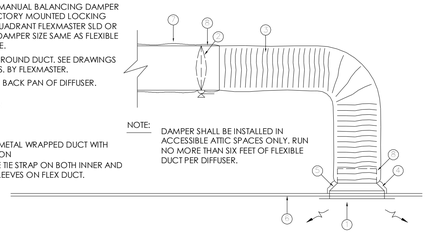
01



AIR HANDLING UNIT CONFIGURATION
NOT TO SCALE

02

1. CEILING DIFFUSER
2. ROUND MANUAL BALANCING DAMPER WITH FACTORY MOUNTED LOCKING HAND QUADRANT FLEXMASTER SLD OR EQUAL. DAMPER SIZE SAME AS FLEXIBLE DUCT SIZE.
3. FLEXIBLE ROUND DUCT. SEE DRAWINGS FOR SIZES. BY FLEXMASTER.
4. INSULATE BACK PAN OF DIFFUSER.
5. DIFFUSER
6. CEILING
7. ROUND METAL WRAPPED DUCT WITH INSULATION
8. PROVIDE TIE STRAP ON BOTH INNER AND OUTER SLEEVES ON FLEX DUCT.

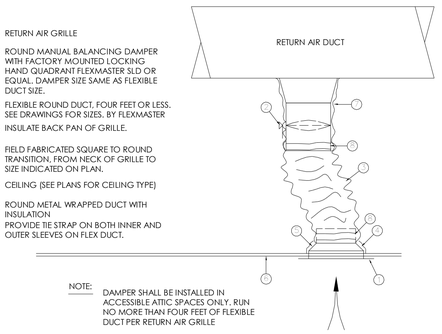


NOTE: DAMPER SHALL BE INSTALLED IN ACCESSIBLE ATTIC SPACES ONLY. RUN NO MORE THAN SIX FEET OF FLEXIBLE DUCT PER DIFFUSER.

DIFFUSER RUN OUT DETAIL
NO SCALE

03

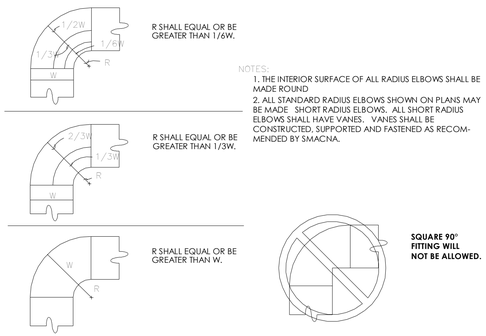
1. RETURN AIR GRILLE
2. ROUND MANUAL BALANCING DAMPER WITH FACTORY MOUNTED LOCKING HAND QUADRANT FLEXMASTER SLD OR EQUAL. DAMPER SIZE SAME AS FLEXIBLE DUCT SIZE.
3. FLEXIBLE ROUND DUCT. FOUR FEET OR LESS. SEE DRAWINGS FOR SIZES. BY FLEXMASTER
4. INSULATE BACK PAN OF GRILLE.
5. FIELD FABRICATED SQUARE TO ROUND TRANSITION. FROM NECK OF GRILLE TO SIZE INDICATED ON PLAN.
6. CEILING (SEE PLANS FOR CEILING TYPE)
7. ROUND METAL WRAPPED DUCT WITH INSULATION
8. PROVIDE TIE STRAP ON BOTH INNER AND OUTER SLEEVES ON FLEX DUCT.



NOTE: DAMPER SHALL BE INSTALLED IN ACCESSIBLE ATTIC SPACES ONLY. RUN NO MORE THAN FOUR FEET OF FLEXIBLE DUCT PER RETURN AIR GRILLE

RETURN AIR GRILLE ATTACHMENT DETAIL
NO SCALE

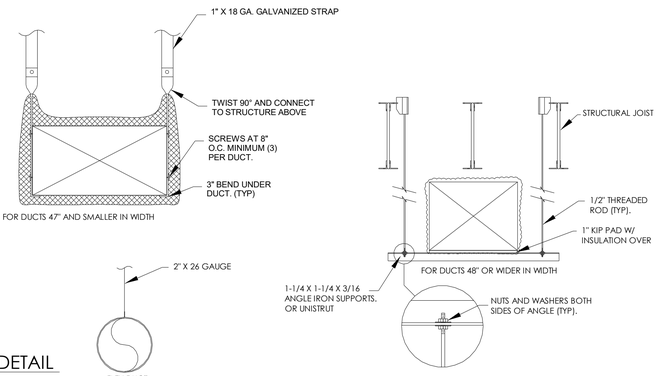
04



RADIUS DUCT ELBOW DETAIL
NO SCALE

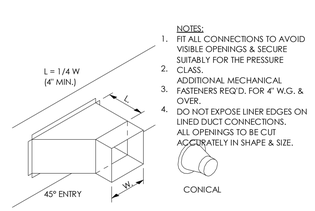
05

DUCT SUPPORT:
1. HANGER ATTACHMENTS TO STRUCTURE: SEE DIVISION 23 SECTION "HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT:. MINIMUM ROD OR BOLT SIZE ⅜(9MM).
2. SUSPEND HORIZONTAL GALVANIZED RECTANGULAR DUCTWORK 47" (1220MM) OR LESS IN LARGEST DIMENSION FROM CONSTRUCTION BY 1 INCH BY 18 GAUGE (25MM X 1.3MM) GALVANIZED STRAP HANGERS SCREWED 8 INCHES (200MM) O.C. TO DUCTS. USE THREE (3) SCREWS MINIMUM PER STRAP. BEND STRAP UNDER DUCT AND SCREW INTO BOTTOM OF DUCT.
3. SUSPEND HORIZONTAL RECTANGULAR STAINLESS STEEL AND COATED DUCTWORK 48" (1220MM) OR LESS IN LARGEST DIMENSION FROM CONSTRUCTION BY 1 INCH BY 18 GAUGE (25MM BY 1.3MM) GALVANIZED STEEL STRAP HANGERS BOLTED TO MATING FLANGES AT MINIMUM OF THREE LOCATIONS. (TOP,MIDDLE,BOTTOM).
4. DUCTS OVER 48" (1220MM) IN LARGEST DIMENSION SUPPORT FROM UNISTRUT, SUPERSTRUT, OR EQUAL. TRAPEZE HANGERS SIZED FOR THE LOAD, PER SMACNA STANDARDS.
5. SUPPORT ROUND STEEL DUCTWORK FROM CONSTRUCTION BY 1 INCH BY 18 GUAGE (25MM BY 1.3MM) GALVANIZED STRAP HANGERS WITH INSIDE RADIUS OF LOOP HANGER EQUAL TO OUTSIDE RADIUS OF DUCT. FOR DUCTS UNDER 12" DIAMETER, PROVIDE SUPPORTS 10 FEET (3CM) O.C; 12 FEET (3.6M) AND OVER, 6 FEET (1.8M) O.C. PROVIDE NOT LESS THAN ONE HANGER PER BRANCH AND AT EACH CHANGE OF DIRECTION.
6. SUPPORT ROUND FLEXIBLE DUCTWORK FROM CONSTRUCTION BY 2 INCHES BY 26 GAUGE (50 MM BY 0.55MM) GALVANIZED STRAP HANGERS WITH INSIDE RADIUS OF LOOP HANGER EQUAL TO OUTSIDE RADIUS OF DUCT. LOCATE SUPPORTS TO AVOID KINKS AND SHARP BENDS.
7. DOUBLE FOLD STRAPS AT ATTACHMENTS TO STRUCTURE.
8. SPACE HANGERS NOT OVER 96 INCHES (2440MM) ON CENTER FOR DUCTS SMALLER THAN 18 INCHES (457MM) IN LARGEST DIMENSION; 60 INCHES (1524MM) O.C. FOR DUCTS 18 INCHES (457MM) AND OVER.



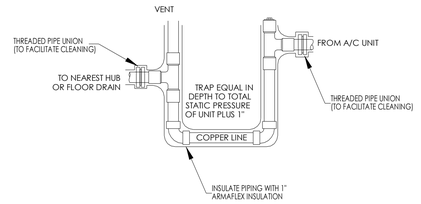
DUCT HANGER DETAIL
NO SCALE

06



BRANCH CONN. DETAIL
NO SCALE

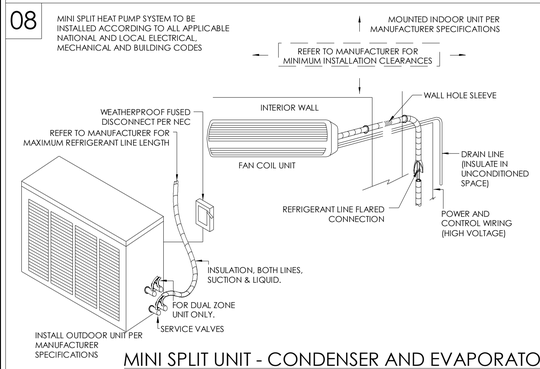
07



CONDENSATE TRAP DETAIL
NO SCALE

08

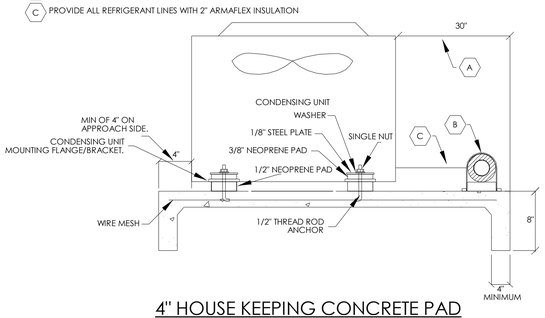
MINI SPLIT HEAT PUMP SYSTEM TO BE INSTALLED ACCORDING TO ALL APPLICABLE NATIONAL AND LOCAL ELECTRICAL, MECHANICAL AND BUILDING CODES



MINI SPLIT UNIT - CONDENSER AND EVAPORATOR
NO SCALE

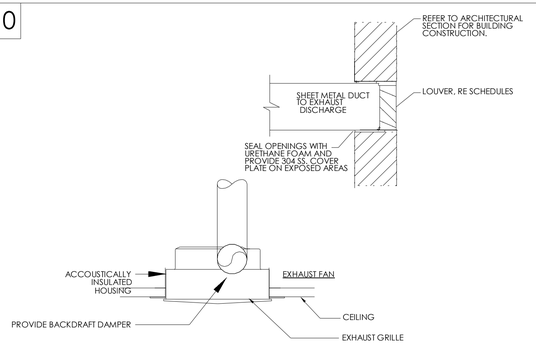
09

A. PROVIDE 30" MINIMUM FOR UNIT MAINTENANCE CLEARANCE AND REFRIGERANT LINE ROUTING
B. ANCHOR REFRIGERANT LINES WITH GALVANIZED UNISTRUT W/ PIPE CLAMP
C. PROVIDE ALL REFRIGERANT LINES WITH 2" ARMAFLEX INSULATION



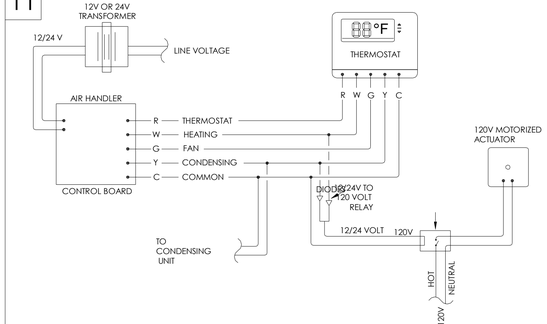
4" HOUSE KEEPING CONCRETE PAD
NO SCALE

10



CEILING MOUNTED EXHAUST FAN
NO SCALE

11



OUTSIDE AIR DAMPER WIRING DIAGRAM (120V)
NO SCALE

12

13

14

15

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MD-101

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ELECTRICAL LEGEND-LIGHTING

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SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

SYMBOL	DESCRIPTION
	2'X4' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	2'X4' LIGHT FIXTURE W/EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
	2'X2' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	2'X2' LIGHT FIXTURE W/EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
	1'X4' LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	TRACK LIGHT WITH HEADS AS INDICATED
	INCANDESCENT, LED, FLUORESCENT, OR HID WALL WASHER LIGHT FIXTURE CEILING MTD, REFER TO LUMINAIRE SCHEDULE
	INCANDESCENT, LED, FLUORESCENT, OR HID FIXTURE CLG. OR WALL MTD, REFER TO LUMINAIRE SCHEDULE
	LED, FLUORESCENT, OR HID FIXTURE WITH EMERGENCY BATTERY PACK. CLG. OR WALL MTD, REFER TO LUMINAIRE SCHEDULE
	EXIT LIGHT, CEILING OR WALL MOUNTED - SHADING INDICATING SINGLE OR DOUBLE FACE; DIRECTIONAL ARROWS AS INDICATED REFER TO LUMINAIRE SCHEDULE
	EXIT LIGHT SAME AS ABOVE, EXCEPT WITH AN EMERGENCY UNIT AS A COMBO, REFER TO LUMINAIRE SCHEDULE
	CEILING FAN
	STRIP UTILITY LIGHT FIXTURE, REFER TO LUMINAIRE SCHEDULE
	STRIP UTILITY STRIP LIGHT WITH EMERGENCY BATTERY PACK, REFER TO LUMINAIRE SCHEDULE
S	WALL SWITCH SPST, 20A,120/277V
S2	DOUBLE POLE TOGGLE SWITCH, 20A/120/277V
S3	3-WAY WALL SWITCH, 20A,120/277V
S4	4-WAY WALL SWITCH, 20A,120/277V
SD	WALL DIMMER SWITCH
SP	WALL SWITCH SPST, 20A,120/277V - PILOT LIGHT SWITCH
SK	WALL SWITCH SPST, 20A,120/277V - KEYED SWITCH, X = 3 OR 4 WAY

ELECTRICAL LEGEND-SPECIAL SYSTEMS

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SYMBOL	DESCRIPTION	
	WALL MOUNTED VOICE/DATA OUTLET, FURNISH AND INSTALL 1.25"C., WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING. +24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.	
	WALL MOUNTED VOICE OUTLET, FURNISH AND INSTALL 1"C , WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING. +24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.	
	WALL MOUNTED DATA OUTLET, FURNISH AND INSTALL 1.25"C , WITH PULLSTRING AND INSULATED BUSHING, STUBBED ABOVE CEILING. +24" UNLESS OTHERWISE NOTE. BOX TO BE MINIMUM 2 1/8" DEEP.	
P	PUBLIC TELEPHONE OUTLET.; J-BOX & 1"C	
	TELEVISION OUTLET. CLG. OR WALL MOUNTED - STUB 1" C. ABOVE CEILING FROM OUTLET BOX	
	PUSHBUTTON WALL MOUNTED.	
	AUDIO VIDEO DROP, REFER TO DETAIL	
	INTERCOM - CALL SWITCH- JBOX WITH 3/4"C	
S	INTERCOM/PAGING LAY-IN SPEAKER	
	PA EXTERIOR SPEAKER	10'-6" AFF
	SECURITY DOOR CONTACT SENSOR - STUB 1/2"C ABOVE CEILING FROM OUTLET BOX	
	SECURITY MOTION DETECTOR SENSOR - STUB 1/2"C ABOVE CEILING FROM OUTLET BOX	
	SECURITY GLASS BREAK SENSOR - STUB 1/2"C ABOVE CEILING FROM OUTLET BOX	
	SECURITY KEY PAD - STUB 3/4"C ABOVE CEILING FROM OUTLET BOX	
SEC	SECURITY PANEL JUNCTION BOX	54"
ACD	ACCESS CONTROL PANEL JUNCTION BOX - BY OTHERS	54"
	CARD READER BOX - STUB 3/4"C ABOVE CEILING LEVEL FROM OUTLET BOX SYSTEM BY OTHERS	----
	MAGNETIC LOCK BOX - STUB 3/4"C ABOVE CEILING LEVEL FROM OUTLET BOX SYSTEM BY OTHERS	----
	INTRUSION EXTERIOR SPEAKER	10'-6" AFF
C	SINGLE SIDED CLOCK, J-BOX W/3/4"C	96" AFF MIN.
C	DOUBLE SIDED CLOCK,J-BOX W/3/4"C	96" AFF MIN.
	CAMERA J-BOX W/ 3/4" CONDUIT	----
	TELEPHONE BOARD- 3/4"x8' FIRE RATED	

ELECTRICAL LEGEND-FIRE ALARM

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SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

SYMBOL	DESCRIPTION
F	FIRE ALARM PULL STATION: STUB 3/4"C ABOVE CEILING FROM J-BOX
AV	FIRE ALARM AUDIBLE/VISUAL SIGNAL: STUB 3/4"C ABOVE CEILING FROM J-BOX
V	FIRE ALARM VISUAL SIGNAL: STUB 3/4"C ABOVE CEILING FROM J-BOX
V S	FIRE ALARM CEILING MOUNT SPEAKER STROBE, UL LISTED, : J-BOX WITH 3/4"C
VS	FIRE ALARM CEILING WALL MOUNT OUTDOOR SPEAKER STROBE, UL LISTED, : J-BOX WITH 3/4"C
SD SD	FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED: STUB 3/4"C ABOVE CEILING FROM J-BOX
H	HEAT DETECTOR CEILING OR WALL MOUNTED: STUB 3/4"C ABOVE CEILING FROM J-BOX
SD	DUCT SMOKE DETECTOR: STUB 3/4"C ABOVE CEILING FROM J-BOX
SD A	SMOKE DETECTOR WITH AN AUDIBLE BASE: STUB 3/4"C ABOVE CEILING FROM J-BOX
FACP	FIRE ALARM CONTROL PANEL, ADDRESSABLE, SURFACE MTD UNO, INCLUDE A FIRE DOCUMENT BOX EQUAL TO MFR. SPACE AGE ELECTRONICS #FDB-ACE-11.
FACP-EVS	FIRE ALARM CONTROL PANEL WITH EMERGENCY VOICE SYSTEM, ADDRESSABLE, FLUSH MTD UNO, INCLUDE A FIRE DOCUMENT BOX EQUAL TO MFR. SPACE AGE ELECTRONICS #FDB-ACE-11.
EVES	FIRE ALARM EMERGENCY VOICE EVACUATION SYSTEM, FLUSH OR SURFACE.
FAAP	FIRE ALARM REMOTE ANNUNCIATOR PANEL, FLUSH MOUNTED UNO
PAD-X	POWER SUPPLY, DEDICATED 110V
DH	DOOR HOLDER DEVICE: STUB 3/4"C ABOVE CEILING FROM J-BOX
TS	TAMPER SWITCH: STUB 3/4"C ABOVE CEILING FROM J-BOX
FS	FLOW SWITCH: STUB 3/4"C ABOVE CEILING FROM J-BOX
F	FIRE ALARM OUTDOOR SPEAKER, WEATHER PROOF: STUB 3/4"C ABOVE CEILING FROM J-BOX

ELECTRICAL LEGEND-GENERAL

---ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS.
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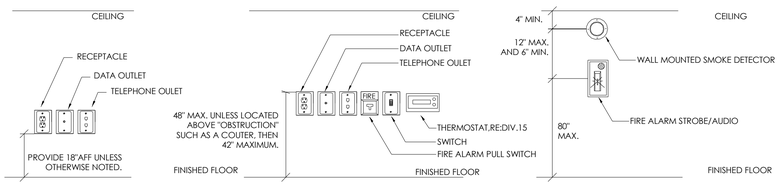
SYMBOL	DESCRIPTION
	HEAVY DUTY DISCONNECT SWITCH FUSED
	HEAVY DUTY DISCONNECT SWITCH NONFUSED
	HEAVY DUTY COMBINATION DISCONNECT/MOTOR STARTER
	HEAVY DUTY MOTOR STARTER
	ENCLOSED BREAKER, RE: TO SCH. FOR MORE INFO.
R	ROTARY TYPE DISCONNECT SWITCH
M	120/277-208/480V.20AMP, MOTOR RATED SWITCH, NEMA-1(INTERIOR) ENCLOSURE, NEMA-3R(EXTERIOR) ENCLOSURE. VOLTAGE TO BE SELECTED PER EQUIPMENT CIRCUIT REQUIREMENTS.
	MOTOR
	PANELBOARD, CLEARANCE AS PER LATEST NEC
	SWITCH LEG
	ELECTRICAL CONDUIT
	UNDERGROUND ELECTRICAL CONDUIT
	COMMUNICATION CONDUIT AND WIRING
X, X, X X/X/X	MULTI-POLE DEVICE CIRCUIT NUMBERS THREE SINGLE POLE DEVICE CIRCUIT NUMBERS
A-1	CONDUIT AND WIRE HOMERUN TO PANEL. SHORT HATCH INDICATES NEUTRAL CONDUCTOR, LONG HATCHES INDICATE PHASE CONDUCTORS. AND LONG HATCH WITH CIRCLE INDICATES ISOLATES OR INSULATED GROUND. ALPHANUMERIC DESCRIPTION INDICATES PANEL AND BREAKER.
A-1	UNDERGROUND CONDUIT AND WIRE HOMERUN TO PANEL. SHORT HATCH INDICATES NEUTRAL CONDUCTOR, LONG HATCHES INDICATE PHASE CONDUCTORS. AND LONG HATCH WITH CIRCLE INDICATES ISOLATED OR INSULATED GROUND. ALPHANUMERIC DESCRIPTION INDICATES PANEL AND BREAKER.
#	DETAIL NUMBER
#	SHEET NUMBER
	THERMOSTAT WALL MOUNTED - STUB 1/2"C ABOVE CEILING FROM OUTLET BOX. COORDINATE EXACT LOCATION AND HEIGHT WITH MECHANCIAL DIVISION.
J J	JUNCTION BOX - SIZE & MOUNTING AS REQUIRED MINIMUM OF 4" SQUARE
	PHOTO CELL(MFR.INTERMATIC #K4136M)
	LIGHTING CONTACTOR, NEMA-1, W/H.O.A. SWITCH
	TIME CLOCK (MFR.TORK#72002)
CP-1	CIRCULATING PUMP
	ELECTRICAL DEVICE AS SHOWN ON PLANS SURFACE MOUNT RACEWAY . SURFACE MOUNT RACEWAY SHALL BE WIREMOLD #V700 SERIES. PROVIDE ALL RELATED #V700 SERIES ACCESSORIES FOR AN OPERABLE SYSTEM.

MOUNTING HEIGHT DETAIL

NOTE: VERIFY WITH ARCHITECTURAL FOR **ADA REQUIREMENTS.**



ELECTRICAL ABBREVIATIONS:

ABBV:	DESCRIPTION	ABBV:	DESCRIPTION
AFF	ABOVE FINISHED FLOOR	MFR. (S.C.)	MANUFACTURER SHARE CIRCUIT
BFC	BELOW FINISHED CEILING	QRCPT(S)	QUAD RECEPTACLE(S)
C	CONDUIT	RCPT(S)	DUPLEX RECEPTACLE(S)
CB	CIRCUIT BREAKER	CRCPT(S)	I.G. RECEPTACLE(S)
EC	EMPTY CONDUIT	QCRCPT(S)	QUAD I.G. RECEPTACLE(S)
EX	EXISTING	PNL	PANEL
F	FUSE	SO (S.O.)	SPACE ONLY
G	GROUND (EQUIPMENT)	SP	SPARE
GFI	GROUND FAULT INTERRUPTER	ST (S.T.)	SHUNT TRIP
MTD	MOUNT OR MOUNTED	SW	SWITCH
NF	NONFUSED	UF	UNDERFLOOR
NIC	NOT IN CONTRACT	UG	UNDERGROUND
H.D	HEAVY DUTY	UNO(U.N.O.)	UNLESS NOTED OTHERWISE
NL	NIGHT LIGHT	WG	WIRE GUARD
AC	ABOVE COUNTER	WP	WEATHERPROOF
HT.	HEIGHT	XFMR	TRANSFORMER
MTD.	MOUNTING	MB	MAIN BREAKER
FDR.	FEEDER	MLO	MAIN LUGS ONLY
CKT.	CIRCUIT	RMC	RIGID METAL CONDUIT
LTG.	LIGHTING	RNC	RIGID NONMETALLIC CONDUIT
LC	LIGHTING CONTACTOR	EMT	ELECTRICAL METALLIC TUBING CONDUIT
IG	ISOLATED GROUND	S/N	SOLID NEUTRAL
EA.	EACH	AC	ABOVE COUNTER
N1	NEMA-1	AHJ	AHUTHORITY HAVING JURISDICTION
N3R	NEMA-3R	T	TAMPER PROOF
N4X	NEMA-4X		
SS	STAINLESS STEEL		

NOTES:

1.) 48" AFF INDICATES TO TOP OF DEVICE:
15" AFF INDICATES TO BOTTOM OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
AC INDICATES 6" ABOVE COUNTER TO BOTTOM OF DEVICE.

ELECTRICAL LEGEND - WIRING DEVICES

---ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS.
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	SINGLE RECEPTACLE - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RECEPTACLE - 20A/125V/2P/3W/G NEMA 5-20R
T	DUPLEX RECEPTACLE TAMPER RESISTANT - 20A/125V/2P/3W/G NEMA 5-20R
H H	HOSPITAL GRADE DUPLEX RECEPTACLE/GFI - 20A/125V/2P/3W/G NEMA 5-20R
	DUPLEX RCPT. GFI - 20A/125V/2P/3W/G NEMA 5-20R
WP/ "IN-USE"	DUPLEX RCPT.,WEATHER RESISTANT "WR", GFI INSTALLED IN A "IN-USE" WEATHER PROOF STEEL ENCLOSURE- 20A/125V/2P/3W/G NEMA 5-20R WP/"IN-USE" SHALL BE EQUAL TO MFR. CARLON. METALLIC SERIES SINGLE GANG, VERTICAL MOUNT #ME9UVMG DOUBLE GANG, VERTICAL MOUNT #ME9U2VMG
	QUADRAPLEX RECEPTACLE
	ISOLATED GROUND QUADPLEX RECEPTACLE
	ISOLATED GROUND DUPLEX RECEPTACLE - 20A/125V NEMA 5-20R
	208V RECEPTACLE, VERIFY NEMA NO. WITH EQUIPMENT SUPPLIER
	SPECIAL PURPOSE RECEPTACLE (NEMA NO. AS INDICATED)
	J-BOX - AIR HAND DRYER: (RECESSED HAND DRYERS TO BE PROVIDED BY DIVISION 16, ELECTRICAL) 120V MODEL #SLIMDRI AS MANUFACTURER BY WORLD DRYER. (COLOR WHITE) QUANITITY: REFER TO DRAWINGS (MIN. ONE PER LAV. COMPLETE W/ ELE. CONNECTIONS TYP.)
	4-GANG FLOOR MOUNTED BOX, 2-DUPLEX RECEPTACLE(INCLUDE RECEPTACLE WITH COVER PLATE)/2-GANG FOR DATA - FLUSH MOUNTED UNO FLOOR BOX = MFR.-HUBBELL MODEL#:CFB4G30RCR-CFBS18BCVRHKL[COVER]-[2]FBMPDUP-FBMP6KS -CFBH8B2(MULTISERVICE STEEL RECESSED FLOOR BOX -VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.
6G	6-GANG FLOOR MOUNTED BOX, 2-DUPLEX RECEPTACLE(INCLUDE RECEPTACLE WITH COVER PLATE)/2-GANG FOR DATA - FLUSH MOUNTED UNO FLOOR BOX = MFR.-HUBBELL MODEL#:CFB4G30RCR-CFBS18BCVRHKL[COVER]-[3]FBMPDUP-FBMP6KS -CFBH8B2(MULTISERVICE STEEL RECESSED FLOOR BOX-VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.
6P	6" FIRE RATED POKE-TRHOUGHS BOX, 2-DUPLEX RECEPTACLE(INCLUDE RECEPTACLE WITH COVER PLATE)-MFR.-HUBBELL MODEL#:S1R6PTFIT-S1R6SPE-S1R6SPL-S1R6SPH(50/50 DEVICE PLATE COMBINATION)-S1R6CVRALU[COVER) -VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.
6JP	6" FIRE RATED POKE-TRHOUGHS BOX, FURNITURE FEED.- MFR.-HUBBELL MODEL#:S1R6PTFFALU[ALUMINUM COVER) -VERIFY FLOOR FINISH PRIOR TO ORDER.
8P	8" FIRE RATED POKE-TRHOUGHS BOX, 2-DUPLEX RECEPTACLE(INCLUDE RECEPTACLE WITH COVER PLATE)-MFR.-HUBBELL MODEL#:S1R8PTFIT3-S1R8CSPK-S1R8CSPK-S1R8PSP2(50/50 DEVICE PLATE COMBINATION)-S1R8CVRALU[COVER) -VERIFY FLOOR FINISH PRIOR TO ORDER SAME BOX FOR DATA OUTLETS.

GENERAL ELECTRICAL NOTES

1. ALL SYMBOLS AND ABBREVIATIONS SHOWN ON THIS LEGEND MAY NOT APPEAR ON THIS SET OF DRAWINGS.
2. USE DIRECTIONAL ARROW ON EXIT SIGNS AS REQUIRED.
3. IEEE STANDARD C37.2-1991, ELECTRICAL POWER SYSTEM DEVICE FUNCTION NUMBERS.
4. CONTRACTOR SHALL NOT INSTALL MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A COMMON RACEWAY. IF CONTRACTOR IS PLANNING ON GROUPING MULTIPLE CIRCUITS IN A SINGLE RACEWAY, THE CONTRCATOR MUST SUBMIT ALL DERATING CALCULATIONS FOR THE PROPOSED INSTALLATION IN ACCORDANCE WITH NEC ARTICLE 310.15 (B) (2) FOR APPROVAL PRIOR TO INSTALLATION. NON APPROVED INSTALLATIONS WILL BE REMOVED AND REINSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE NEC AT NO ADDITIONAL COST TO THE OWNER.
5. THERE SHALL NOT BE MORE THAN THE EQUIVALENT OF THREE 90° BENDS (270 DEGREES TOTAL) BETWEEN PULL POINTS. WHERE THERE ARE MORE THAN THREE QUARTER BENDS, CONTRACTOR SHALL PROVIDE PULL BOXES AS SPECIFIED AND SIZED IN ACCORDANCE WITH NEC.
6. COMPLY WITH NEC REQUIREMENTS FOR ELECTRICAL INSTALLATIONS. ALL ELECTRICAL EQUIPMENT AND MATERIAL TO BE APPROVED, LISTED, LABELED, IDENTIFIED AND INSTALLED PER RECOGNIZED ELECTRICAL TESTING LABORATORY.
7. ALL RECEPTACLES, SWITCHES AND JUNCTION BOXES SERVED BY EMERGENCY BRANCH CIRCUITS SHALL BE "RED" IN COLOR. COVERPLATES SHALL BE LABELED IN ACCORDANCE WITH SPECIFICATIONS TO INDICATE PANELBOARD AND CIRCUIT NO. (IE: ET*LA-3).

ELECTRICAL: LIGHTING FUNCTIONAL TESTING / COMMISSIONING PLAN:

CONTRACTOR SHALL PERFORM THE TASK BELOW TO COMMISSION THE LIGHTING CONTROL SYSTEM. CONTRACTOR SHALL SUBMIT A DOCUMENTATION DETAILING THE LIGHTING CONTROL SYSTEM, SETTING/CONDITION. ACTIONS PERFORMED AND FINAL SETTING CONDITION. SUBMIT DOCUMENTATION AT OR BEFORE SUBSTANTIAL COMPLETION TO FACILITATE OBTAINING THE CERTIFICATE OF OCCUPANCY.

A. ENSURE ALL LIGHTING FIXTURES FIXTURES HAVE LAMPS INSTALLED AND ARE FUNCTIONAL.
B. TEST ALL EXIT SIGNS, EMERGENCY LIGHTING FIXTURES, AND EMERGENCY BALLASTS FURNISHED INTEGRAL TO FIXTURES.
C. ENSURE ALL OCCUPANCY SENSORS HAVE BEEN INSTALLED AND ARE OPERATIONAL.
D. VERIFY ALL WALLBOX AND SCENE CONTROLLERS ARE INSTALLED AND OPERATIONAL.
E. TEST EACH INDIVIDUAL DEVICE FOR OCCUPANCY SENSOR TYPES OS1, OS2 AND TEST THE LIGHTING CONTROL RELAY PANEL SYSTEM.
F. TEST 10% OF ALL THE DEVICES FOR OCCUPANCY SENSOR TYPE: WSX-PDT-SA.
G. VERIFY THE FOLLOWING:
1. ALL SENSORS ARE LOCATED AND AIMED PER THE MANUFACTURER'S RECOMMENDATIONS.
2. STATUS INDICATORS ON DEVICES ARE OPERATIONAL AND CORRECT.
3. DEVICES CONTROL LIGHTING FIXTURES AS INDICATED ON DRAWINGS.
4. TIME DELAYS HAVE BEEN SET AS PER CODE AND PER OWNERS DIRECTIONS.
5. MOVEMENT IN ADJACENT AREAS AND/ CYCLING OF HVAC SYSTEMS DOES NOT FALSE TRIGGER SENSORS.
6. PHOTOCELL LOCATION AND AIMED PER MANUFACTURERS RECOMMENDATIONS.
7. PROGRAM INTERIOR RELAYS WITH A TIME FUNCTION ACCEPTABLE TO OWNER.
8. PROGRAM INTERIOR OVERRIDE SWITCH WITH A TIME FUNCTIONAL ACCEPTABLE BY OWNER.

Light Fixture Schedule

Tag	Lamp	Voltage	Mounting	Description	Manufacturer	Model
A	LED (1970LM)(18W)	120V	RECESSED	6"LED OPEN DOWN- LUMINAIRE, CLEAR REFLECTOR, WITH 0-10V DRIVER	LITHONIA	LBR6 ALO2 (1000LM) SWW1 (3500K) AR LSS MWD 80CRI
AE	LED (1970LM)(18W)	120V	RECESSED	SAME AS TYPE 'A' EXCEPT WITH 1400 LUMEN EMERGENCY BATTERY PACK	LITHONIA	LBR6 ALO2 (1000LM) SWW1 (3500K) AR LSS MWD 80CRI
B	LED(4000LMLM)(30W)	<varies>	<varies>	LED RECESSED LINEAR FIXTURE UL LISTED, PROVIDE ALL NECESSARY MATERIALS FOR PROPER INSTALLATION	MARK ARCHITECTURAL LIGHTING	S1RD-LOP-4FT-TGT-90CRI-40K-1000LMF-SCT-MIN10-FLL-MVOLT-XXX
BE	LED(4000LMLM)(30W)	120V	RECESSED	LED RECESSED LINEAR FIXTURE UL LISTED, PROVIDE ALL NECESSARY MATERIALS FOR PROPER INSTALLATION	MARK ARCHITECTURAL LIGHTING	S1RD-LOP-4FT-TGT-90CRI-40K-1000LMF-SCT-MIN10-FLL-MVOLT-XXX
C	LED (3649LM)(28W)	120V	LAY-IN	2'X2' LED FLAT PANEL FIXTURE, UL LISTED, LENS, HIGH EFFICIENCY 0-10V DRIVER	LITHONIA	CPX 2X2 AL07 SWW7 M4 MED LUMEN
CE	LED (3649LM)(28W)	120V	LAY-IN	SAME AS TYPE 'C' EXCEPT WITH 1400 LUMEN EMERGENCY BATTERY PACK	LITHONIA	CPX 2X2 AL07 SWW7 M4 MED LUMEN
D	LED (4000LM)(35W)	120V	RECESSED	2'X4' LED FLAT PANEL FIXTURE, UL LISTED, LENS, HIGH EFFICIENCY 0-10V DRIVER	LITHONIA	CPX 2X4 AL08 SWW7 M2 HIGH LUMEN
DE	LED (4000LM)(35W)	120V	RECESSED	SAME AS TYPE 'D' EXCEPT WITH 1400 LUMEN EMERGENCY BATTERY PACK	LITHONIA	CPX 2X4 AL08 SWW7 M2 HIGH LUMEN
E	INCLUDED	120V	SURFACE	THERMOPLASTIC EXIT/EMERGENCY UNIT WITH SELF-DIAGNOSTICS	LITHONIA	ELM2 LED SD
F	LED (1600LM)(32W)	120V	RECESSED	4' LED MODULE FIXTURE WITH REMOTE POWER SUPPLY (CONCEALED ABOVE THE FIXTURE/PER FIXTURE)	T-BAR LED	TBSL-MN-4-24-D-W-XX
G	LED(2000LM)(15W)	120V	RECESSED	6IN LED DOWNLIGHT FIXTURE, UL LISTED, LENS, HIGH EFFICIENCY 0-10V DRIVER	LITHONIA	LBR6-AL02-(1000LM) SWW1(3500L) AR LAA MWD 80CI
H	LED (1500LM) (21W)	120V	<varies>	4IN LED CYLINDER STEM MOUNTED, SLIM, DIMMING, UL LISTED	GOTHAM	ICO4PC-40/40-AR-LSS-65D-MVOLT-GZ10-JBX-P CAN-XX-_-_-COLOR BY ARCH
HE	LED (1500LM) (21W)	120V	SURFACE	SAME AS TYPE 'H' EXCEPT WITH EMERGENCY BATTERY PACK	GOTHAM	ICO4PC-40/40-AR-LSS-65D-MVOLT-GZ10-JBX-P CAN-XX-_-_-COLOR BY ARCH
J	LED(1000LM)(4000K)(10W)	120V	RECESSED	6IN LED WALL WASH DOWNLIGHT, UL LISTED, 0-10V DRIVER	LITHONIA	LDN4-AL02-SWW1-LW4-AR-_-LSS-_-mvolt-UGZ)
X1	INCLUDED	120V	SURFACE	THERMOPLASTIC EXIT/EMERGENCY LIGHT COMBO UNIT WITH SELF-DIAGNOSTICS	LITHONIA	LHQM LED _ R SD
AA	LED(2000LM)(15W)	120V	PENDANT	6IN LED DOWNLIGHT FIXTURE, UL LISTED, LENS, HIGH EFFICIENCY 0-10V DRIVER	ALW	CCP4/WL20-83-40-80-df-n-v10-z-XX-XX-RS50(field cut)
AAE	LED(2000LM)(15W)	120V	PENDANT	6IN LED DOWNLIGHT FIXTURE, UL LISTED, LENS, HIGH EFFICIENCY 0-10V DRIVER	ALW	CCP4/WL20-83-40-80-df-n-v10-z-XX-XX-RS50(field cut)-EMB
BB	LED (4000LM) (35W)	120V	SURFACE	LED WALL PACK FIXTURE RATED FOR WET LOCATION AND INCLUDE ALL REQUIRED LED DRIVERS.	LITHONIA	WDGE2 LED P3 40K 80CRI VF MVOLT DNAXD
BBE	LED (4000LM) (35W)	120V	SURFACE	SAME AS TYPE 'BB' EXCEPT WITH EMERGENCY BATTERY PACK	LITHONIA	WDGE2 LED P3 40K 80CRI VF MVOLT DNAXD
CC	LED (7000LM)(54W)	120V	20' POLE	ARCHITECTURAL POST TOP AREA LUMINARIE, INTEGRAL PHOTO-CELL, UL LISTED, WET LOCATION RATED, FINISH BY ARCH	LITHONIA	FIXTURE: RADPT P3 40K ASY PE XX MFR.POLE: KW#RSP20-4.0-11-XX-POST-BC
FF	LED(2600LM)(4000K)	120V	SURFACE	LED, DIRECT/INDIRECT, WALL SCONCE FIXTURE, UL LISTED, WET LOCAITONS RATED	ALW	CCU3/WL-13-83-40-40-df-13--83-40-40-df-D-v10--1C-Z-XX- XX-

GENERAL NOTES:
1.) EQUAL MANUFACTURER SHALL BE ACCEPTABLE WITH EQUAL PERFORMANCE OF SPECIFIED EQUIPMENT AND APPROVED BY ENGINEER.
2.) SUBMIT EQUAL MANUFACTURERS TO ENGINEER 10 DAYS PRIOR TO BID DATE.
3.) SUBMIT LIGHT FIXTURES CUTSHEETS TO OWNER FOR APPROVAL PRIOR TO ORDER.
4.) CONTRACTOR SHALL VERIFY THAT ANY IRRIGATION SPRINKLER HEAD IS AWAY FROM ANY LIGHT POLE A MINIMUM OF 75' TO AVOID CONSISTENT WATER TO LIGHT POLE. COORDINATE WITH IRRIGATION CONTRACTOR PRIOR TO ANY WORK.
5.) ANCHOR BOLTS SHALL BE OF NON-CORROSIVE MATERIAL (STAINLESS STEEL).
6.) ACCEPTABLE MANUFACTURES; LITHONIA, GOTHAM.

INDEX OF SHEETS ELECTRICAL

APPLICABLE BUILDING CODE

2018 International Building Code
2018 International Plumbing Electrical Code
2018 International Mechanical Code
2018 International Energy Conservation Code
2018 International Existing Building Code
2017 National Electrical Code of the National Fire Protection Association
2018 International Fire Code
2012 Texas Accessibility Standards

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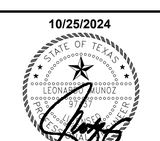
LC Veterans Center
Laredo College
Sheridan Rd, Laredo, TX 78040

10/25/2024



NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

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Texas Registered Engineering Firm - F10362
Project number: 23.4.37

KEY PLAN

ELECTRICAL LEGEND

Drawn by:	Author
Checked by:	Checker
Project number:	23.4.37
Project Issue Date:	10/25/2024

EG-101

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

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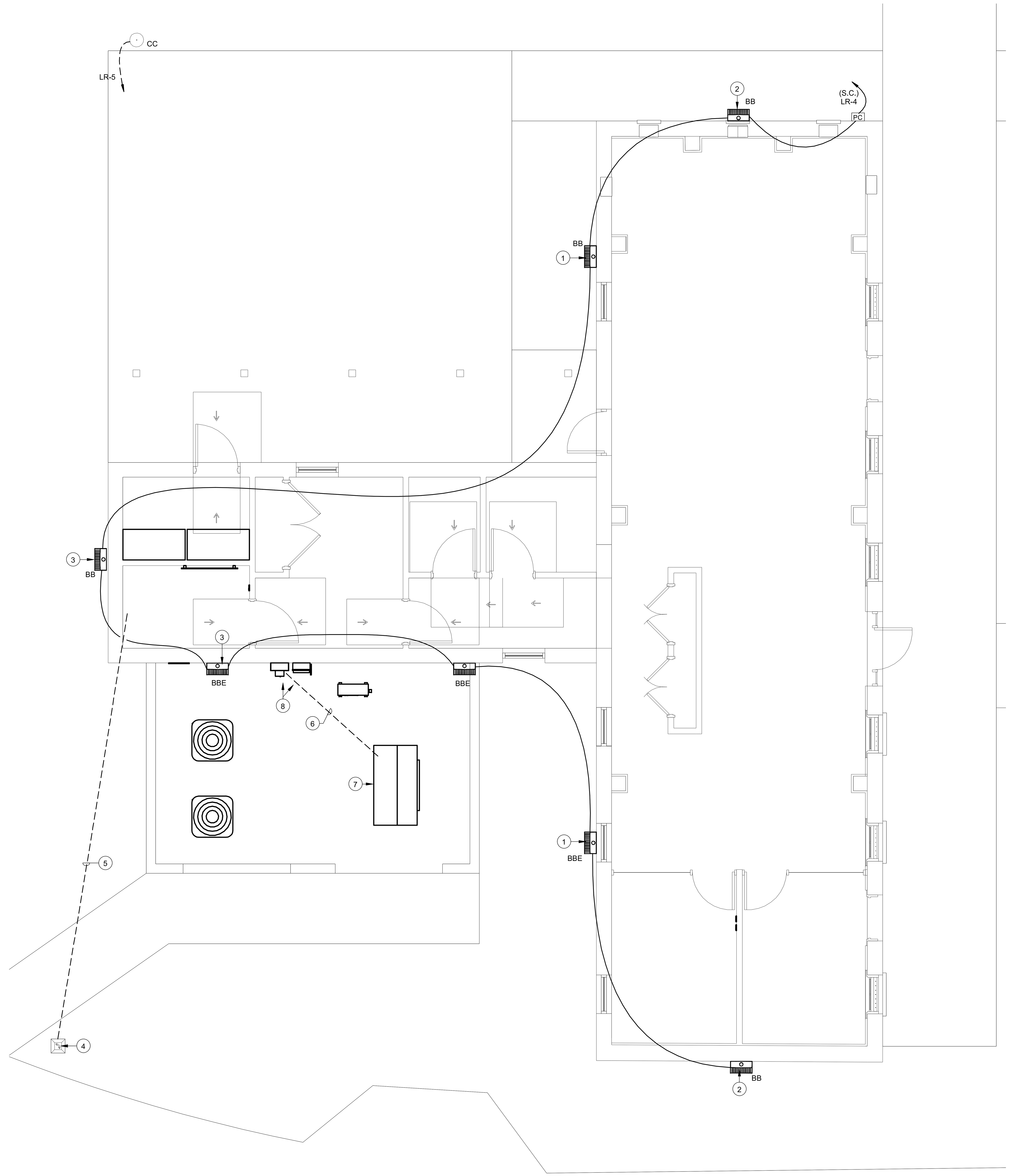

1 ELECTRICAL SITE PLAN
1/4" = 1'-0"

GENERAL NOTES - ELECTRICAL SITE

A. CONTRACTOR TO VERIFY ALL EXISTING MAIN POWER SERVICES AND COORDINATE WITH POWER COMPANY FOR ALL NEW REQUIREMENTS AND ALL COST ASSOCIATED. CONTRACTOR SHALL INCLUDE ANY COST FOR THE NEW TRANSFORMER AND OTHER ASSOCIATED FEES IN BID. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL FEES WITH POWER COMPANY AND TO INCLUDE IN BID. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH POWER COMPANY AS SOON THE CONTRACT IS AWARDED TO ORDER TRANSFORMER AND THE RELATED ELECTRICAL SERVICE EQUIPMENT AS SOON AS POSSIBLE.

B. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, TRENCHING AND BACKFILLING. COORDINATE WITH ALL UTILITIES PRIOR TO EXCAVATION.

C. CONTRACTOR TO VERIFY ALL EXISTING MAIN TELEPHONE SERVICES AND COORDINATE WITH TELEPHONE COMPANY FOR ALL REQUIREMENTS AND ALL COST ASSOCIATED. INCLUDE ALL COST IN BID. CONDUIT FROM MAIN TELEPHONE RISER SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.

D. ALL ELECTRICAL EQUIPMENT OUTDOORS SHALL BE RATED TYPE NEMA 3R UNLESS OTHERWISE NOTED.

E. CONTRACTOR SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES. ALL WORK SHALL CONFORM TO NATIONAL ELECTRICAL CODES AND ALL OTHER AUTHORITY HAVING JURISDICTION. OBTAIN PERMITS AND PAY ALL FEES. PERFORM MODIFICATIONS TO MEET CODE AND ORDINANCE REQUIREMENTS AT NO ADDITIONAL COST TO OWNER, ARCHITECT OR ENGINEER. VERIFY PRIOR TO BID DATE.

F. VERIFY AT JOB SITE THE EXACT LOCATIONS OF STRUCTURAL MEMBERS SUCH AS BEAMS, COLUMNS, ETC. TO LOCATE EQUIPMENT CONDUIT, PANELS AND DEVICES. IF DEVIATIONS FROM THE DRAWING ARE NECESSARY TO MEET STRUCTURAL CONDITIONS MAKE DEVIATIONS WITHOUT ADDITIONAL COST, TO OWNER, ARCHITECT, OR ENGINEER.

G. IN COOPERATION WITH OTHER CONTRACTORS, DETERMINE THE EXACT LOCATION OF EQUIPMENT AND DEVICES AND CONNECTIONS THERETO BY REFERENCE TO THE SUBMITTALS AND ROUGH-IN DRAWINGS, AND BY MEASUREMENTS AT THE SITE. REFER TO ALL OTHER TRADES SUBMITTAL FOR ELECTRICAL INFORMATION.

H. GROUND ENTIRE ELECTRICAL SYSTEM IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.

I. VERIFY AT JOB SITE GENERAL WORK TO BE DONE AS SPECIFIED, AS NOTED, OR AS REQUIRED FOR INSTALLATION ELECTRICAL SYSTEMS PRIOR TO SUBMISSION OF BIDS.

J. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND EQUIPMENT TO BE REMOVED AND REPLACED BEFORE SUBMITTING HIS BID.

K. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SMALL SCALE ONLY. THEY CONVEY THE INTENT OF THE WORK BUT DO NOT SHOW DETAIL SUCH AS JUNCTION AND PULL BOXES REQUIRED BY THE SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE(NEC). PROVIDE ALL MATERIALS AND METHODS CALLED FOR IN THE SPECIFICATIONS AND AS REQUIRED IN THE NEC TO PROVIDE A COMPLETE INSTALLATION OF ALL WORK.

L. ALL WIRING SHALL BE COPPER.

M. ALL SLEEVES, PENETRATIONS, ETC. SHALL BE SEALED SOLID NON-SHRINKING MATERIAL IMMEDIATELY UPON FILLING OF THE OPENING WITH PIPE OR CONDUIT.

N. ARRANGE FOR SOURCES OF TEMPORARY CONSTRUCTION SERVICES. SUCH SERVICES SHALL BE NOMINALLY 120/240V, 1-PHASE, 3-WIRE FROM WHICH A COMPLETE SYSTEM OF TEMPORARY POWER AND LIGHTING SHALL BE PROVIDED FOR ALL CONSTRUCTION NEEDS.

ELECTRICAL KEYNOTES

1	NEW WALL PACK SHALL MATCH SAME HEIGHT AS EXISTING, FIELD VERIFY PRIOR TO ANY WORK.
2	EXISTING WALL PACK TO BE REPLACE WITH NEW AS SCHEDULED AT SAME LOCATION.
3	WALL PACK SHALL BE MOUNTED TO MATCH SAME HEIGHT OF NEW WINDOWS, TO THE TOP OF THE LIGHT FIXTURE.
4	NEW TELEPHONE PEDESTAL. VERIFY ALL REQUIREMENTS PRIOR TO ANY ROUGH-INS.
5	CONTRACTOR TO PROVIDE AND INSTALL (2)-4"PVC CONDUIT FOR TELEPHONE SERVICE EQUIPPED WITH PULLSTRING, AND TURNED UP AND CAPPED AT BOTH ENDS. DEPTH OF CONDUIT SHALL BE A MINIMUM OF 36". VERIFY ALL REQUIREMENTS WITH LOCAL UTILITIES BEFORE ROUGH-IN. ROUTE TO NEAREST TELEPHONE SERVICE LINE OR AS DIRECTED BY LOCAL TELEPHONE COMPANY. PROVIDE TRENCHING AND BACKFILL AS REQUIRED. COORDINATE EXACT LOCATION AND COST WITH TELEPHONE COMPANY PRIOR TO BID.
6	CONTRACTOR TO PROVIDE AND INSTALL PVC CONDUIT FROM NEW UTILITY TRANSFORMER TO NEW ELECTRICAL METER AND MAIN SWITCH DISCONNECT PER POWER COMPANY STANDARDS. VERIFY ALL REQUIREMENTS PRIOR TO ANY ROUGH-IN. REFER TO ELECTRICAL RISER DIAGRAM.
7	NEW PAD MOUNT TRANSFORMER AT EXISTING LOCATION ON NEW CONCRETE PAD.
8	NEW 120/208V, 3-PHASE, 4W, ELECTRICAL SERVICE METER AND DISCONNECT.

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10/25/2024

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LEONARDO MUNOZ
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PROFESSIONAL ENGINEER

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

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Project number: 23.4.37

KEY PLAN

ELECTRICAL SITE LIGHTING PLAN

Drawn by:	Author
Checked by:	Checker
Project number:	23.4.37
Project Issue Date:	10/25/2024

ES-101

Scale: 1/4" = 1'-0"

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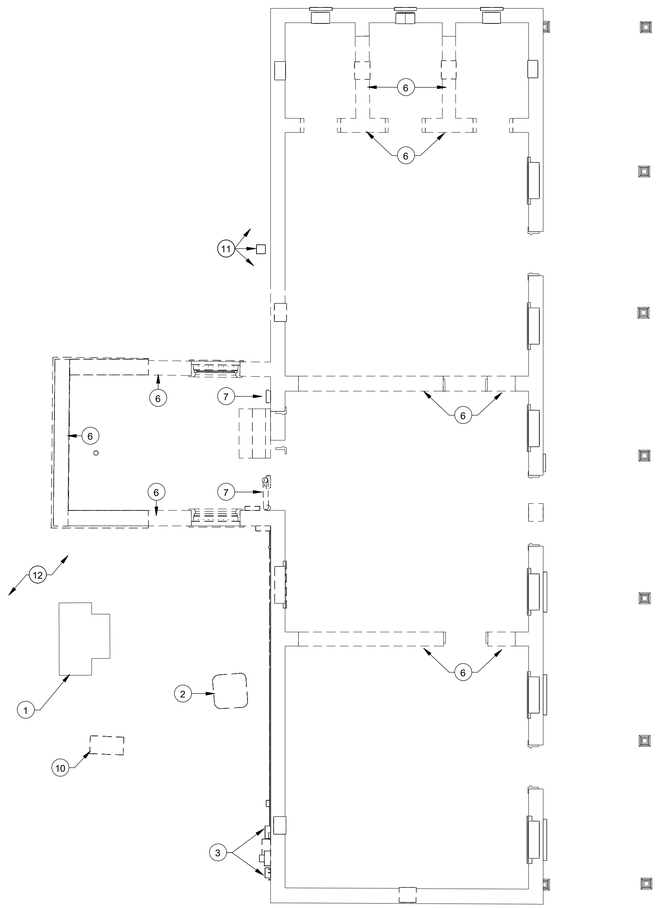
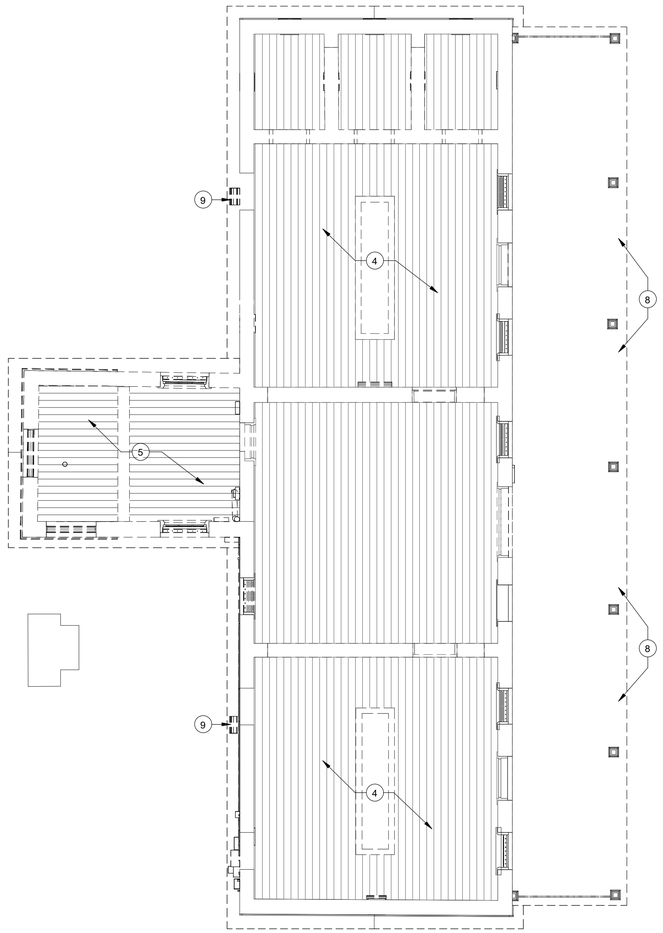


1 ELECTRICAL DEMOLITION FLOOR PLAN - FIRST FLOOR
3/16" = 1'-0"



2 ELECTRICAL DEMOLITION PLAN - FIRST FLOOR
3/16" = 1'-0"

GENERAL NOTES- DEMOLITION

A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
B. PROVIDE CLEAR VANDAL COVER WITH STOPPER II OPTION FOR ALL FIRE ALARM PULL STATIONS.
C. EQUIPMENT AS FURNISHED OF A SINGLE MANUFACTURER.
D. COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT IN ACCORDANCE MECHANICAL DRAWINGS.
E. ALL CONDUITS SHALL REAMED AND COMPLETED WITH CONNECTORS AND INSULATED BUSHINGS AT BOTH ENDS.
F. ALL DEVICES SHOWN ON DRAWINGS ARE SYMBOLIC ONLY. THE ENTIRE FIRE ALARM SYSTEM, SHALL BE IN FULL COMPLIANCE AND MEET ALL CODES AND REQUIREMENTS OF THE LOCAL ADMINISTRATIVE AUTHORITY. ANY MODIFICATIONS REQUIRED TO PROVIDE COMPLIANCE SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER OR ARCHITECT/ ENGINEER.
G. FIRE ALARM LICENSE HOLDER SHALL ASSUME ALL RESPONSIBILITY FOR DESIGN AND SUBMIT DRAWINGS TO JURISDICTION HAVING AUTHORITY AND ABIDE BY ALL OTHER REQUIREMENTS PER NFPA.
H. ALL SPECIAL SYSTEM CONDUITS SHALL BE STUBBED UP ABOVE THE CEILING LEVEL. IF CABLE TRAY IS PRESENT, STUBBED CONDUITS TO CABLE TRAY.

ELECTRICAL KEYNOTES

1	EXISTING PAD MOUNT TRANSFORMER TO BE REPLACED, REMOVE EXISTING CONCRETE PAD AND PRVIDE NEW CONCRETE PAD. COORDINATE WITH AEP TO DICONNECT AND RECONNECT EXISTING UTILITY. INCLUDE ALL COST ASSOCIATED WITH AEP IN BID.
2	EXISTING MECHANICAL EQUIPMENT TO BE DEMOLISHED. REMOVE ALL ASSOCIATED CONDUIT AND WIRING.
3	EXISTING ELECTRICAL SERVICE EQUIPMENT TO BE REPLACED. REFER TO REMODEL PLANS.
4	EXISTING CEILING TO BE DEMOLISHED. REMOVE ALL ELECTRICAL CONDUIT, WIRING, SPEAKERS, SMOKE DETECTORS, ALARM DEVICES, LIGHTING, FANS OR ANY ELECTRICAL DEVICE ON CEILING.
5	EXISTING CEILING AND FRAMING TO BE DEMOLISHED. REMOVE ALL ELECTRICAL CONDUIT, WIRING, SPEAKERS, SMOKE DETECTORS, ALARM DEVICES, LIGHTING, FANS OR ANY ELECTRICAL DEVICE ON CEILING.
6	PORTION OF EXISTING WALL TO BE DEMOLISHED. REMOVE ALL ELECTRICAL CONDUIT, WIRING, RECEPTACLES, WALL PLATES, DATA OUTLETS, FIRE ALARM OR ANY ELECTRICAL DEVICE ON WALL.
7	EXISTING ELECTRICAL PANELBOARDS TO BE DEMOLISHED. REMOVE ALL ASSOCIATED CONDUIT AND WIRING.
8	EXISTING ROOF, WOOD SHINGLES, TRIMS, RAMING, COLUMNS, AND ALL ASSOCIATED CONCEALED STRUCTURAL ELEMENTS TO BE DEMOLISHED. REMOVE ALL ELECTRICAL LIGHTING OR POWER DEVICES AND ALL ASSOCIATED CONDUIT AND WIRING.
9	EXISTING WALLPACK TO BE DEMOLISHED.
10	FIELD COORDINATE RELOCATION OF EXISTING PULLBOX TO ALLOW FOR NEW CONSTRUCTION. FIELD VERIFY EXISTING CONDITIONS.
11	CONTRACTOR SHALL COORDINATE W/AT&T TO REMOVE AND RELOCATE COMMUNICAITON PULLBOX AND UNDERGROUND LINES.
12	EXISTING ELECTRICAL NOT IN USE TO BE REMOVED, FIELD VERIFY EXISTING CONDITIONS.

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NOTES:
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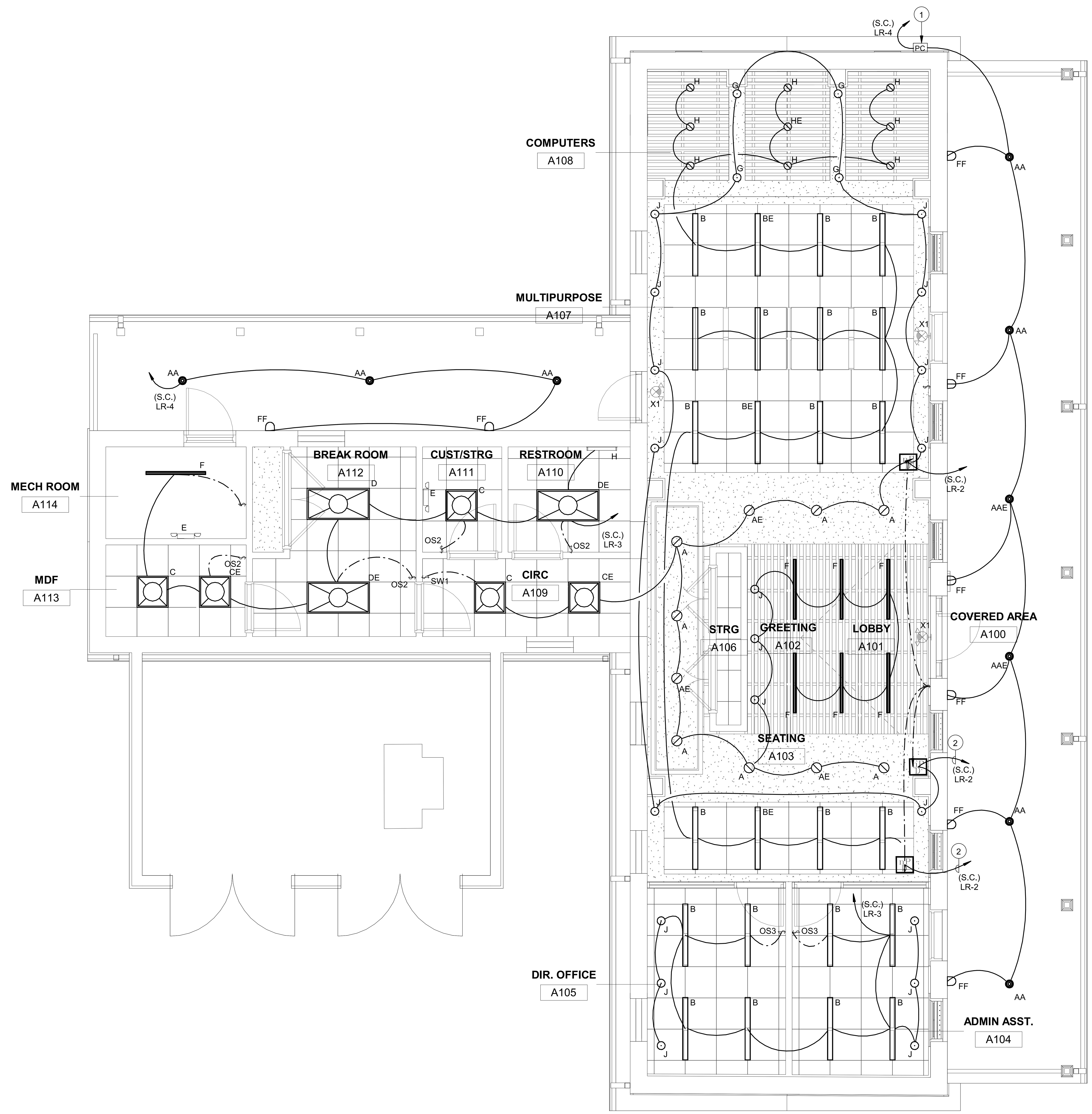
KEY PLAN

ELECTRICAL DEMOLITION PLAN

Drawn by:	Author
Checked by:	Checker
Project number:	23.4.37
Project Issue Date:	10/25/2024

EDP-101

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



1 ELECTRICAL LIGHTING PLAN - FIRST FLOOR
1/4" = 1'-0"

GENERAL NOTES- LIGHTING

A. F.ALL EXIT FIXTURES TYPE-"X1 & X2", EMERGENCY LIGHT FIXTURE TYPE-"E" AND ALL EMERGENCY BALLAST SHALL BE ON CIRCUIT "LR-1". FIXTURE TYPE LABEL WITH AN "_E" ARE LIGHT FIXTURES WITH EMERGENCY BALLAST. REFER TO LIGHT FIXTURE SCHEDULE.

B. VERIFY CEILING TYPES AND COORDINATE WITH FIXTURE TYPE LIGHT FIXTURE SHALL BE COMPATIBLE WITH CEILING TYPE AS INDICATED ON THE ARCHITECTURAL DOCUMENTS. NOTIFY ENGINEER IF DISCREPANCIES EXIST PRIOR TO ORDERING FIXTURES.

C. COORDINATE EXACT ROUTING OF ALL CONDUIT ABOVE CEILING IN BUILDING. TYPICAL FOR ALL BUILDING EXTERIOR LIGHTING.

D. COORDINATE LOCATION OF LIGHTS WITH DIFFUSERS AND GRILLES.

E. SWITCH LEGS ARE NOT SHOWN WHERE SWITCHING SCHEME IS OBVIOUS.

ELECTRICAL KEYNOTES

1	120V EXTERIOR LIGHTING PHOTOCELL. LOCATE AS DIRECTED BY MANUFACTURER.
2	SHALL BE CONTROLLED VIA LIGHTING CONTROL PANEL 'LCP1'. REFER TO RISER AND SPECIFICATION FOR ADDITIONAL INFORMATION.

APPLICABLE BUILDING CODE

2018 International Building Code
2018 International Plumbing Electrical Code
2018 International Mechanical Code
2018 International Energy Conservation Code
2018 International Existing Building Code
2017 National Electrical Code of the National Fire Protection Association
2018 International Fire Code
2012 Texas Accessibility Standards

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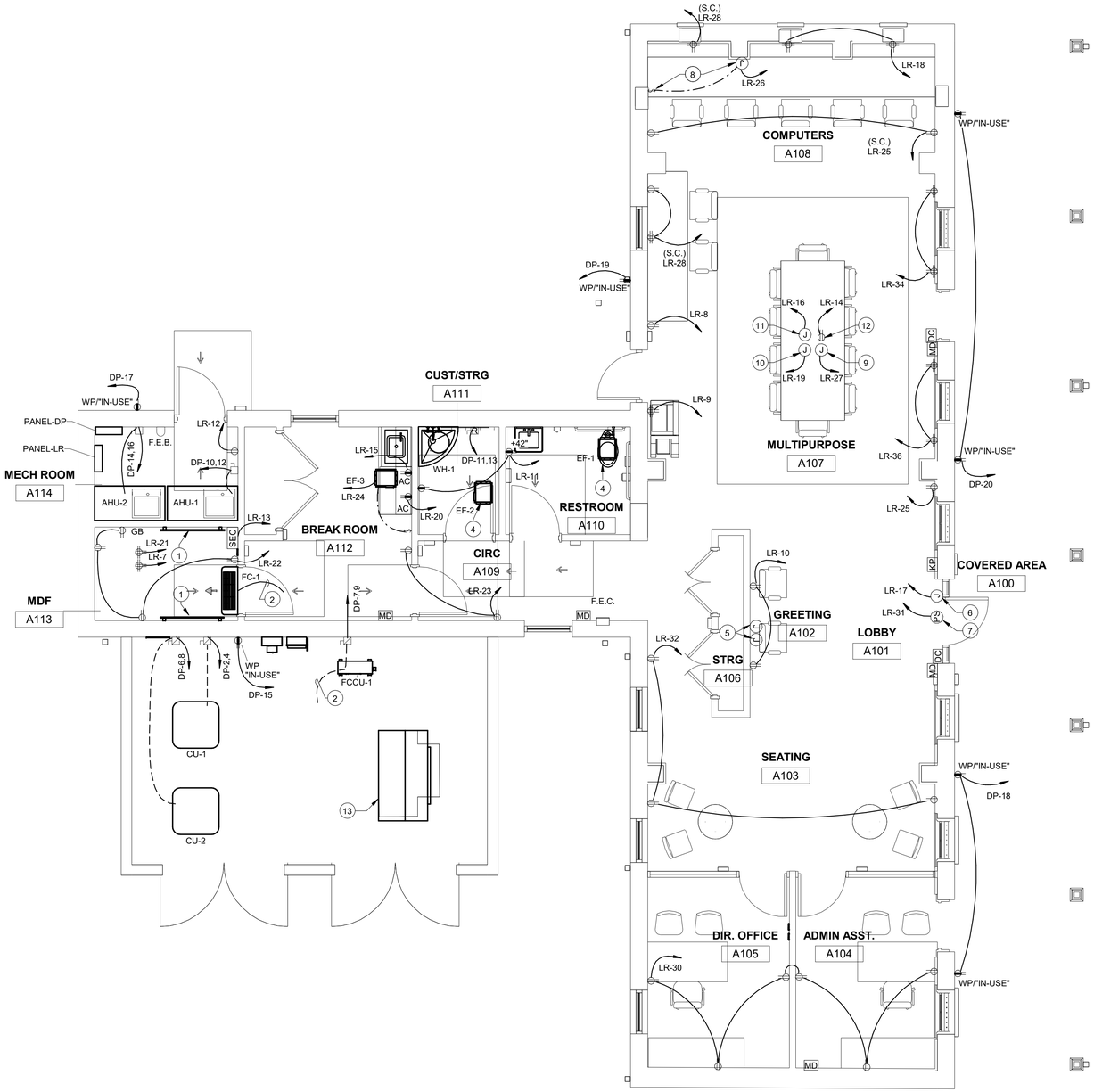
KEY PLAN

ELECTRICAL LIGHTING FLOOR PLAN

Drawn by:	Author
Checked by:	Checker
Project number:	23.4.37
Project Issue Date:	10/25/2024

EL-101

Scale: 1/4" = 1'-0"



1 ELECTRICAL POWER FLOOR PLAN - FIRST FLOOR
1/4" = 1'-0"

GENERAL NOTES- POWER

A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.
B. ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTION TO H.V.A.C EQUIPMENT, PLUMBING EQUIPMENT, REFER TO PANEL SCHEDULE FOR WIRE SIZE.
C. ELECTRICAL CONTRACTOR SHALL PROVIDE STARTERS, RELAYS, CONTACTORS AND THE REQUIRED ELECTRICAL ACCESSORIES FOR MECHANICAL SYSTEM AS REQUIRED.
D. COORDINATE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT IN ACCORDANCE W/MECHANICAL DRAWINGS TO MEET ELECTRICAL AND MECHANICAL REQUIRED CLEARANCE BY THE LATEST CODE.
E. COORDINATE EXACT LOCATION OF ISOLATED OUTLETS FOR COMPUTERS WITH OWNER.
F. ELECTRICAL CONTRACTOR SHALL PROVIDE J-BOX AND CONDUIT FOR H.V.A.C. CONTROLS AND THERMOSTATS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
G. NEMA RATED OUTLETS, REFER TO BREAKER SIZE AND COORDINATE WITH EQUIPMENT REQUIREMENTS PRIOR TO BID.
H. REFER TO ALL TECHNOLOGY, AUDIO VISUAL, SECURITY ALL "T"-SHEETS FOR ADDITIONAL ELECTRICAL REQUIREMENTS. INCLUDE ALL COST IN BID.

ELECTRICAL KEYNOTES

1	3/4"X8'HX4'W PLYWOOD TELEPHONE BOARD FINISHED ONE SIDE. PROVIDE GROUND BAR AND TIE INTO ELECTRICAL GROUNDING SYSTEM VIA WIRE #4.
2	INTERLOCK FCCU WITH FC H.V.A.C. EQUIPMENT. WIRING SHALL BE 3#10, 1#10G, 3/4"C.
4	TIE INTO ROOMS LIGHTING CIRCUIT AND INTERLOCK FAN WITH ROOMS LIGHTS. WIRING SHALL BE 2#12, 1#12G, 1/2"C.
5	PROVIDE JBOX FOR DOOR ACCESS AND PANIC BUTTON. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
6	PROVIDE JBOX FOR AUTOMATIC DOOR OPENER. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
7	PROVIDE JBOX FOR DOOR ACCESS CONTROL POWER SUPPLY. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
8	PROVIDE JBOX FOR RECESSED PROJECTOR SCREEN AND CONTROL SWITCH. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
9	PROVIDE CEILING MOUNTED J-BOX FOR SPEAKER AMPLIFIER. COORDINATE EXACT LOCAION PRIOR TO ANY WORK.
10	PROVIDE CEILING MOUNTED J-BOX FOR WIRELESS PRESENTAION DEVICE. COORDINATE EXACT LOCAION PRIOR TO ANY WORK.
11	PROVIDE CEILING MOUNTED J-BOX FOR DROP COLUMN POWER.
12	PROVIDE CEILING MOUNTED JBOX/ RECEPTACLE FOR PROJECTOR. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
13	NEW PAD MOUNT TRANSFORMER AT EXISTING LOCATION ON NEW CONCRETE PAD.

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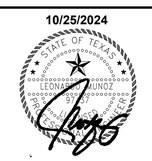

NOTES:
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KEY PLAN

ELECTRICAL POWER FLOOR PLAN

Drawn by:	Author
Checked by:	Checker
Project number:	23.4.37
Project Issue Date:	10/25/2024

EP-101

Scale: 1/4" = 1'-0"

Branch Panel: PANEL-DP

Location: MECH ROOM A114 | Volts: 120/208 Wye | A.I.C. Rating: 18
Supply From: | Phases: 3 | Mains Type: MLO
Mounting: Surface | Wires: 4 | Mains Rating: 200 A
Enclosure: Type 1 | | MCB Rating: 200 A

CKT	Circuit Description	Trip	Poles	Comments	A		B		C		Comments	Poles	Trip	Circuit Description	CKT
DP-1	PANEL-LR	100 A	3	4#3, 1#6G,1.5"C	6930 VA	0 VA					3#6, 1#10G,1"C	2	45 A	CU-1	DP-2
DP-3	--	--	--	--			6211 VA	0 VA			--	--	--	--	DP-4
DP-5	--	--	--	--					4350 VA	0 VA	3#10, 1#10G,3/4"C	2	30 A	CU-2	DP-6
DP-7	FCCU-1	15 A	2	3#12, 1#12G,1/2"C	1352 VA	0 VA					--	--	--	--	DP-8
DP-9	--	--	--	--			1352 VA	7592 VA			3#4, 1#8G,1 1/2"C	2	80 A	AHU-1	DP-10
DP-11	WH-1	20 A	2	3#12, 1#12G,1/2"C					1500 VA	7592 VA	--	--	--	--	DP-12
DP-13	--	--	--	--	1500 VA	4992 VA					3#6, 1#10G,1"C	2	50 A	AHU-2	DP-14
DP-15	Receptacle	20 A	1	2#12, 1#12G,1/2"C			1500 VA	4992 VA			--	--	--	--	DP-16
DP-17	Receptacle	20 A	1	2#12, 1#12G,1/2"C					1500 VA	3000 VA	2#4, 1#8G,1.5"C	1	20 A	Receptacle	DP-18
DP-19	Receptacle	20 A	1	2#12, 1#12G,1/2"C	1500 VA	3000 VA					2#6, 1#10G,1"C	1	20 A	Receptacle	DP-20
DP-21	Space	--	1				--								DP-22
DP-23	Space	--	1						--	--		1	--	Space	DP-24
DP-25	Space	--	1		--	--						1	--	Space	DP-26
DP-27	Space	--	1				--	--				1	--	Space	DP-28
DP-29	Space	--	1						--	--		1	--	Space	DP-30
DP-31	Space	--	1		--	--						1	--	Space	DP-32
DP-33	Space	--	1				--	--				1	--	Space	DP-34
DP-35	Space	--	1						--	--		1	--	Space	DP-36
DP-37	1) SPD	20 A	3	4#12, 1#12G,1/2"C	0 VA	0 VA						1	20 A	Spare	DP-38
DP-39	--	--	--	--			0 VA	0 VA				1	20 A	Spare	DP-40
DP-41	--	--	--	--					0 VA	0 VA		1	20 A	Spare	DP-42
				Total Load:	19268 VA		21647 VA		17941 VA						
				Total Amps:	162 A		182 A		150 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Equipment	0 VA	0.00%	0 VA		
HVAC	27880 VA	100.00%	27880 VA	Total Conn. Load:	58854 VA
Lighting - Exterior	400 VA	125.00%	500 VA	Total Est. Demand:	55097 VA
Other	7200 VA	100.00%	7200 VA	Total Conn.:	163 A
Receptacle	18220 VA	77.44%	14110 VA	Total Est. Demand:	153 A
Lighting	1034 VA	125.00%	1293 VA		
EMERGENCY LIGHTING	1200 VA	100.00%	1200 VA		
WATER HEATER	3000 VA	100.00%	3000 VA		

Notes:
1) PROVIDE INTEGRAL SURGE PROTECTION DEVICE, 100KA.

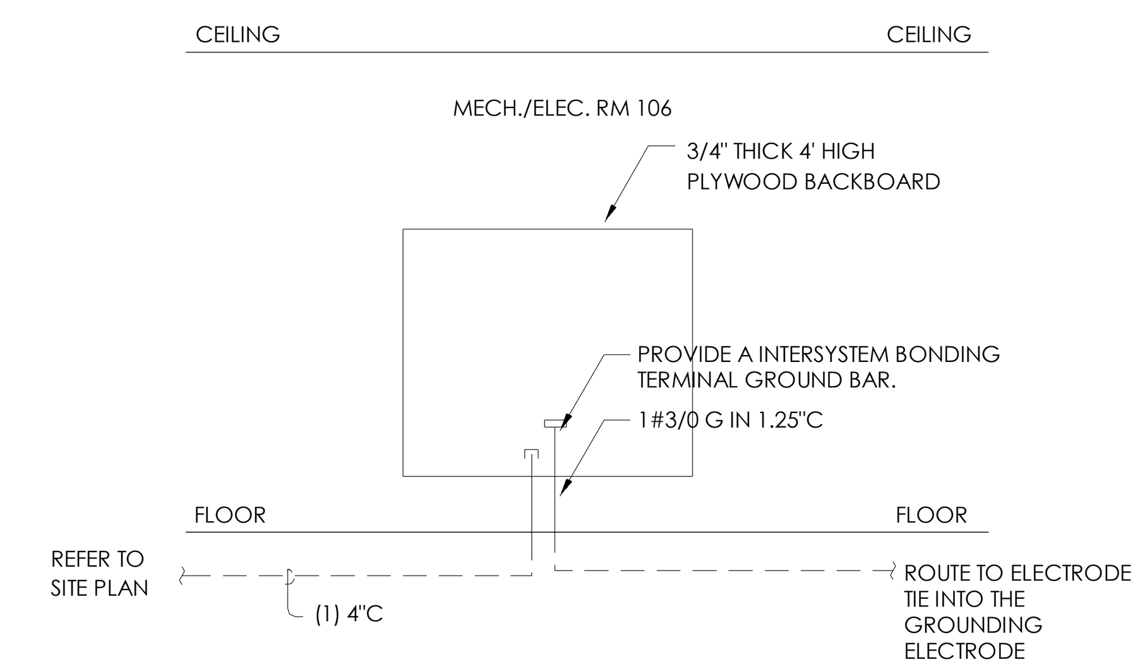
Branch Panel: PANEL-LR

Location: MECH ROOM A114 | Volts: 120/208 Wye | A.I.C. Rating:
Supply From: PANEL-DP | Phases: 3 | Mains Type: MLO
Mounting: Surface | Wires: 4 | Mains Rating: 100 A
Enclosure: Type 1 | | MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	Comments	A		B		C		Comments	Poles	Trip	Circuit Description	CKT
LR-1	EMERGENCY LIGHTING	20 A	1	2#10, 1#10G,3/4"C	1200 VA	0 VA					2#12, 1#12G,1/2"C	1	20 A	Lighting	LR-2
LR-3	Lighting	20 A	1	2#12, 1#12G,1/2"C			341 VA	700 VA			2#10, 1#10G,3/4"C	1	20 A	Lighting	LR-4
LR-5	Lighting - Exterior	20 A	1	2#12, 1#12G,1/2"C					400 VA	0 VA		1	20 A	Spare	LR-6
LR-7	Receptacle	20 A	1		200 VA	200 VA					2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-8
LR-9	Receptacle	20 A	1	2#12, 1#12G,1/2"C			200 VA	400 VA			2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-10
LR-11	Receptacle	20 A	1	2#12, 1#12G,1/2"C					360 VA	200 VA	2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-12
LR-13	Receptacle	20 A	1	2#12, 1#12G,1/2"C	200 VA	200 VA					2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-14
LR-15	Receptacle	20 A	1	2#12, 1#12G,1/2"C			180 VA	1200 VA				1	20 A	Other	LR-16
LR-17	Other	20 A	1	2#10, 1#10G,3/4"C					1200 VA	200 VA	2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-18
LR-19	Other	20 A	1		1200 VA	180 VA					2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-20
LR-21	Receptacle	20 A	1	2#12, 1#12G,1/2"C			200 VA	800 VA			2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-22
LR-23	Receptacle	20 A	1	2#12, 1#12G,1/2"C					400 VA	8 VA	2#12, 1#12G,1/2"C	1	20 A	EF-3	LR-24
LR-25	Receptacle	20 A	1	2#12, 1#12G,1/2"C	600 VA	1200 VA					2#10, 1#10G,3/4"C	1	20 A	HAND DRYERS	LR-26
LR-27	Other	20 A	1				1200 VA	600 VA			2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-28
LR-29										1200 VA	2#10, 1#10G,3/4"C	1	20 A	Receptacle	LR-30
LR-31	Other	20 A	1	2#10, 1#10G,3/4"C	1200 VA	600 VA					2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-32
LR-33	Spare	20 A	1				0 VA	400 VA			2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-34
LR-35	Spare	20 A	1						0 VA	400 VA	2#12, 1#12G,1/2"C	1	20 A	Receptacle	LR-36
LR-37	Spare	20 A	1		0 VA	0 VA						1	20 A	Spare	LR-38
LR-39	Spare	20 A	1				0 VA	0 VA				1	20 A	Spare	LR-40
LR-41	Spare	20 A	1						0 VA	0 VA		1	20 A	Spare	LR-42
				Total Load:	6930 VA		6211 VA		4350 VA						
				Total Amps:	60 A		54 A		36 A						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	8 VA	100.00%	8 VA		
Lighting - Exterior	400 VA	125.00%	500 VA	Total Conn. Load:	17489 VA
Other	7200 VA	100.00%	7200 VA	Total Est. Demand:	17843 VA
Receptacle	7720 VA	100.00%	7720 VA	Total Conn.:	49 A
Lighting	1034 VA	125.00%	1293 VA	Total Est. Demand:	50 A
EMERGENCY LIGHTING	1200 VA	100.00%	1200 VA		

Notes:



2 TELE/DATA RISER
SCALE: NTS

LIGHTING CONTROL SENSORS LEGEND

SYMBOL	ACUITY MODEL NUMBER	CONDUIT	COMMENTS
$OS2	WSXAMWO-PDT---WH	3/4"C	WALL SENSOR SWITCH, WITH VACANCY
$OS3	WSXAMWO-PDT-D-WH	3/4"C	WALL SENSOR SWITCH, DIMMING, WITH VACANCY
SW1 $	nPODM-_-_-_WH	3/4"C	WALL MOUNT SWITCH WITH ON/OFF WITH STAINLESS STEEL PLATE
SW2 $	nPODM-_-DX-_WH	3/4"C	WALL MOUNT SWITCH WITH ON/OFF WITH RAISE /LOWER FUNCTION AND WITH STAINLESS STEEL PLATE
NP	nPP16	3/4"C	POWER PACK, 120,240,277, VAC, 16AMPS/POLE, PLENUM RATED, RELAY CONTACT PROTECTION, RJ-45 PORT
NP D	nPP16 D	3/4"C	POWER PACK, 120,240,277, VAC, 16AMPS/POLE, 0-10VDC DIMMING, PLENUM RATED, RELAY CONTACT PROTECTION, RJ-45 PORT

GENERAL NOTES:
A. CONTRACTOR SHALL REFER TO MANUFACTURERS INSTRUCTIONS AND WIRING DIAGRAMS PRIOR TO BID DATE.
B. CONTRACTOR SHALL INCLUDE ALL COST IN BID FOR AN OPERABLE LIGHTING SYSTEM.

NOTES:

1. All sensor locations are approximate, refer to manufacturers installation instructions prior to installation.
2. Ultrasonic ceiling mount sensors should be located a minimum of six feet from HVAC supply/return vents.
3. Contractor is responsible for: proper sensitivity & time delay settings (for non-adaptive products) recommended placement, and field verification of circuits with in respect to power placement.
4. Contractor is responsible for field verification of required number of power packs:
   - One power pack is required for each circuit to be controlled.
   - One power pack is required for every three sensors in the zone.
   - If multiple circuits are to be controlled by a sensor, an auxiliary relay can be used in conjunction with the power pack.
   - The maximum number of sensors that can be put on a power pack is to be reduced by one for each slave pack used.
5. Sensors mounted over the door must be placed one foot inside the threshold.
6. Contractor is responsible for ensuring that the sensor bill of materials complies with the sensor design and layout specifications.
7. Contractor is responsible for installing equipment in compliance with local code.
8. Refer to manufacturers wiring diagrams.
9. NOTE: Contractor shall include all cost for a manufacturer certified technician to provide a complete training session to owner representatives. Training shall include but not limited to the following: calibrate sensors settings, programming existing conditions and how to add new circuits, trouble shooting, overview of panel and any request from owner. Training may take days; contractor/manufacturer shall include all cost in bid. Contractor shall notify owner/Architect/Engineer on the day for the training. Technician shall calibrate all sensors to owners desire, include cost for technician to provide service after the job is complete.

GENERAL NOTES:

A. PROVIDE GROUND /BONDING AS INDICATED ON THE NATIONAL ELECTRICAL CODE.
B. NAME PLATES SHALL BE PROVIDED FOR ALL ELECTRICAL SWITCH GEAR, PANEL BOARDS, LIGHTING CONTACTORS, LIGHTING CONTROL PANELS, ETC.. BY ELECTRICAL CONTRACTOR.
C. NEW ELECTRICAL METERING AND SERVICE EQUIPMENT SHALL BE PROVIDED AND INSTALLED ACCORDING TO THE LOCAL POWER UTILITY CO. AND CITY REQUIREMENTS. VERIFY AND COORDINATE WITH POWER UTILITY CO. AND AHJ BEFORE BID AND INSTALLATION.
D. COMPLY WITH NFPA 70E SAFETY REQUIREMENTS.
E. PANELBOARDS WITH MORE THAN 42 CIRCUITS SHALL BE IN ONE CABINET ENCLOSURE, UNLESS OTHERWISE NOTED.
F. PROVIDE 4"CONCRETE PAD FOR ALL DRY-TYPE TRANSFORMERS.
G. ALL TWO SECTION PANELBOARDS SHALL BE FEED THRU LUGS.
H. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY OF ELECTRICAL SERVICE TO THE NEW BUILDING WITHIN PROJECT SCHEDULE. COORDINATE ALL COST FOR LABOR AND MATERIALS WITH LOCAL ELECTRICAL UTILITY COMPANY PRIOR TO BID. ALL COST ASSOCIATED WITH THE DELIVERY OF ELECTRICAL SERVICE INCLUDING ALL MATERIALS SHALL BE INCLUDED IN BID. TRANSITION OF NEW ELECTRICAL SERVICE SHALL PROCEED IN WEEKENDS OR HOLIDAYS, INCLUDE ALL COST IN BID FOR OVERTIME FROM ELECTRIC UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE MADE FOR SERVICE DELIVERY COSTS AFTER CONTRACT HAS BEEN AWARDED.

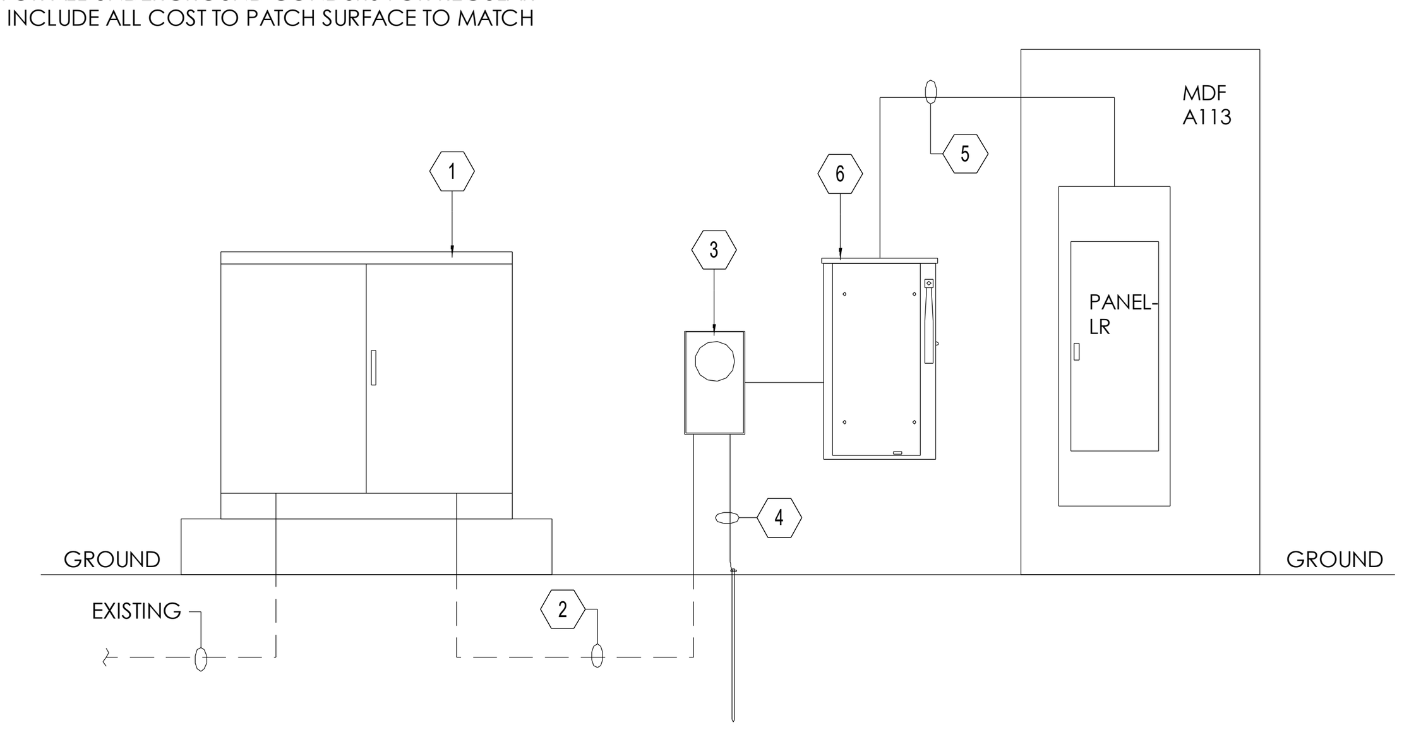
   ELECTRICAL SERVICE 480/277V 1000AMPS OR MORE SHALL INCLUDE GROUND FAULT PROTECTION.
J. ELECTRICAL SERVICE 120V THRU 480V 1000AMPS OR MORE SHALL INCLUDE AN ARC REDUCTION MAINTENANCE SWITCH. COORDINATE EXACT LOCATION OF SUCH SWITCH.

PROVIDE TRENCHING AND BACKFILLING FOR ALL UNDERGROUND CONDUITS FOR REGULAR NON-ASPHALT/CONCRETE SURFACE.

PROVIDE SAWCUT AND PATCHING FOR ALL UNDERGROUND CONDUITS FOR REGULAR ASPHALT OR CONCRETE SURFACE. INCLUDE ALL COST TO PATCH SURFACE TO MATCH EXISTING FINISH.

ELECTRICAL RISER DIAGRAM KEYED NOTES:

1. NEW POWER COMPANY PAD MOUNT TRANSFORMER 120/208V, 3P, 4W .
2. PROVIDE 4#4/0, 3"C.
3. NEW ELECTRICAL SERVICE METER 120/208V, 3P, 4W. CONTRACTOR SHALL PROVIDE METER BASE. VERIFY WITH POWER FOR METER BASE REQUIREMENTS PRIOR TO BID DATE. INCLUDE ALL COST IN BID. COORDINATE ALLOCATION OF METER SOCKET AND WIRING WITH POWER COMPANY.
4. 1#3/0G IN 1"C, 3/4"X10' COPPER CLAD RODS. PROVIDE GROUNDING AS PER NEC REQUIREMENTS.
5. PROVIDE 4#4/0, 1#6G,3"C.
6. PROVIDE 200AMPS, 208V, 3P, 4W, S/N, N3R, HEAVY DUTY FUSED SERVICE ENTRANCE DISCONNECT, FUSED@200AMPS.



1 ELECTRICAL SCHEMATIC DIAGRAM
SCALE: NTS

DISCONNECT SCHEDULE

LABEL	DESCRIPTION
AHU-1	100AMP, 1P, 3W, N1, 208V, S/N, N.F., H.D. DISCONNECT
AHU-2	60AMP, 1P, 3W, N1, 208V, S/N, N.F., H.D. DISCONNECT
CU-1	60AMP, 1P, 3W, N3R, 208V, S/N, H.D. FUSED DISCONNECT
CU-2	30AMP, 1P, 3W, N3R, 208V, S/N, H.D. FUSED DISCONNECT
FCCU-1	30AMP, 1P, 3W, N3R, 208V, S/N, H.D. FUSED DISCONNECT
WH-1	30AMP, 1P, 3W, N1,208V, S/N, N.F., H.D. ROTARY TYPE DISCONNECT

NOTE: 1. REFER TO BREAKER SIZE FOR FUSE SIZE.
2. REFER TO PANELBOARD FOR DISCONNECT PHASES AND VOLTAGE.
3. PROVIDE SOLID STATE PHASE LOSS PROTECTION FOR ALL STARTER AND COMBOS .

120/208V, 3P, 4W ELECTRICAL LOAD ANALYSIS

DESCRIPTION	TOTAL KVA
LIGHTING	2
GENERAL POWER	13
A/C	28
WATER HEATER	3

TOTAL WATTS: 46 KVA
TOTAL AMPS: 127 AMPS
TOTAL AMPS+25%: 159 AMPS
WIRE SIZE AMPS: 200 AMPS

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Sheridan Rd, Laredo, TX 78040

10/25/2024

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

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Texas Registered Engineering Firm - F10362
Project number: 23.4.37

KEY PLAN

ELECTRICAL RISER DIAGRAM

Drawn by:	Author
Checked by:	Checker
Project number:	23.4.37
Project Issue Date:	10/25/2024

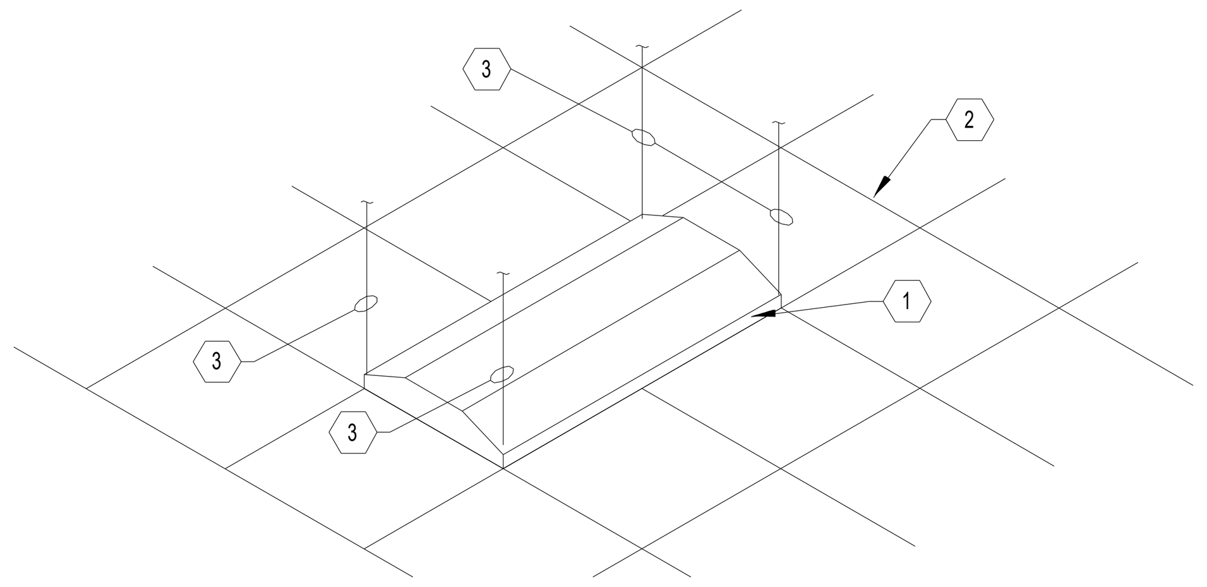
ER-101

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

01

KEYED NOTES:

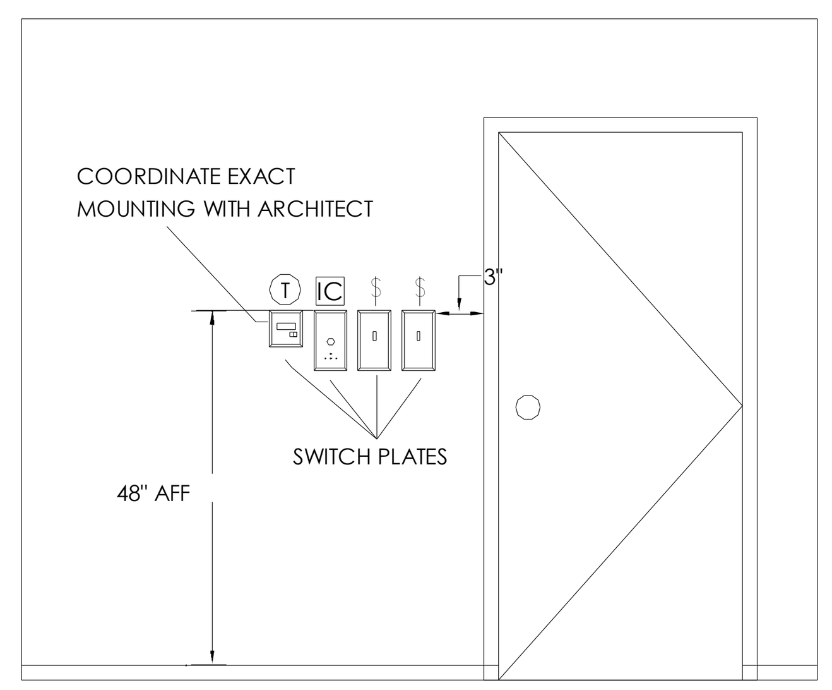
1. 2'x 4' LAY-IN LED/FLUORESCENT FIXTURE
2. SUSPENDED CEILING
3. TIE WIRE, CONNECT TO ALL FOUR CORNERS OF FIXTURE TO TOP OF STRUCTURE, INDEPENDENT OF CEILING SUPPORTS.



TYPICAL LAY-IN FIXTURE SUPPORT
NO SCALE

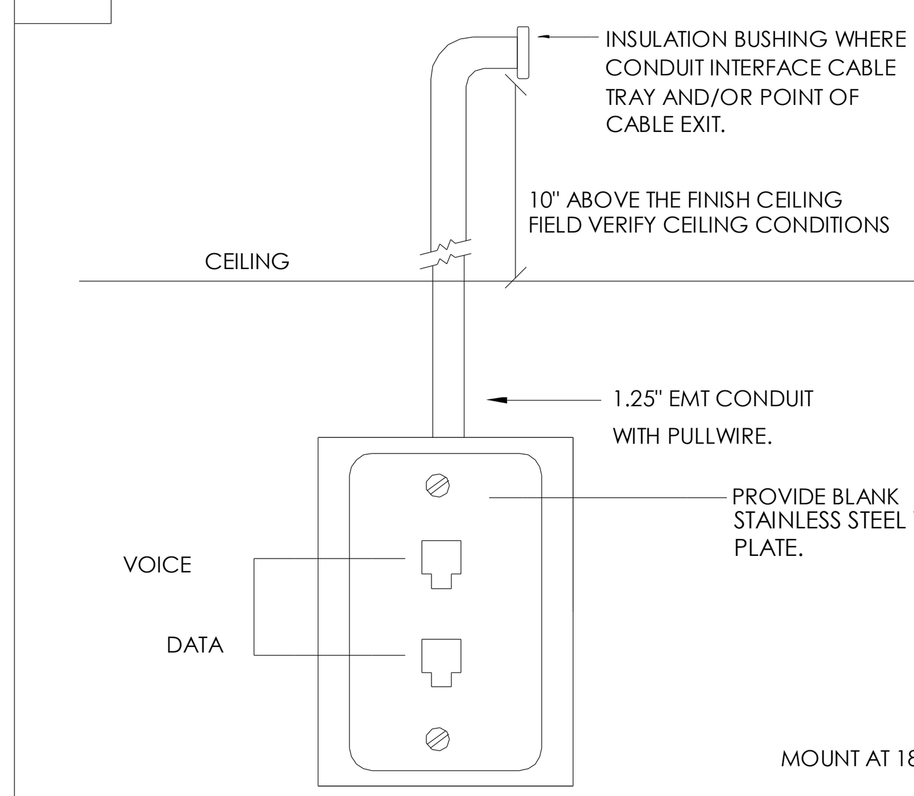
02

NOTE:
VERIFY WITH DIVISION-15 FOR THERMOSTAT LOCATION AND HEIGHT.



SWITCH PLATE LOCATION DETAIL
NO SCALE

03

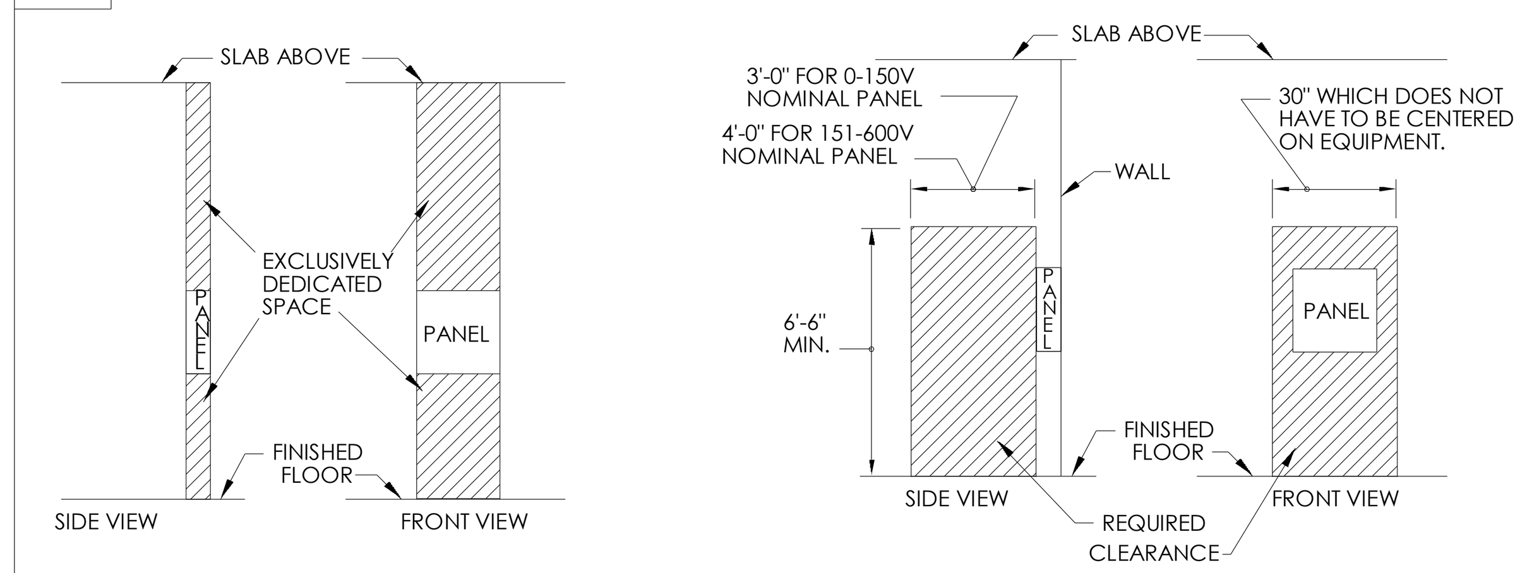


NOTE: CONTRACTOR SHALL PROVIDE A BLANK COVER PLATE ON ALL UNUSED COMMUNICATIONS OUTLET BOXES.

MOUNT AT 18" AFF UNLESS NOTED OTHERWISE.

VOICE/ DATA DETAIL
NO SCALE

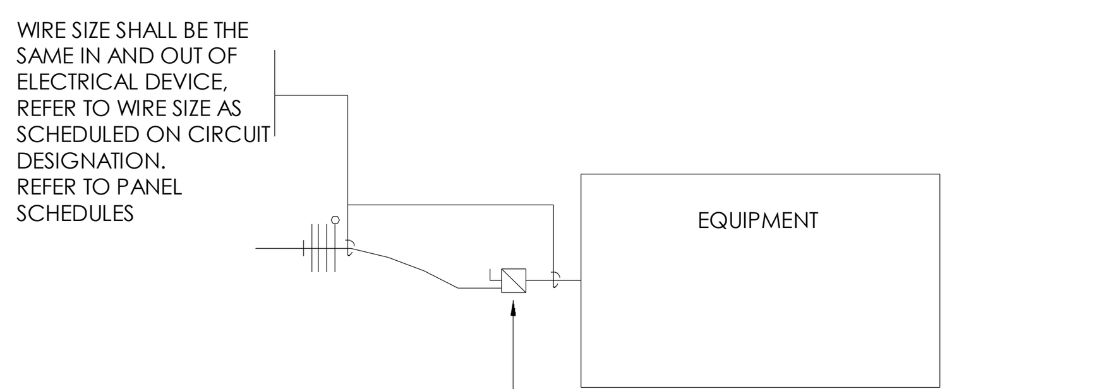
04



NOTE:
REFER TO THE LATEST NATIONAL ELECTRICAL CODE AND LOCAL CODES.

TYPICAL PANEL BOARD REQUIRED CLEARANCE
NO SCALE

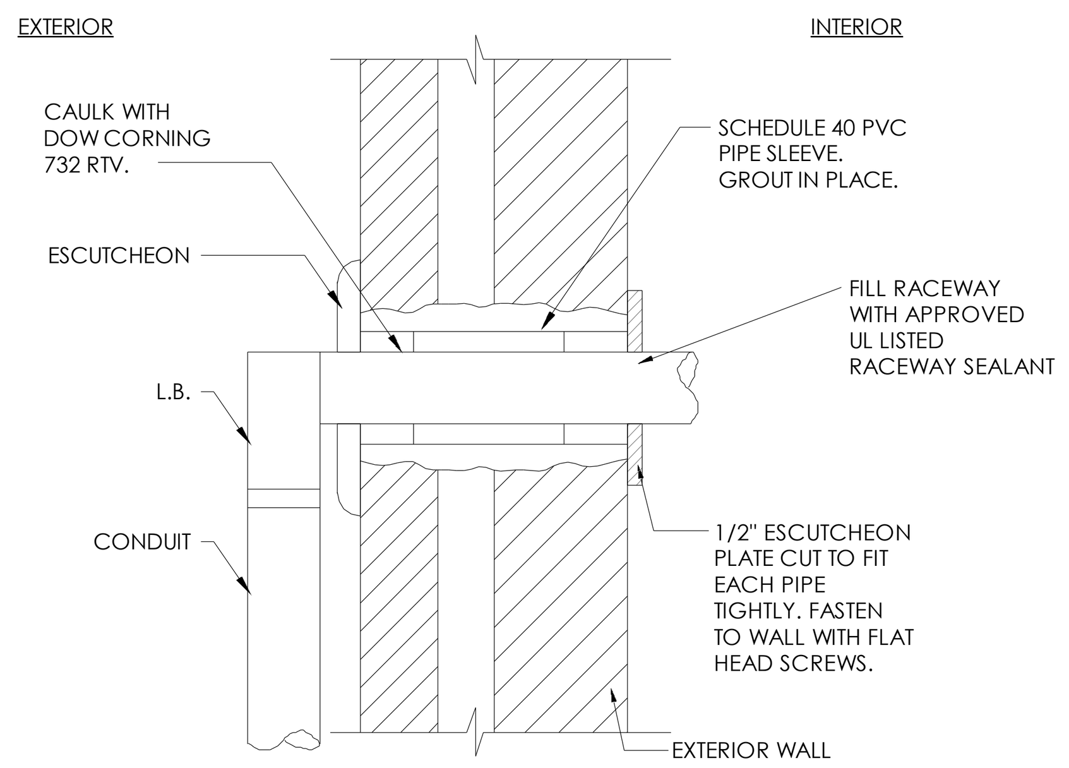
05



NOTE:
FOR MECHANICAL TERMINAL UNITS, REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE

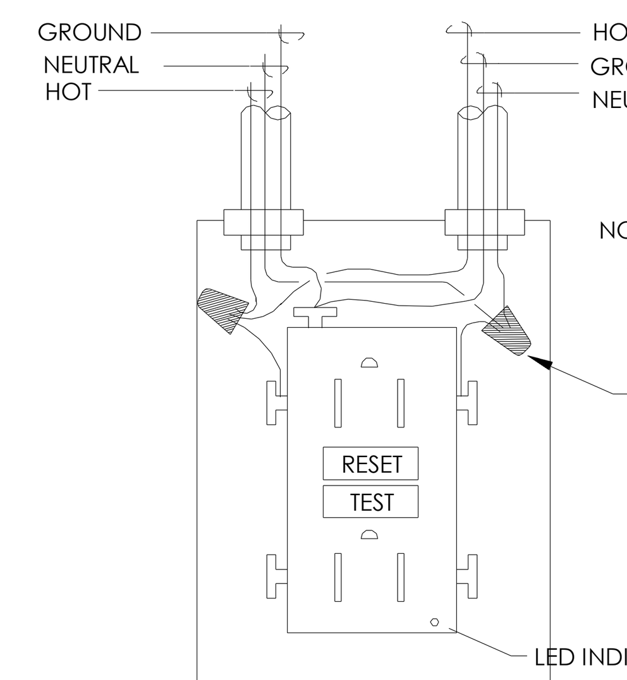
EQUIPMENT CIRCUIT DETAIL
NO SCALE

06



CONDUIT ENTRY THROUGH EXTERIOR
NO SCALE

07



NOTE:
WALL PLATE.
1) PROVIDE STAINLESS STEEL

WIRE GFCI DEVICE SUCH THAT THE DOWNSTREAM DEVICES ARE NOT AFFECTED BY GROUND FAULT INTERRUPTION. IE. NON FEED THRU. EACH GFCI DEVICE SHALL BE SELF PROTECTING ONLY.

GFI RECEPTACLE- WIRING DIAGRAM
NO SCALE

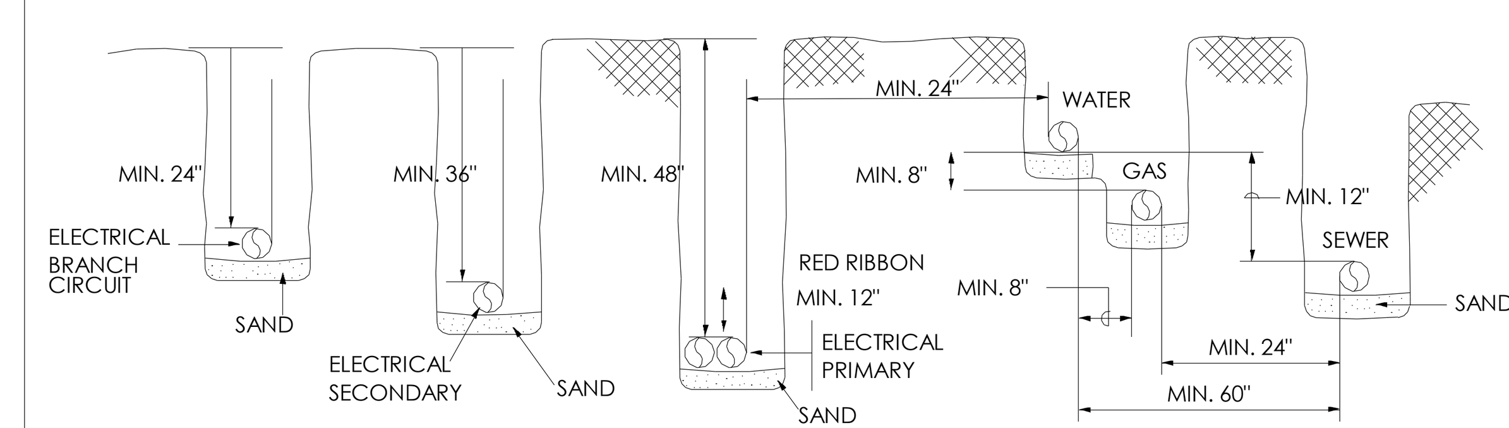
08

CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION.

COMPACT TRENCH FILL TO 95% PROCTOR DENSITY.

MAINTAIN A MINIMUM OF 60 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES OR SUPPORT WATER LINE ON SEPARATE SHELF A MINIMUM OF 12" ABOVE SEWER LINE.

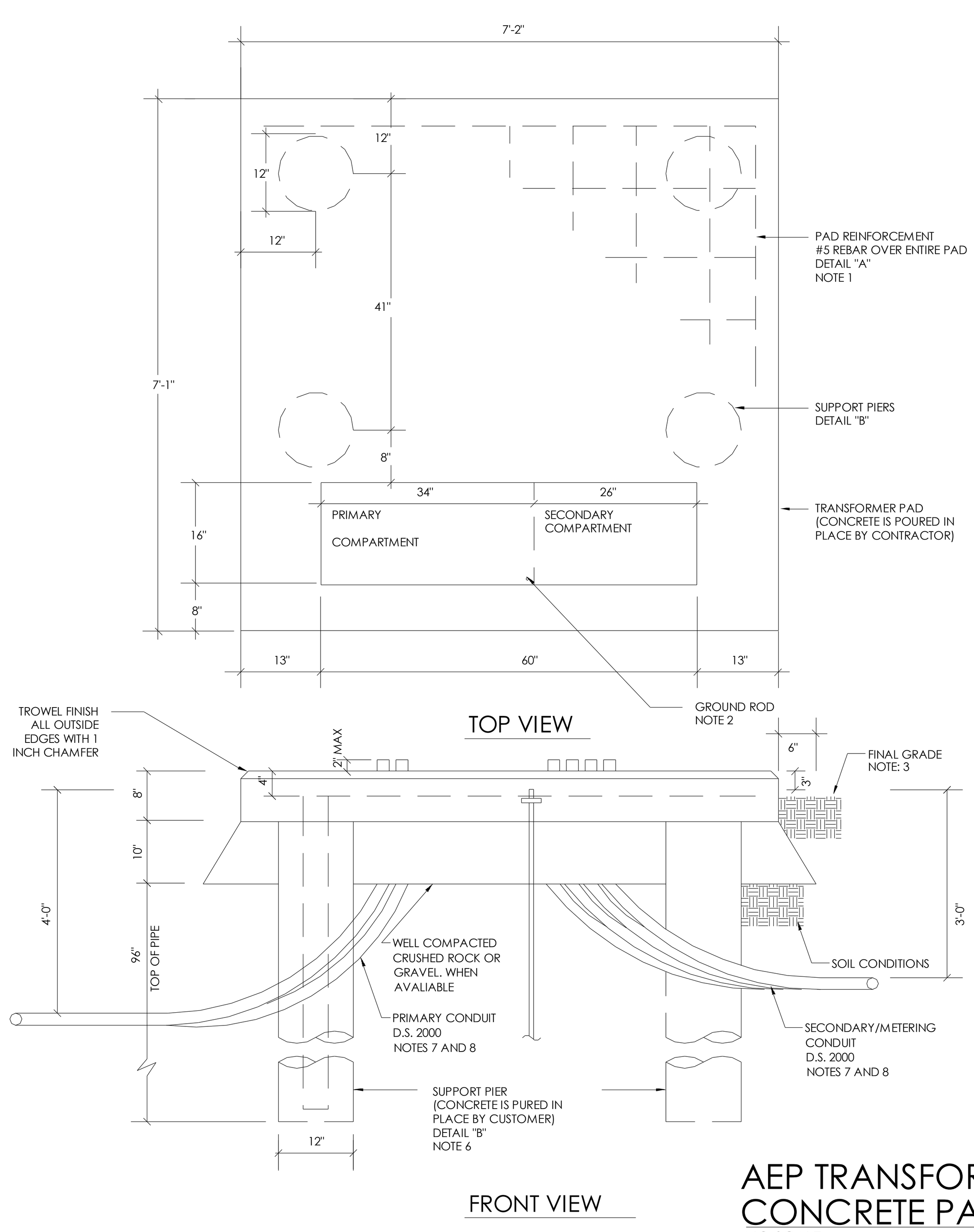
MAINTAIN A MINIMUM OF 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND SEWER. MAINTAIN A MINIM OF 12" VERTICALLY OR 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND WATER LINES, GAS LINES, TELEPHONE RACEWAYS AND CABLE RACEWAYS.



TRENCH DETAIL

09

CONCRETE PAD & PIERS FOR THREE PHASE PAD-MOUNTED TRANSFORMER

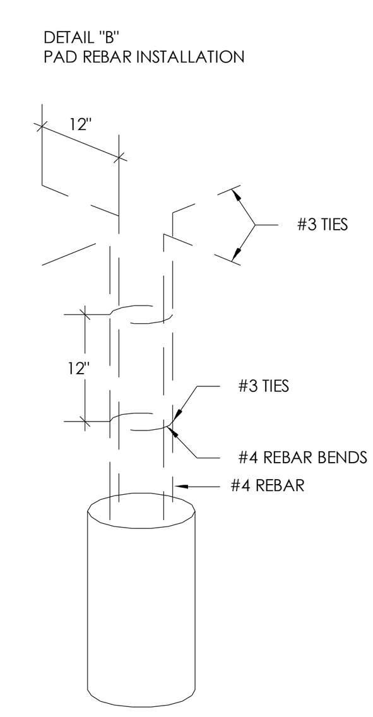


AMERICAN ELECTRIC POWER COMPANY DISTRIBUTION STANDARDS

NOTE:

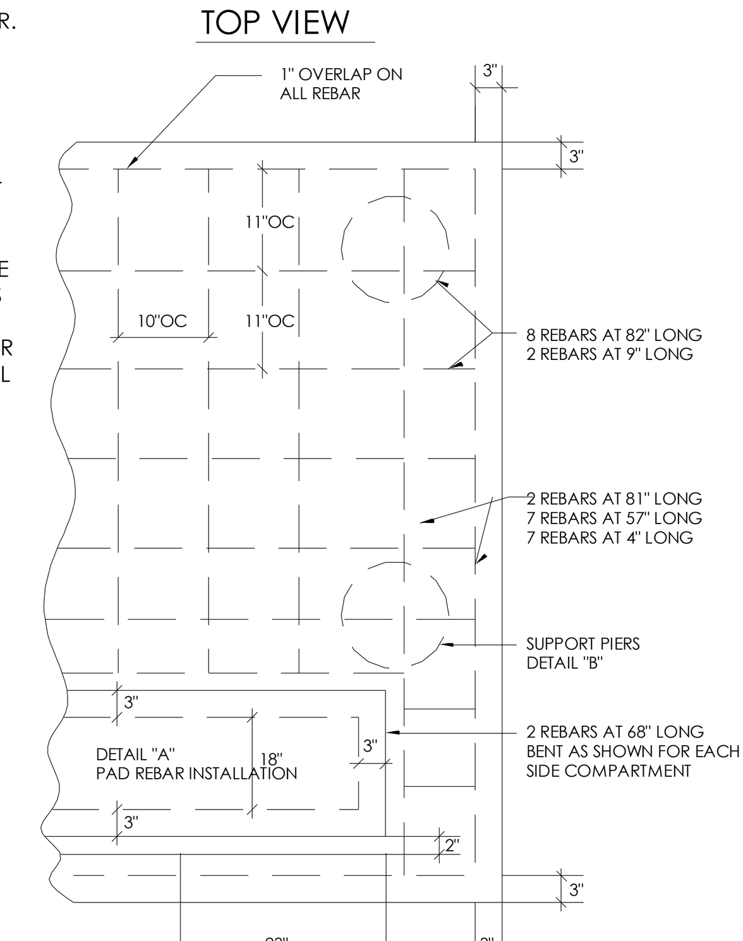
1. SLAB REINFORCEMENT SHALL BE #5 REBARS, ON CENTER (OC) SPACING TO FOLLOW DIMENSIONS SHOWN ON THE DRAWING WITH 4" COVER. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AFTER 28 DAYS.
2. FOR GROUND ROD PLACMENT, REFER TO DS 2235, 2236, OR 2237.
3. FINAL GRADE SHALL BE ESTABLISHED BEFORE INSTALLATION OF PAD.
4. CONCRETE PAD WITH PIERS IS TO BE INSTALLED OF PAD.
5. PIERS SHALL BE 12" MINIMUM IN DIAMETER, 8 FEET DEEP WITH 4 - #4 VERTICALE REBAR AND #3 TIES AT 12" ON CENTER (O/C), AND PROVIDE A MINIMUM 3" COVER. THE #4 BEND BARS SHOULD BE 12" LONG IN THE HORIZONTAL DIRECTION..
6. PIERS REBAR BENT IN THE HORIZONTAL DIRECTION SO THAT IT MAY TIE IN WITH PAD REBAR.
7. THE NUMBER AND PLACEMENT OF SECONDARY CONDUITS TO BE DETERMINED BY ENGINEERING. CONDUIT MAY EXTEND IN ANY DIRECTION AS REQUIRED BY THE CUSTOMER.
8. BURIAL DEPTH OF CONDUIT IS DEFINED AS THE DISTANCE BETWEEN FINAL GRADE AND THE TOP OF THE CONDUIT. UNLESS OTHERWISE DESIGNATED BY ENGINEERING, CONDUITS SHALL BE INSTALLED AT A BURIAL DEPTH OF NOT LESS THAN 4'-0" AND SECONDARY CONDUITS SHALL BE INSTALLED AT A BURIAL DEPTH OF NOT LESS THAN 3'-0". THESE INITIAL DEPTHS ARE TO ALLOW FOR CHANGES TO THE SURFACE CONDITIONS. LOCAL AGREEMENTS AND CODES MAY REQUIRE ADDITIONAL DEPTH. IF OTHER ARE KNOWN EXTENSIVE CHANGES TO THE FINAL GRADE SUCH THAT THEIR DEPTHS ARE NOT MAINTAINED, CORRECTIVE ACTION SHALL BE TAKEN.

DETAIL - "B" - PIER REBAR INSTALLATION



DETAIL - "A" - PAD INSTALLATION

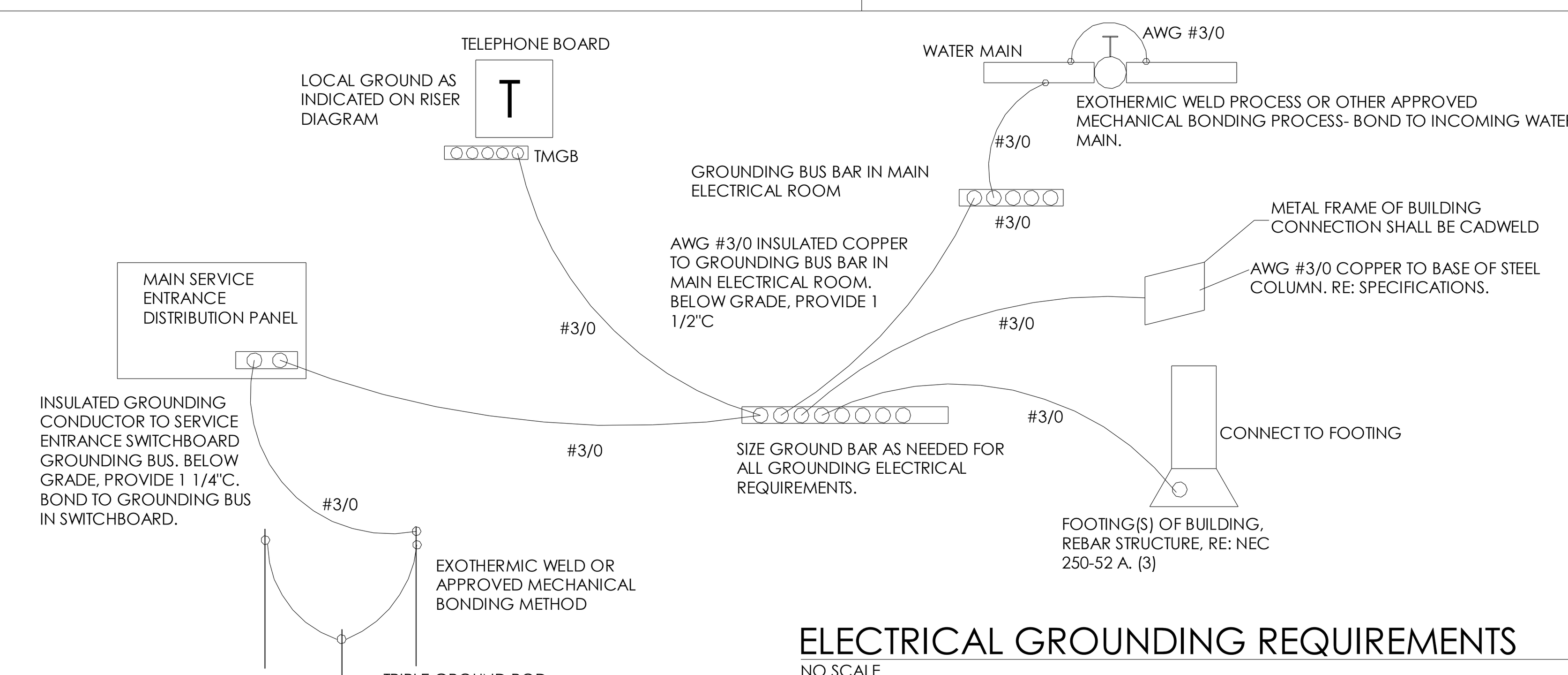
TOP VIEW



CONCRETE PAD AND PIERS FOR THREE PHASE PAD-MOUNTED TRANSFORMERS
HIGH VOLUME CLAY OR SAND TYPE SOIL APPLICATIONS
75KVA - 2500KVA
25KV AND BELOW

AEP TRANSFORMER CONCRETE PAD DETAIL
NO SCALE

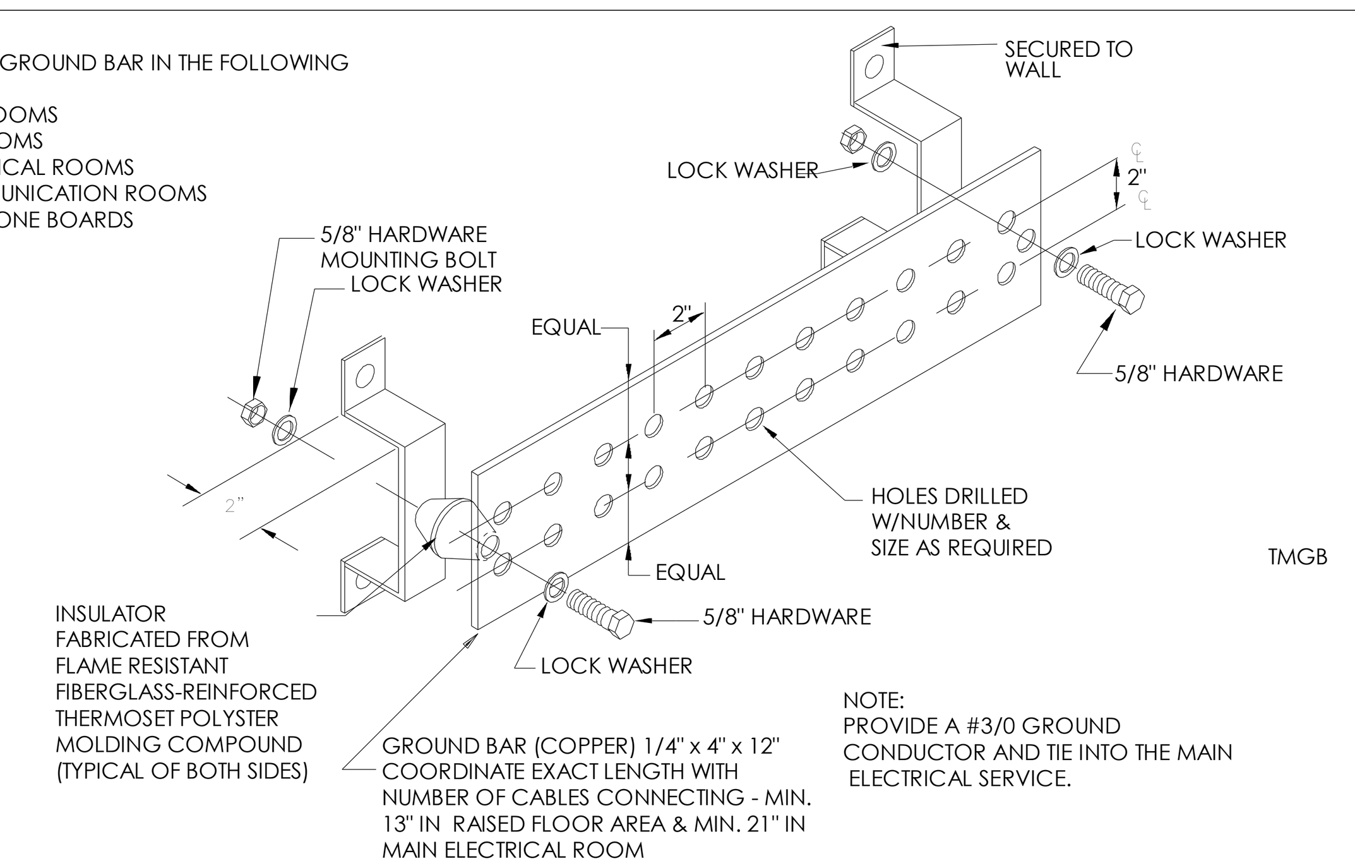
10



ELECTRICAL GROUNDING REQUIREMENTS
NO SCALE

11

PROVIDE GROUND BAR IN THE FOLLOWING ROOMS:
1. MDF ROOMS
2. IDF ROOMS
3. ELECTRICAL ROOMS
4. COMMUNICATION ROOMS
5. TELEPHONE BOARDS



TMGB

NOTE:
PROVIDE A #3/0 GROUND CONDUCTOR AND TIE INTO THE MAIN ELECTRICAL SERVICE.

WALL MOUNTED SINGLE-POINT GROUND BAR DETAIL
NO SCALE

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10/25/2024

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NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

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Texas Registered Engineering Firm - F10362
Project number: 23.4.37

KEY PLAN

ELECTRICAL DETAILS

Drawn by: Author
Checked by: Checker
Project number: 23.4.37
Project Issue Date: 10/25/2024

ED-101

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

ABBREV.	DESCRIPTION
AC	ABOVE CEILING
AFF	ABOVE FINISHED FLOOR
ASA	AMERICAN STANDARDS ASSOCIATION
ASME	AMERICAN SOICIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AW	ACID WASTE
AWWA	AMERICAN WATER WORKS ASSOCIATION
AV	ACID VENT
BTUH	BRITISH THERMAL UNIT PER HOUR
CA	COMPRESSED AIR
CI	CAST IRON
CO	CLEANOUT
CU	COPPER
DN	DOWN
EQ	EQUAL
FCO	FLOOR CLEANOUT
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
GAL	GALLON(S)
GALV	GALVANIZED
GW	GREASE WASTE
HB	HOSE BIBB
HP	HORESPOWER
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
RD	ROOF DRAIN(S)
RE:4/P6	REFER TO DETAIL 4 DRAWING P-6
RO	REVERSE OSMOSIS
SD	STORM DRAIN
SPEC	SPECIFICATION
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
VTR	VENT THRU ROOF
V	VACUUM
W/	WITH
WCO	WALL CLEAN OUT
YCO	YARD CLEAN OUT

PLUMBING GENERAL NOTES: (ALL SHEETS)

A. ALL WORK AND MATERIAL SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AS ADAPTED AND AMENDED BY THE INSPECTING AUTHORITIES.

B. ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID CONFLICT WITH ALL ELECTRICAL WORK, MECH'L WORK AND STRUCTURAL MEMBERS. COORDINATE WITH MECHANICAL, ELEC'L AND STRUCTURAL FOR PROPER CLEARANCES.

C. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASING AND SEQUENCE OF CONSTRUCTION OF WORK.

D. SLEEVE ALL OUTSIDE WALL, FLOOR SLAB, AND GRADE BEAM PENETRATIONS PER DETAILS AND PER CODE.

E. LOCATE ALL PLUMBING VENTS TO ROOF (VTR) SO THAT THEY TERMINATE A MINIMUM OF 1'-0" AWAY FROM ANY VERTICAL SURFACE AND 10'-0" AWAY FROM ANY OUTSIDE AIR INTAKES.

F. RECORD INVERT ELEVATIONS OF ALL YCO'S ON "AS-BUILT" DRAWINGS.

G. MINIMUM 3" WASTE LINE BELOW FLOOR AND MINIMUM 2" WASTE RISER. UNLESS NOTED OTHERWISE (UNO).

H. PLUMBING CONTRACTOR SHALL PAY FOR ALL UTILITY CONNECTIONS FEES, PERMITS, TESTS AND INSPECTIONS. FURNISH 3 COPIES OF INSPECTION CERTIFICATE BEFORE REQUESTING FINAL PAYMENT.

I. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ALL AREAS WHICH ARE DAMAGED BY HIS OPERATIONS.

J. CUTTING OF CONCRETE FLOORS SHALL BE BY MACHINE SAW, HOLES FOR PIPES (WALL OR FLOOR) SHALL BE DONE WITH CORE DRILLING EQUIPMENT WITH PRIOR APPROVAL FROM THE STRUCTURAL ENGINEERS.

K. PRESSURE TEST ALL INSTALLATIONS PRIOR TO CONNECTING EQUIPMENTS.

L. LABEL ALL PIPING PER ANSI STANDARD.

M. PROVIDE PROPER INSULATION ON ALL HOT WATER PIPING, STORM PIPING AND CONDENSATE PIPING.

N. PROVIDE SHUT-OFF VALVES (STOPS) ON ALL ROUGH-INS TO FIXTURES AND EQUIPMENTS.

O. PROVIDE ANY BACK FLOW PREVENTION DEVICE REQUIRED BY CODE OR GOVERNING AUTHORITIES. CONTRACTOR SHALL VERIFY THIS WITH CITY OR LOCAL AGENCIES AND INCLUDE COST OF SAME IN BID. CONTRACTOR TO HAVE BACK FLOWS CERTIFIED.

P. PROVIDE WATER HAMMER ARRESTORS AS INDICATED ON THE DRAWINGS. AIR CHAMBERS NOT AN APPROVED SUBSTITUTE.

Q. ALL EXPOSED PIPING FOR DESIGNATED DISABLED ACCESS FIXTURES SHALL BE COVERED OR OTHERWISE WRAPPED IN ACCORDANCE WITH A.D.A. REQUIREMENTS AND LOCAL AUTHORITY.

R. ALTERNATE MATERIALS NOT IDENTIFIED IN SPECIFICATIONS/DRAWINGS BUT APPROVED BY LOCAL AUTHORITY SHALL BE SUBMITTED TO ARCHITECT AND PLUMBING ENGINEER FOR REVIEW PRIOR TO INSTALLATION.

S. ISOMETRIC DIAGRAMS ARE FOR SIZING PURPOSES ONLY AND SHALL NOT BE USED FOR MATERIAL TAKE-OFFS, OR BE CONSTRUED TO INDICATE ACTUAL SITE INSTALLATION.

T. DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.

U. EVERY FLOOR DRAIN, FLOOR SINK OR HUB DRAIN SHALL BE SERVED BY AN AUTOMATIC TRAP PRIMER, UNO.

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	BALL VALVE		DOMESTIC COLD WATER
	CHECK VALVE		DOMESTIC HOT WATER
	GATE VALVE		DOMESTIC HOT WATER RETURN
	UNION		SANITARY SEWER VENT
	DIRECTION OF FLOW		SANITARY WASTE LINE
	WALL CLEANOUT	140°	140° HOT WATER
	FLOOR CLEANOUT YARD CLEANOUT		SANITARY DIRECTION OF FLOW
	FLOOR SINK		BRANCH - TOP CONNECTION
	FLOOR DRAIN		PIPE RISER
	WALL HYDRANT OR HOSE BIBB		PIPE DROP
			POINT OF CONNECTION (APPROXIMATED FIELD VERIFY EXACT POINT OF CONNECTION)

NOTE: 1. NOT ALL SYMBOLS USED ON THIS PROJECT
2. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDER SIDE OF WATER CLOSET OR DOOR OPENING.
3. INSTALL ADA APPROVED FLUSH VALVE HANDLE FOR ADA PLUMBING FIXTURES.

PLUMBING PIPING MATERIAL:

1. SANITARY DRAIN & VENT INSIDE BUILDING BELOW GRADE: SCHEDULE 40 PVC
2. SANITARY DRAIN OUTSIDE BUILDING: SCHEDULE 40 PVC
3. SANITARY DRAIN & VENT INSIDE BUILDING ABOVE GRADE: SCHEDULE 40 PVC
4. SANITARY DRAIN & VENT IN PLENUM CEILING: NO-HUB CAST IRON
5. ACID WASTE PIPING: FR POLYPROPYLENE
6. ACID VENT IN PLENUM CEILING: FR-PVDF
7. DOMESTIC HOT & COLD WATER: COPPER, TYPE "L" HARD DRAWN
8. DOMESTIC WATER BELOW GRADE: COPPER, TYPE "K" SOFT ANNEALED
8. DOMESTIC WATER BELOW GROUND OUTSIDE OF BUILDING PIPING 2" SIZE AND SMALLER: COPPER, TYPE "L" HARD DRAWN
9. DOMESTIC WATER BELOW GROUND OUTSIDE OF BUILDING PIPING OVER 2" SIZE: SDR 26 CLASS 160 PVC

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE TYPE	CONNECTION SIZE				DESCRIPTION
		San. Sewer	Vent	Cold Water	Hot Water	
WC-1	WATER CLOSET FLOOR MOUNTED ADA	4"	2"	1"	-	KOHLER "HIGHCLIFF ULTRA" MODEL NO. K-96057, FLOOR MOUNTED WATER CLOSET, WITH ELONGATED RIM, 16-5/8" RIM HEIGHT, VITREOUS CHINA, SIPHON JET FLUSH ACTION 10"- 12" ROUGH IN, WITH SLOAN "ROYAL" MANUAL FLUSHOMETER VALVE MODEL NUMBER 111-1.28 , FLOW RATE (1.28 GPF). INCLUDES 1" TOP SPUD AND 2 BOLTS CAPS. COMPLETE WITH BEMIS MODEL NO. 1955SSTFR, OPEN FRONT SEAT LESS COVER. FLUSH LEVER SHALL BE MOUNTED ON APPROACH SIDE OF FIXTURE.
UR-1	URINAL (STANDARD & HANDICAPPED) REFER TO ARCH'L DRAWING FOR MOUNTING HEIGHTS	2"	2"	3/4"	-	KOHLER "DEXTER" MODEL NO. K-5016-ER, SIPHON JET WALL HUNG URINAL. VITREOUS CHINA, 1 GPF FLUSH OR LESS, COMPACT DESIGN, WITH INTEGRAL TRAP, 3/4" TOP INLET, 14" LIP, INCLUDES WALL HANGERS, 2" IPS OUTLET FLANGE AND RUBBER GASKET. WITH SLOAN "ROYAL" MANUAL URINAL FLUSHOMETER VALVE MODEL NUMBER 186-0.5 , FLOW RATE (0.5 GPF). INCLUDES 3/4" TOP SPUD AND 2 BOLTS CAPS. . SF PROVIDE ZURN CARRIER SYSTEM MODEL NO. Z-1221.
L-1	LAVATORY WALL HUNG ADA REFER TO ARCH'L DRAWING FOR MOUNTING HEIGHTS	2"	2"	1/2"	1/2"	KHOLAR "BRENHAM" MODEL NO. K-1997-4 (21x19) WALL HUNG LAVATORY. WITH OVERFLOW. INCLUDES WALL HANGER. VITREOUS CHINA, WITH 4-INCH CENTER FAUCET HOLES. PROVIDE FAUCET EQUAL TO MOEN MODEL 8413F05, SINGLE HANDLE, FLOW RATE (0.5 GPM) . VANDAL RESISTANT, ADA APPROVED. PROVIDE ANTI-ROTATION DECKPLATE MODEL NO. 99550. PROVIDE PROTECTIVE COVER SHIELD ZURN AQUASPEC PART MODEL NO. Z6900-VG ON P-TRAP AND STOPS. PROVIDE ZURN CARRIER SYSTEM MODEL: Z1231 PROVIDE P-TRAP: 17 GAUGE CHROME DEARBORN BRAND PROVIDE SINK/LAV WITH SINGLE OUTLET THERMOSTATIC MIXING VALVE (TMV), WATTS LFMMV-US-M1. SET TEMPERATURE AS PER LOCAL JURISDICTION.
SK-1	SINGLE-COMPARTMENT SINK ADA COMPLIANT	2"	2"	1/2"	1/2"	ELKAY LRAD2219-55-3 18-GAUGE, FULLY UNDERCOATED, STAINLESS STEEL, SINGLE-BOWL, THREE FAUCET HOLE, OFF-CENTER DRAIN, ADA COMPLIANT, 3-1/2-INCH OUTLET. FAUCET: ELKAY LKD2442-BH SERIES, FLOW RATE (2.2 GPM) . LEDGE MOUNTED, 8-INCH CENTER-SET ESCUTCHEON, TWO WRIST BLADE HANDLES, 8-INCH GOOSENECK SPOUT. SUPPLY: MCGUIRE 2167 SERIES. TRAP: MCGUIRE 8912 SERIES. STRAINER AND TAILPIECE: MCGUIRE 151 SERIES. BASKET TYPE.
MS-1	MOP SINK	3"	2"	1/2"	1/2"	FIAT MODEL NO. TSB100, 24"X24"X12" TERRAZO MOP SINK, COMPLETE WITH FAUCET MODEL 830-AA, MOP SINK SHALL INCLUDE ALL HOSE BRACKETS, HOSE, AND MOP HANGER. WITH 3" DRAIN WITH STRAINER & DEEP SEAL P-TRAP. PROVIDE WALL GUARD MSG2424.
HB-1	HOSE BIB EXTERIOR GENERAL USE	-	-	3/4"	-	MILD TEMPERATURE WALL HYDRANT SHALL BE WADE MODEL 8600MT-175 3/4" INLET WITH BRONZE CASING, BRONZE FACE AND STRAIGHT INLET CONNECTION WITH INTEGRAL BACKFLOW PREVENTER.
TMV-1	THERMOSTATIC MIXING VALVE	-	-	3/4"	3/4"	BRADLEY THERMOSTATIC MIXING VALVE MODEL S59-2025-TMV25 SURFACE. PROVIDE WITH CABINET TO BE EQUAL TO BRADLEY CABINET MODEL CAB-TMV25-R-S-T-P-SS-W SURFACE MOUNT STAINLESS STEEL CABINET.
FD-1	RESTROOM FLOOR DRAIN	AS NOTED ON PLANS				EQUAL TO JOSAM PART # 30003-6A-Y-50, CAST IRON BODY WITH CLAMP RING, FLANGE, ADJUSTABLE NIKALOY STRAINER, HUB OUTLET WITH GASKET AND 1/2" PRIMER TAP.
FD-2	FLOOR DRAIN	AS NOTED ON PLANS				EQUAL TO JOSAM PART # 30003-7E2-Y, COATED CAST IRON BODY WITH CLAMP RING, TWO PIECE BODY WITH DOUBLE DRAINAGE FLANGE, ADJUSTABLE NIKALOY FUNNEL STRAINER .
FCO	FLOOR CLEANOUT	AS NOTED ON PLANS				MIFAB MODEL "C1100-R-1" ADJUSTABLE FLOOR CLEANOUT, COMPLETE WITH NICKEL BRONZE TOP ASSEMBLY, LACQUERED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, AND PRIMARY GASKET SEAL.
YCO	YARD CLEANOUT	AS NOTED ON PLANS				MIFAB MODEL "C-1220" LACQUERED CAST IRON CLEANOUT, THREADED BRONZE PLUG FOR AIR TIGHT SEAL AND STANDARD REINFORCED SATIN FINISHED NICKEL BRONZE ADJUSTABLE TOP ASSEMBLY.
WCO	WALL CLEANOUT	AS NOTED ON PLANS				MIFAB MODEL "C1430-RD" CAST BRONZE CLEANOUT PLUG. COMPLETE WITH STAINLESS STEEL WALL ACCESS COVER AND ANCHOR SCREW. MOUNT 24" A.F.F.

NOTES:

1.) INSULATE ALL WATER AND WASTE PIPING UNDER LAVATORIES WITH HANDY-SHIELD JACKET BY PLUMBEREX.

2.) PROVIDE SINGLE FIXTURE WATER HAMMER ARRESTORS EQUAL TO MINI-RESTER , HYDRA-RESTER SIOUX CHIEF. FOR ALL PLUMBING FIXTURES IN THE WATER SUPPLY SYSTEM.

3.) ALL VITREOUS CHINA FIXTURES SHALL BE WHITE.

ELECTRIC WATER HEATER SCHEDULE

DESIG.	STORAGE GALLONS	RECOVERY G.P.H.	DEGREE RISE °F	WATER TEMP. LEAVING	WATER INLET	WATER OUTLET	REMARKS
WH-1	19.9	20	60°	120°	3/4"	3/4"	RHEEM MODEL NO. EGSP-20, 3KW, 208V/1□, ELECTRIC TANK TYPE. PROVIDE 2 GALLON EXPANSION TANK. PROVIDE WITH HOLDRITE MODEL SKU 40-SWHP-WM WALL MOUNTED WATER HEATER PLATFORM

APPLICABLE BUILDING CODE

2018 International Building Code
2018 International Plumbing Electrical Code
2018 International Mechanical Code
2018 International Energy Conservation Code
2018 International Existing Building Code
2017 National Electrical Code of the National Fire Protection Association
2018 International Fire Code
2012 Texas Accessibility Standards

INDEX OF SHEETS PLUMBING

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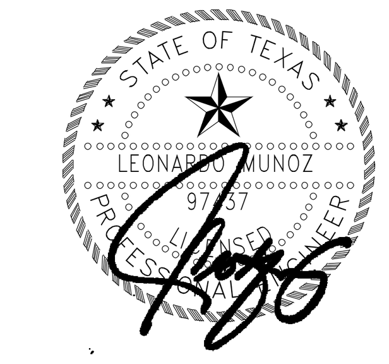

NOTES:
DO NOT SCALE DRAWINGS.
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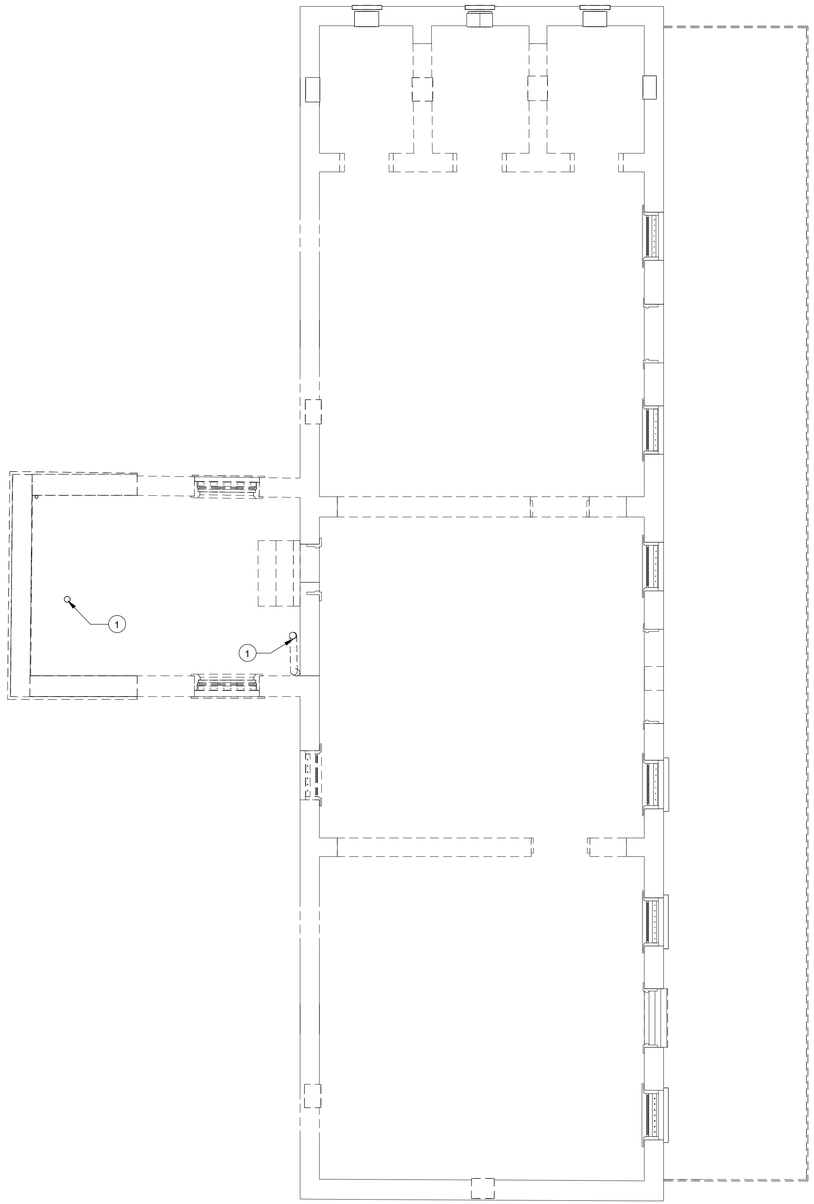
KEY PLAN

PLUMBING LEGEND

Drawn by:	JV
Checked by:	JG
Project number:	23.4.37
Project Issue Date:	10/25/2024

PG-101

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



1 PLUMBING DEMOLITION - FIRST FLOOR
1/4" = 1'-0"

GENERAL DEMOLITION NOTES

A. THE CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING THE DEMOLITION WORK UNDER THIS SECTION OF THE PROJECT IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES INCLUDING THOSE PUBLISHED BY OSHA AND EPA.

B. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ARCHITECTURAL DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE WILL BE REQUIRED PRIOR TO BIDDING. CONTRACTOR SHALL IDENTIFY/ VERIFY ALL WATER, GAS AND SANITARY LINES BEFORE STARTING ANY DEMOLITION WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL UNDERGROUND UTILITIES IN AREAS OF EXCAVATION WORK.

C. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL AND/OR RELOCATION OF PLUMBING FIXTURES AND EQUIPMENT AND ASSOCIATED SERVICES TO PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.

D. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ARCH'L DOCUMENTS IN ADDITION TO THE DIVISION 15 AND 16 DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.

E. WHERE FIXTURES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE REMOVED, THE ASSOCIATED SERVICES SHALL BE CAPPED AT A CONCEALED LOCATION.

F. WHERE FIXTURES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE RELOCATED, THE ASSOCIATED SERVICES SHALL BE REMOVED AND CAPPED. NEW MATERIALS SHALL BE USED TO EXTEND SERVICES TO NEW LOCATION.

G. WHERE SERVICES RUN ABOVE INACCESSIBLE CEILINGS OR IN WALLS WHICH ARE TO REMAIN UNDISTURBED, SERVICES SHALL BE CAPPED AT CONCEALED LOCATION AND ABANDONED

H. WHERE THE REMOVAL OF FIXTURES OR EQUIPMENT RENDERS EQUIPMENT DOWNSTREAM INOPERABLE, SERVICES SHALL BE EXTENDED TO THE DOWN-STREAM FIXTURES OR EQUIPMENT SO THAT THE FIXTURES OR EQUIPMENT IS LEFT IN OPERATING CONDITION.

I. COORDINATE DEMOLITION OF DIVISION 15 SYSTEMS AS REQUIRED WITH ALL OTHER TRADES.

J. ALL EXISTING PLUMBING FIXTURES AND EQUIPMENT REMOVED DURING CONSTRUCTION THAT ARE NOT TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER.

K. WHERE EXISTING FIXTURE OR EQPT IS TO BE RELOCATED, BE CAUTIOUS TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION AND APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

L. EXISTING FIXTURES OR EQUIPMENT TO BE REUSED SHALL BE CLEANED AND REPAIRED AT THE DISCRETION OF THE ARCHITECT WHERE APPLICABLE.

M. ALL DEVICES WITH AN (E) SYMBOL ARE EXISTING TO REMAIN. (UNO).

N. ALL DEVICES ATTACHED TO WALLS OR CEILINGS SHALL BE REMOVED PER DEMOLITION NOTE A - L WHETHER SHOWN ON DRAWINGS OR NOT.

O. CUTTING OF CONCRETE FLOORS SHALL BE BY MACHINE SAW. HOLES FOR PIPES (WALL OR FLOOR) SHALL BE DONE WITH CORE DRILLING EQUIPMENT WITH PRIOR APPROVAL FROM THE STRUCTURAL ENGINEERS. CONTRACTOR SHALL INFORM THE ENGINEER IF REINFORCING IS CUT OR DAMAGED WHILE MAKING OPENINGS AS REQUIRED BY DRAWINGS OR SPECIFICATIONS. PATCH AND SEAL OPENINGS AS REQUIRED. COORDINATE ALL CUTTING AND PATCHING WITH OTHER TRADES.

PLUMBING KEYED NOTES	
1	REMOVE EXISTING PLUMBING FIXTURES AND HARDWARE. AREA TO BE PREP FOR NEW PLUMBING FIXTURES.

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10/25/2024

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LEONARDO JUNOZ
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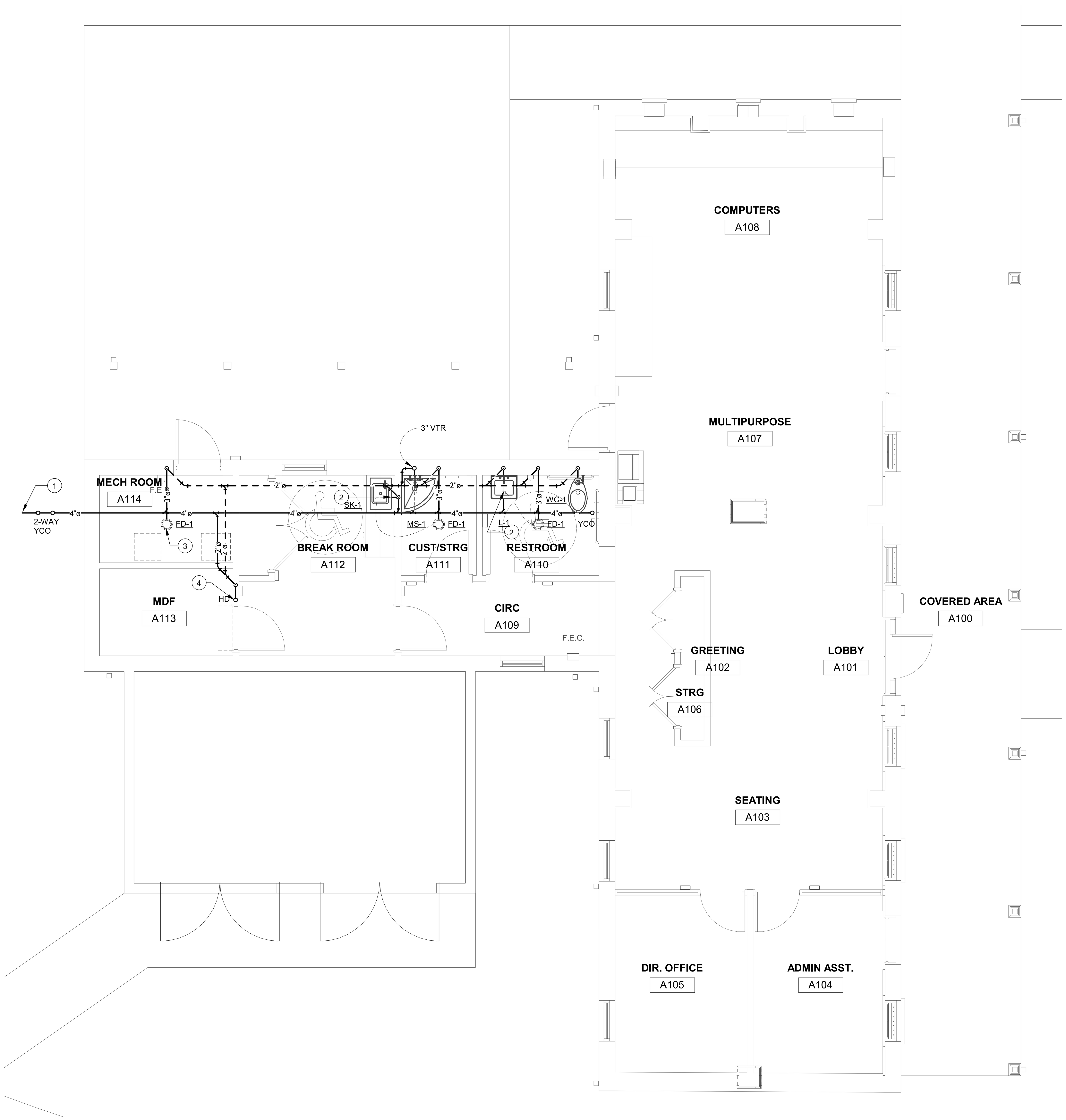
KEY PLAN

PLUMBING DEMOLITION

Drawn by:	JV
Checked by:	JG
Project number:	23.4.37
Project Issue Date:	10/25/2024

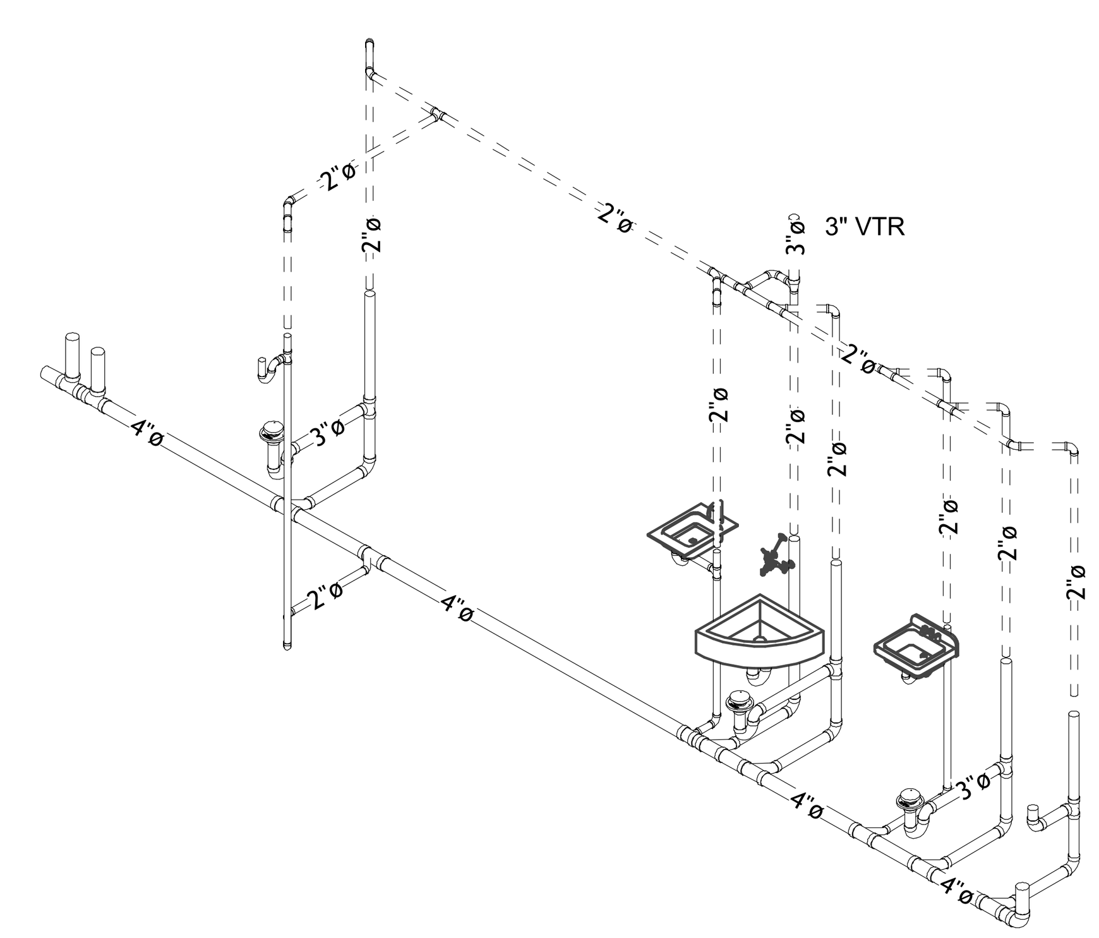
P-100

Scale: As indicated



1 PLUMBING SEWER - FIRST FLOOR
1/4" = 1'-0"

PLUMBING KEYED NOTES	
1	CONNECT NEW SANITARY SEWER LINE TO EXISTING SANITARY SEWER. FIELD VERIFY SIZE, DIRECTION OF FLOW AND LOCATION OF EXISTING SANITARY SEWER
2	1/2" COPPER FROM TRAP PRIMER PROVIDE LAVATORY WITH "PRIME-EZE" TRAP PRIMER BY JR SMITH. REFER TO DETAIL 08/PD01. COVER WITH SLEEVE "POLY SLEEVE" OR EQUAL. TYPICAL ALL TRAP-PRIMERS.
3	FLOOR DRAIN FOR CONDENSATE FROM AHU's. COORDINATE LOCATION WITH HVAC CONTRACTOR.
4	PROVIDE 3" HUB DRAIN FOR FAN COIL UNIT, WITH DEEP EAL P-TRAP, IN WALL, ALONG WITH DRAIN KIT, TRAP PRIMER AND 8X8 UNIVERAL ACCESS DOOR EQUAL TO MIFAB SERIES UA. REFER TO DETAIL 13/PD01.



2 PLUMBING SEWER & VENT RISER

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KEY PLAN

PLUMBING SEWER & VENT FLOOR PLAN

Drawn by: JV
Checked by: JG
Project number: 23.4.37
Project Issue Date: 10/25/2024

P-101

Scale: 1/4" = 1'-0"

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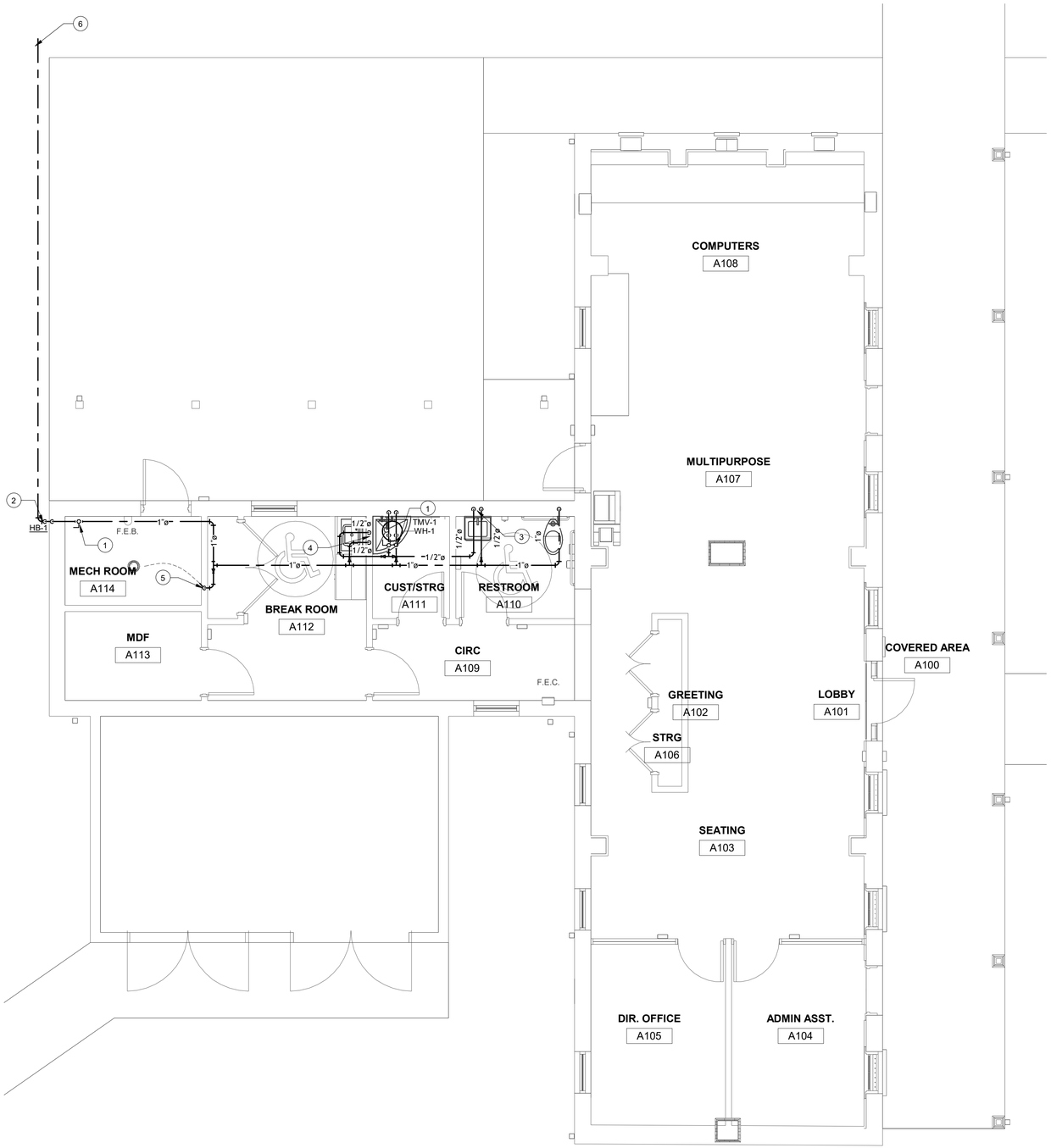
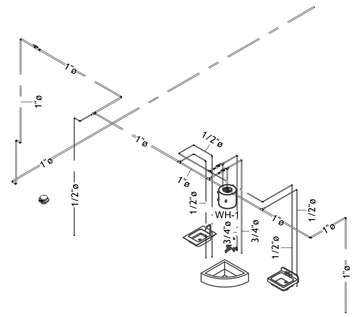


1 PLUMBING DOMESTIC WATER- FIRST FLOOR
1/4" = 1'-0"

PLUMBING KEYED NOTES	
1	BRONZE CUT-OFF VALVE ABOVE CEILING. PROVIDE ACCESS PANEL WHERE LOCATED IN AN INACCESSIBLE CEILING. PANEL SHALL BE 12"X12" PAINTED TO MATCH CEILING.
2	WATER SERVICE ENTRANCE. REFER TO DETAIL 01/P501.
3	PROVIDE THERMOSTATIC MIXING VALVE EQUAL TO WATTS LFMMV-US-M1, TO SERVE LAVATORY/LAVATORIES. SET TEMPERATURE PER LOCAL JURISDICTION REQUIREMENTS.
4	PROVIDE THERMOSTATIC MIXING VALVE EQUAL TO WATTS LFMMV-US-M1, TO SERVE SINK/SINKS. SET TEMPERATURE PER LOCAL JURISDICTION REQUIREMENTS.
5	PRESSURE DROP ACTIVATED TRAP PRIMER. PROVIDE ACCESS PANEL IF INACCESSIBLE. SEE DETAIL 07/PD01.
6	CONNECT NEW 1" CW TO EXISTING CW OF EQUAL OR GREATER SIZE. VERIFY SIZE AND LOCATION OF EXISTING CW PRIOR TO CONSTRUCTION.



2 PLUMBING DOMESTIC WATER RISER

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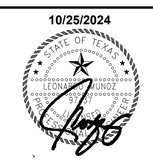

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KEY PLAN

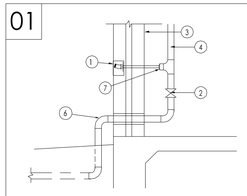
PLUMBING DOMESTIC WATER FLOOR PLAN

Drawn by:	JV
Checked by:	JG
Project number:	23.4.37
Project Issue Date:	10/25/2024

P-201

Scale: 1/4" = 1'-0"

01



1. WALL HYDRANT - INSTALL LOW ENOUGH TO DRAIN RISER.
2. MAIN SHUT-OFF VALVE
3. WALL
4. TYPE "L" COPPER, WATER SUPPLY TO SYSTEM
5. SLEEVE
6. PROVIDE 1" ARMAFLEX INSULATION W/ METAL JACKET ON EXPOSED PIPING.
7. REDUCE PIPE ACCORDINGLY FOR SUPPLY TO HOSE BIBB

WATER SERVICE ENTRANCE DETAIL

NO SCALE

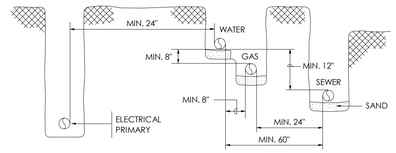
02

CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION.

COMPACT TRENCH FILL TO 95% PROCTOR DENSITY.

MAINTAIN A MINIMUM OF 60 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES OR SUPPORT WATER LINE ON SEPARATE SHELF A MINIMUM OF 12" ABOVE SEWER LINE.

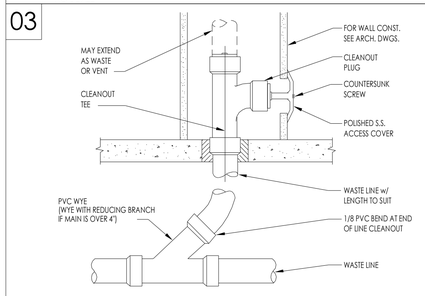
MAINTAIN A MINIMUM OF 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND SEWER. MAINTAIN A MINIM OF 12" VERTICALLY OR 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND WATER LINES, GAS LINES, TELEPHONE RACEWAYS AND CABLE RACEWAYS.



TRENCHING DETAIL

NO SCALE

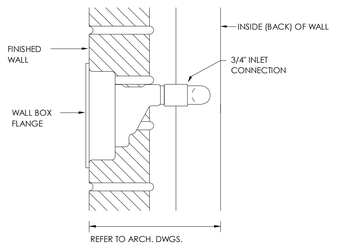
03



WALL CLEANOUT DETAIL

NO SCALE

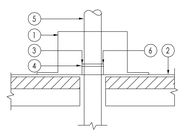
04



WALL HYDRANT DETAIL

NO SCALE

05

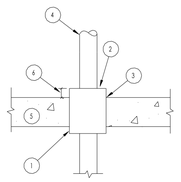


1. PREFABRICATED ROOF CURB. FURNISHED & INSTALLED BY ROOFING CONTR. (COORDINATE)
2. METAL ROOFING
3. STAINLESS STEEL CLAMP
4. SLEEVE PIPE BY ROOFING CONTR.
5. VTR - USE CAST IRON WHERE CEILING IS PLENUM SPACE.
6. PROVIDE CAULKING GROVE
7. LOCATE MIN. 10'-0" FROM A/C AIR INTAKES

VENT THRU ROOF DETAIL

NO SCALE

06

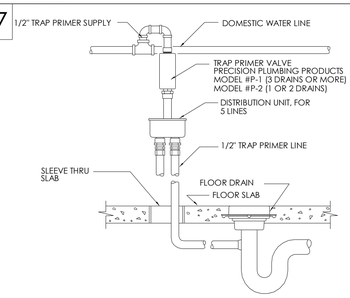


1. METAL SLEEVE TWO SIZES LARGER THAN PIPE
2. FILL VOID WITH NON-SHRINKING WATERPROOF, VERMIN PROOF MATERIAL
3. ALL PLUMBING PIPE PENETRATIONS THROUGH GROUND FLOOR, AND GRADE BEAMS SHALL BE SLEEVED
4. PIPE
5. CONCRETE SLAB
6. MINIMUM 2"

FLOOR PENETRATION DETAIL

NO SCALE

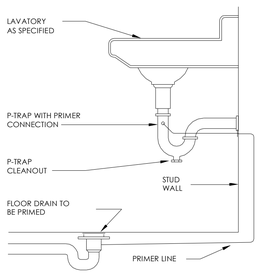
07



TRAP SEAL PRIMER DETAIL

NO SCALE

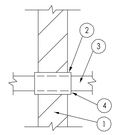
08



TRAP SEAL PRIMER INSTALLATION DETAIL

NO SCALE

09

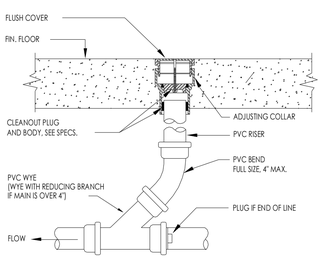


1. MASONRY WALL
2. GALVANIZED SCHEDULE 40 STEEL OR COPPER SLEEVE. SIZE TO BE MINIMUM 3/8" LARGER IN DIAMETER THAN PIPE AND INSULATION.
3. PLUMBING PIPE (RELIEF LINES, DOMESTIC WATER, AIR, AND GAS PIPING).
4. FILL VOID WITH MINERAL WOOL AND CAULK VERMIN TIGHT.

WALL SLEEVE DETAIL

NO SCALE

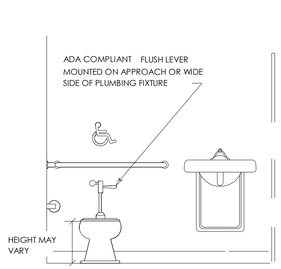
10



FLOOR CLEANOUT DETAIL

NO SCALE

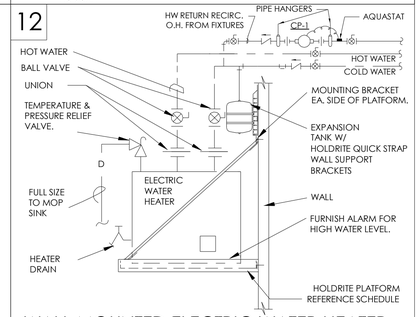
11



ADA WATER CLOSET DETAIL

NO SCALE

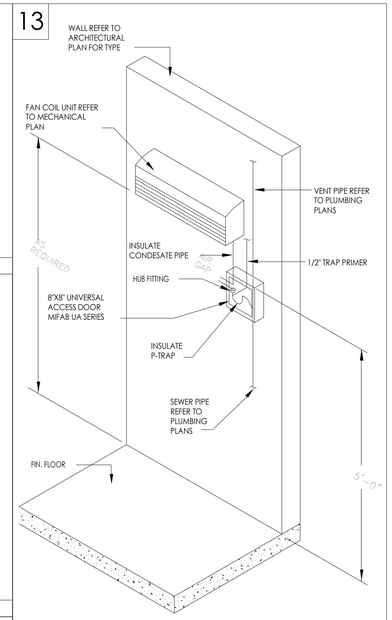
12



WALL MOUNTED ELECTRIC WATER HEATER

NO SCALE

13



CONDENSATE DRAIN DETAIL

NO SCALE

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KEY PLAN

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PD-101

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

TECHNOLOGY SYMBOLS & LEGEND

VOICE SYMBOLS

	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS PER LOCATION.
W	SINGLE VOICE OUTLET FOR WALL-MOUNTED PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.

DATA SYMBOLS

	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF DATA OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
W	SINGLE DATA OUTLET FOR WALL-MOUNTED IP PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE ABOVE CEILING DATA OUTLET, CABLE TYPE AS SPECIFIED.
X	ABOVE CEILING DATA OUTLET, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.

ROUGH-IN & MISC. SYMBOLS

R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
R	POWER POLE WITH ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
WAP	WIRELESS ACCESS POINT. EQUIPMENT AS SPECIFIED.

VOICE/DATA SYMBOLS

	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF VOICE TERMINATIONS , Y = NUMBER OF DATA TERMINATIONS PER LOCATION.
	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF VOICE OUTLETS AND Y = NUMBER OF DATA OUTLETS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET AND SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X Y	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X Y	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS PER LOCATION.

FIBER OPTIC SYMBOLS

	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF FIBER OPTIC OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.

CABLE PLANT & RISER DIAGRAM

	MAINTENANCE HOLE, SIZE & TYPE AS SPECIFIED.
	PULLBOX, SIZE AND TYPE AS SPECIFIED.
UGC	DIRECT BURIED COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
AER	AERIAL COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
	CONDUIT, SIZE AND TYPE AS SPECIFIED.

GENERAL SYMBOLS

# SHEET — DRAWING TITLE — SCALE: SCALE	DRAWING TITLE CALLOUT, # = DETAIL NUMBER.
# SHEET	DETAIL CALLOUT, # = DETAIL NUMBER.
# SHEET	SECTION CALLOUT, # = DETAIL NUMBER.
SHEET #	ELEVATION CALLOUT, # = DETAIL NUMBER.
#	KEYED NOTE, # = KEYED NOTE NUMBER.
#	REVISION TRIANGLE, # = REVISION NUMBER (PER SHEET).
TR (IDF XXX)	INDICATES TELECOMMUNICATIONS REGION

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AER	AERIAL
DEMARC	DEMARCATION POINT
EMT	ELECTRIC METALLIC TUBE
F.O.C.	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
HE	PA/INTERCOM HEAD-END
IMC	INTERMEDIATE METAL CONDUIT
ISP	INSIDE CABLE PLANT
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
MH	MAINTENANCE HOLE
MM	MULTIMODE
OSP	OUTSIDE CABLE PLANT
PB	PULLBOX
PR	PAIR
PVC	POLYVINYL CHLORIDE
RSC	RIGID STEEL CONDUIT
SM	SINGLE MODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TB	TERMINAL BLOCK
TR	TELECOMMUNICATION REGION
UGC	UNDERGROUND COMMUNICATION
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR

NOTES

1. CONTRACTOR SHALL REVIEW DRAWINGS AND SPECIFICATIONS THAT MAKE UP THE CONTRACT DOCUMENTS AND COMPLETE ALL WORK INCLUDED THEREIN.
2. SCALE OF TECHNOLOGY DRAWINGS IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CABLE LENGTHS, SIZE OF PATHWAYS, DIMENSIONS, ETC.
3. TECHNOLOGY DRAWINGS SHALL BE USED TO COMPLEMENT THE WRITTEN SPECIFICATIONS.
4. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT AND SUBSEQUENTLY CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE ARCHITECT'S/DESIGN CONSULTANT`S INTERPRETATION.

INDEX OF DRAWINGS

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BICSI ID # 311985
EXPIRES 12-31-25
RCDD
10/11/2024

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No.	Description	Date

KEY PLAN

TECHNOLOGY SYMBOLS & LEGEND

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

T000

Scale: 12" = 1'-0"

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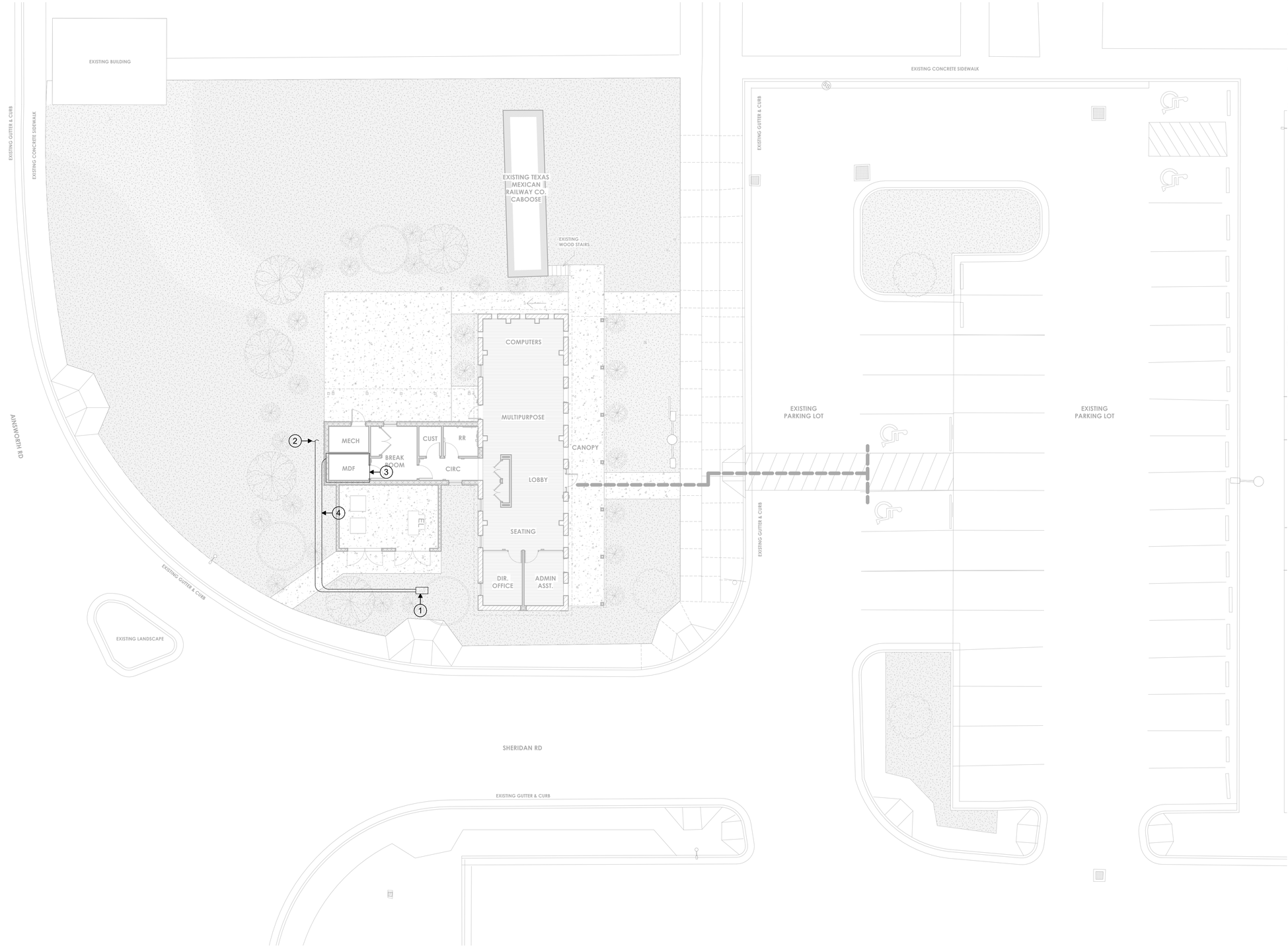

1 T001 TECHNOLOGY SITE PLAN
3/32" = 1'-0"

GENERAL NOTES

1. ALL CONDUIT PATHWAYS, ROUGH-INS, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
2. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH WALLS/STRUCTURES FOR TECHNOLOGY CABLING TO PREVENT WATER INFILTRATION INTO THE SPACE.
6. CONDUITS SHALL MAINTAIN A MINIMUM OF 12-INCHES OF WELL TAMPED EARTH OR 3-INCHES OF CONCRETE SEPARATION BETWEEN ANY FOREIGN CONDUITS AND/OR PIPES THROUGHOUT THE ENTIRE CONDUIT PATHWAY.
7. CONDUIT SEGMENTS SHALL BE NO MORE THAN 600-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
8. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
9. CONTRACTOR SHALL PROVIDE DETECTABLE WARNING TAPE 12-INCHES BELOW GRADE ON TOP OF ALL CONDUITS THROUGHOUT THE ENTIRE CONDUIT TRENCH.
10. CONTRACTOR SHALL COORDINATE ALL CONDUIT PATHWAYS WITH THE ARCHITECT AND LANDSCAPE PLAN PRIOR TO BEGINNING ANY TRENCHING.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.

KEYED NOTES

1. APPROXIMATE LOCATION OF EXISTING TELECOMMUNICAITON HAND HOLE.
2. APPROXIMATE UNDERGROUND CONDUIT ROUTE OF EXISITNG BACKBONE PATHWAY FROM EXISITNG "DE LA GARZA" BUILDING.
3. APPROXIMATE LOCATION OF NEW BUILDING MDF.
4. (2) (4)-INCH SCHEDULE 80 PVC CONDUIT BURIED 36-INCHES BELOW FINAL FINISHED GRADE FROM EXISTING COMMUNICATIONS HAND HOLE TO NEW MDF ROOM. CONTRACTOR SHALL PROVIDE PULL STRING INSIDE EACH CONDUIT. CONTRACTOR SHALL PROVIDE NYLON BUSHINGS AND PROTECTIVE CAPS ON EACH END OF THE CONDUIT. CONDUITS SHALL BE TERMIANTED 4-INCHES A.F.F. AND NO FARTHER THAN 2-INCHES FROM THE WALL IN THE MDF. (BY DIV. 26).

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No.	Description	Date

KEY PLAN

TECHNOLOGY SITE PLAN

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

T001

Scale: 3/32" = 1'-0"

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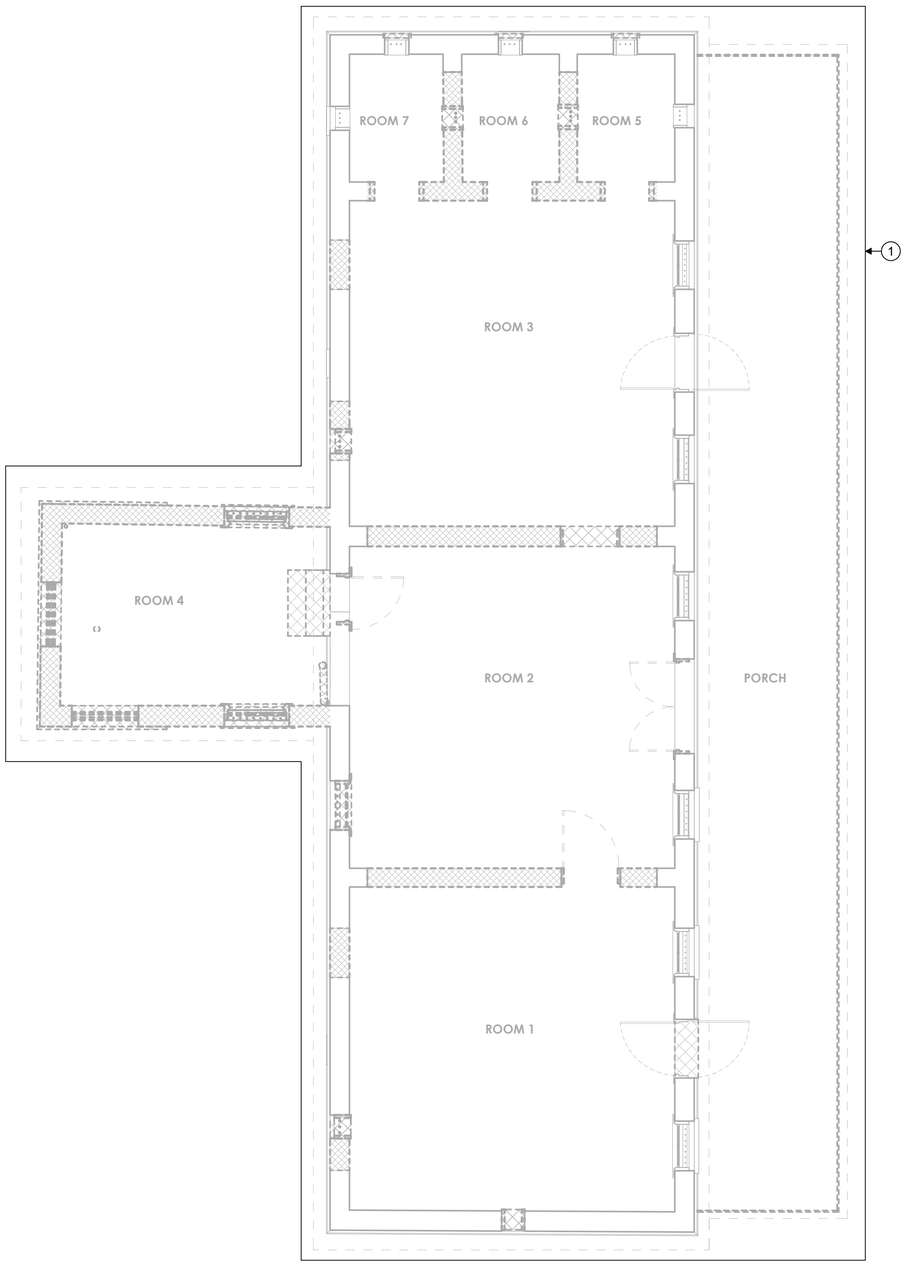

1 T100 TECHNOLOGY DEMO FLOOR PLAN
1/4" = 1'-0"

GENERAL NOTES

1. ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS SHALL REMAIN OPERATIONAL AT ALL TIMES DURING BUSINESS HOURS. ANY SYSTEM DOWNTIME SHALL BE SCHEDULED WITH THE ARCHITECT/ENGINEER AND OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE. CONTRACTOR SHALL DEVELOP A PHASING PLAN AND SCHEDULE OF ANY REQUIRED SYSTEM DOWNTIME FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER AND OWNER PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. THE EQUIPMENT ROOMS AND TELECOM ROOMS ENVIRONMENTAL CONTROLS SHALL BE MAINTAINED AT ALL TIMES. THE EQUIPMENT ROOMS AND TELECOM ROOMS TEMPERATURE SHALL REMAIN BETWEEN 60 - 70 DEGREES F WITH RELATIVE HUMIDITY OF 30% - 50% NON-CONDENSING. THE TEMPERATURE RANGE OF THE EQUIPMENT ROOMS AND TELECOM ROOMS SHALL BE MAINTAINED BETWEEN + - 9 DEGREES F.
3. OWNER SHALL BE RESPONSIBLE FOR POWER DOWN AND START-UP OF ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT/ENGINEER AND OWNER AND PROVIDE A MINIMUM OF TEN (10) WORKING DAYS NOTICE FOR SCHEDULING OF ANY REQUIRED DOWNTIME.
4. ALL EXISTING CONDITIONS AS SHOWN ARE APPROXIMATELY CORRECT. NOT ALL EXISTING CONDITIONS ARE SHOWN. CONTRACTOR SHALL VISIT THE SITE TO FIELD VERIFY ALL EXISTING CONDITIONS AS REQUIRED TO PROPERLY PROVIDE A BID/PROPOSAL AND PERFORM ALL REQUIRED WORK.
5. ALL EXISTING FIBER BACKBONE, HORIZONTAL DATA CABLE, HORIZONTAL VOICE CABLE AND J-HOOK PATHWAYS ARE TO BE REMOVED IN THEIR ENTIRETY AS INDICATED ON TD-SERIES DRAWINGS. ALL OTHER FIBER OPTIC CABLE AND COPPER BACKBONE ARE CRITICAL COMPONENTS FOR THE CAMPUS AND THE DISTRICT FIBER RING AND SHALL REMAIN PROTECTED AND OPERATIONAL AT ALL TIMES.
6. ALL EXISTING COAXIAL CABLE (.500 / RG-6 / RG-59) FOR CATV IS TO REMAIN IN PLACE AND OPERATIONAL.
7. ALL EXISTING WIRELESS ACCESS POINTS ARE TO BE REMOVED AND RETURNED TO OWNER. CONTRACTOR SHALL RE-INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.
8. COORDINATE REMOVAL OF EXISTING CAMERA WITH OWNER/ARCHITECT DURING CONSTRUCTION.

KEYED NOTES

(1) EXISTING DATA/VOICE/WIRELESS ACCESS POINT OUTLET TO BE REMOVED. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL 4-PAIR CABLES AND WORKSTATION CONNECTING HARDWARE TERMINATED AT THIS LOCATION. IF LOCATION IS NOT RE-USED, CONTRACTOR SHALL SUPPLY AND INSTALL BLANK COVER. CONTRACTOR IS TO REMOVE EACH CABLE TO BE DEMOLISHED FROM THE PATCH PANEL OR TERMINATION BLOCK IN THE TELECOMMUNICATIONS ROOM, REMOVE THE ENTIRE LENGTH OF THE CABLE AND THE CORRESPONDING MODULAR CONNECTOR, FACEPLATE AND ACCESSORIES. NO ABANDONED CABLING IS TO BE LEFT ABOVE CEILING. CONTRACTOR SHALL INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.

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No.	Description	Date

KEY PLAN

TECHNOLOGY DEMO FLOOR PLAN

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

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Scale: 1/4" = 1'-0"

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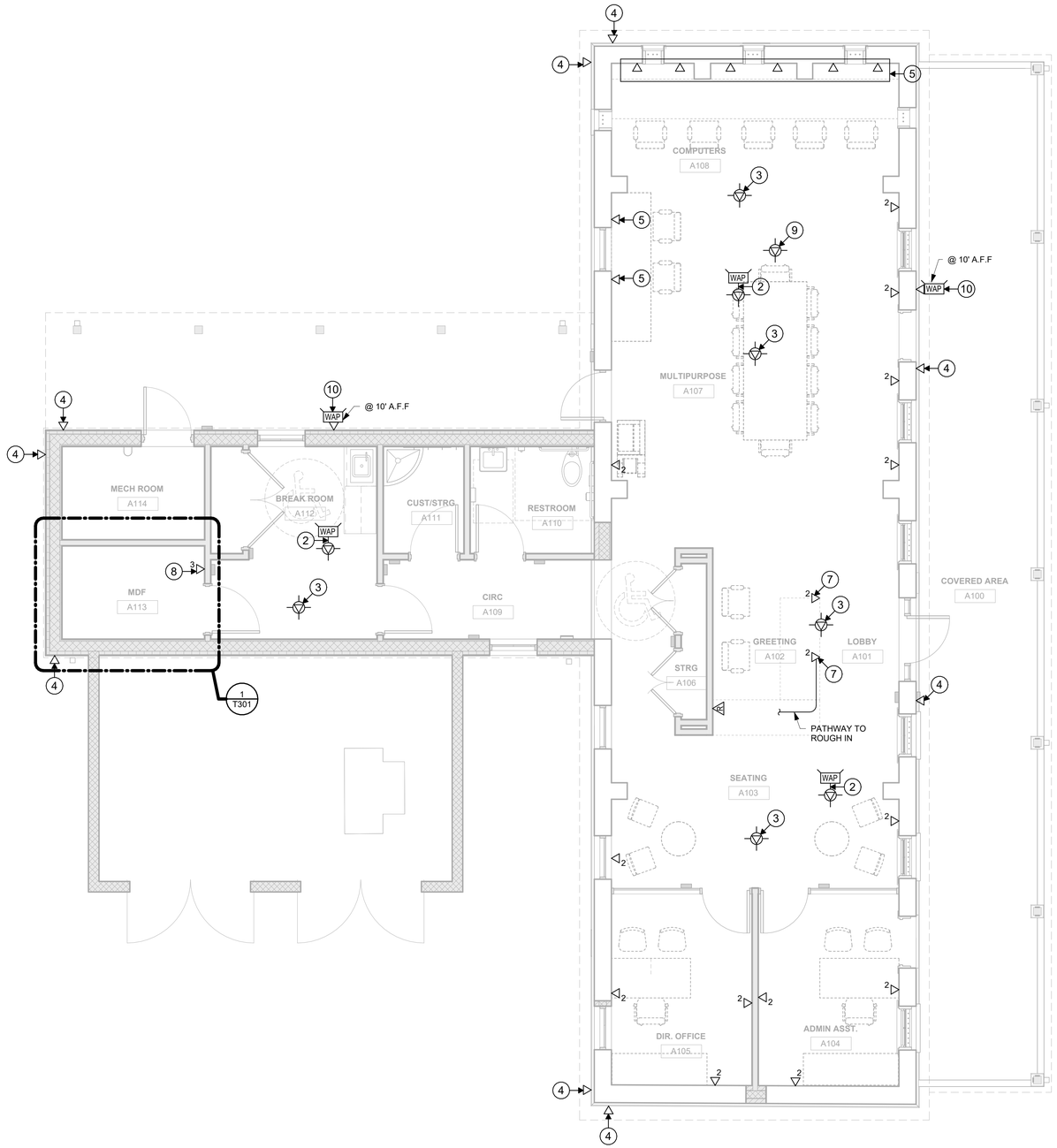

1 T101 TECHNOLOGY 1st FLOOR PLAN
1/4" = 1'-0"

GENERAL NOTES

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES / ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM

KEYED NOTES

(1) FLOOR BOX AS SPECIFIED AND INSTALLED BY DIVISION 26. PROVIDE (1) 1-INCH CONDUIT DEDICATED FOR DATA CABLE AND (1) 1-INCH CONDUIT DEDICATED FOR AUDIO VISUAL CABLE FROM THE POKE THROUGH TO ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE POKE THROUGH IS LOCATED. REFER TO ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR EXACT LOCATION AND ADDITIONAL CONDUIT ROUGH-IN REQUIREMENTS PRIOR TO INSTALLATION.

(2) DATA CABLE WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING FOR OWNER PROVIDED / OWNER INSTALLED CEILING MOUNTED WIRELESS ACCESS POINT.

(3) DATA CABLE WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING FOR CEILING MOUNTED VIDEO SURVEILLANCE CAMERA. REFER TO SECURITY DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS

(4) DATA CABLE WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING FOR EXTERIOR WALL MOUNTED VIDEO SURVEILLANCE CAMERA WHERE THERE IS AN ACCESSIBLE CEILING. WHERE THERE IS NOT AN ACCESSIBLE CEILING, DATA CABLE SHALL BE TERMINATED WITH A SURFACE MOUNTED BOX LOCATED INSIDE THE CAMERA ROUGH-IN. REFER TO SECURITY DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.

(5) DATA CABLE FOR COMPUTERS. CABLES SHALL BE ROUTED IN HORIZONTAL DUAL CHAMBER SURFACE MOUNTED RACEWAY. SURFACE MOUNTED RACEWAY SHOULD EXTEND INTO ABOVE ACCESSIBLE CEILING AREA.

(6) DATA CABLE WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON A J-HOOK ABOVE ACCESSIBLE CEILING FOR OWNER PROVIDED / OWNER INSTALLED WALL MOUNTED MONITOR WHERE THERE IS AN ACCESSIBLE CEILING. REFER TO AUDIO | VISUAL DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.

(7) DATA CABLE FOR RECEPTION LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BESIDE RECEPTION LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE RECEPTION LOCATION. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.

(8) DATA CABLE WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK FOR SECURITY PANELS. REFER TO SECURITY DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS

(9) DATA CABLE WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON A J-HOOK ABOVE ACCESSIBLE CEILING FOR CEILING MOUNTED PROJECTOR WHERE THERE IS NO ACCESSIBLE CEILING CABLE SHALL BE TERMIANTED IN ROUGH IN WITH SURFACE MOUNTED BOX. REFER TO AUDIO | VISUAL DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.

(10) DATA CABLE WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON A J-HOOK ABOVE ACCESSIBLE CEILING FOR EXTERIOR WALL MOUNTED WIRELESS ACCESS POINT. WHERE THERE IS NO ACCESSIBLE CEILING CABLE SHALL BE TERMIANTED IN ROUGH IN WITH SURFACE MOUNTED BOX. REFER TO AUDIO | VISUAL DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.

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KEY PLAN

TECHNOLOGY 1st FLOOR PLAN

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

T101

Scale: 1/4" = 1'-0"

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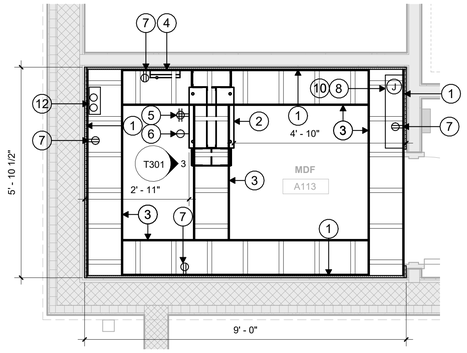
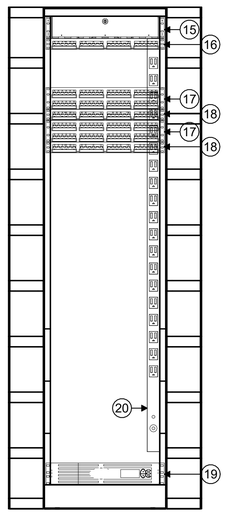
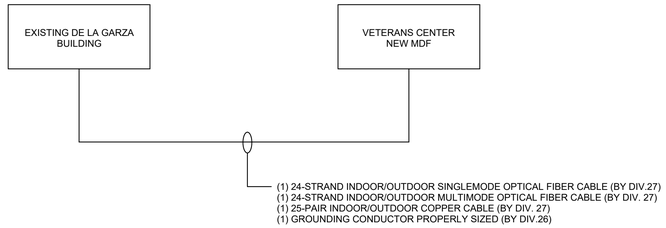


1 T301 MDF A113 - ENLARGE ELEVATION
1/2" = 1'-0"



3 T301 RACK ELEVATION
1" = 1'-0"



2 T301 BACKBONE RISER DIAGRAM
1" = 1'-0"

MDF GENERAL NOTES

1. IN THE EVENT THE CONTRACTOR PROVIDES AND INSTALLS 2-POST EQUIPMENT RACKS IN THE MDF/IDF ROOMS, THE DIVISION 27 CONTRACTOR SHALL COORDINATE WITH THE OWNER TO DETERMINE IF THE OWNER NEEDS ADDITIONAL EQUIPMENT RACK SUPPORT SUCH AS RAILS OR DEEP SHELVING TO SUPPORT FUTURE OWNER PROVIDED/OWNER INSTALLED UPS SYSTEM EQUIPMENT.
2. CONTRACTOR SHALL CONFIRM PATCH PANEL COUNTS WITH CABLE QUANTITIES PRIOR TO BIDDING.
3. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
4. A VERTICAL SECTION OF LADDER RACK SHALL BE ATTACHED TO THE WALLBOARD TO MANAGE BACKBONE CABLES, SERVICE PROVIDER CABLES, OR CABLES AS THEY TRANSITION FROM THE ENTRANCE CONDUITS TO OVERHEAD LADDER RACK.

MDF KEYED NOTES

1. 4-FEET X 8-FEET X ¾-INCH A-B GRADE, VOID FREE, FIRE RATED PLYWOOD INSTALLED VERTICALLY STARTING AT 24-INCHES ABOVE FINISHED FLOOR ON ALL PERIMETER WALLS. PAINT WITH (2) COATS OF FIRE-RETARDANT PAINT. (BY DIV. 27)
2. 19-INCH X 84-INCH EQUIPMENT RACK WITH VERTICAL WIRE MANAGERS. (BY DIV. 27)
3. 12-INCH LADDER RACK MOUNTED AT 87-INCHES ABOVE FINISHED FLOOR. LADDER RACK SHALL BE SUPPORTED PER MANUFACTURE AND INDUSTRY STANDARDS. (BY DIV. 27)
4. GROUND BUS BAR MOUNTED AT 84-INCHES ABOVE FINISHED FLOOR. (BY DIV. 27)
5. DEDICATED 20 AMP CIRCUIT WITH QUAD NEMA 5-20R RECEPTACLE MOUNTED TO LADDER RACK AT REAR SIDE OF EQUIPMENT RACKS. (BY DIV. 26)
6. DEDICATED 20 AMP CIRCUIT WITH SIMPLEX NEMA L6-20R TWIST LOCK RECEPTACLE MOUNTED TO LADDER RACK AT REAR SIDE OF EQUIPMENT RACKS. (BY DIV. 26)
7. 20 AMP CIRCUIT WITH DUPLEX NEMA 5-20R RECEPTACLE FLUSH MOUNTED TO THE FINISHED WALL SURFACE AT 18-INCHES ABOVE FINISHED FLOOR. MAXIMUM OF (6) PER CIRCUIT. (BY DIV.26)
8. DEDICATED 20 AMP CIRCUIT HARDWIRED TO ACCESS CONTROL SECURITY PANEL. (BY DIV. 26)
9. DEDICATED 20 AMP CIRCUIT HARDWIRED TO INTRUSION DETECTION SYSTEM. (BY DIV. 26)
10. 48-INCHES WIDE X 84-INCHES HIGH RESERVED FOR ACCESS CONTROL SYSTEM. (BY DIV. 27 / 28)
11. 48-INCHES WIDE X 84-INCHES HIGH RESERVED FOR SERVICE PROVIDER TERMINATION. (BY DIV.27)
12. (3) 4-INCH CONDUITS STUBBED FROM FIRST FLOOR MDF TO SECOND FLOOR IDF. CONDUITS SHALL STUB UP 4-INCHES ABOVE FINISHED FLOOR AND NO FURTHER THAT 4-INCHES FROM THE WALL. CONTRACTOR SHALL PROVIDE AND INSTALL NYLON BUSHINGS, PULL STRING AND CAPS ON EACH END. (BY DIV. 26)
15. 2 RU RACK MOUNTED FIBER OPTIC ENCLOSURE. (BY DIV. 27)
16. 24 PORT RACK MOUNTED PATCH PANEL
17. 2 RU RACK MOUNTED 48 PORT PATCH PANEL FOR DATA CABLES. (BY DIV. 27)
18. 1 RU RACK MOUNTED 48 PORT SWITCH. (BY OTHERS)
19. UNITERRUPTIPLE POWER SUPPLY. (BY OTHERS)
20. VERTICAL POWER SUPPLY. (BY DIV. 27)

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EXPIRES 12-31-25
RCDD
10/11/2024

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

TECHNOLOGY ENLARGED VIEWS

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
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T301

Scale: As indicated

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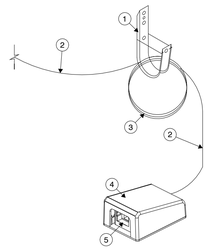
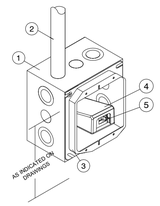


KEYED NOTES:

1. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
2. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
3. 20 FOOT SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV 27).
4. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BUILDING STRUCTURE (BY DIV 27).
5. DATA INSERT (BY DIV 27).

1/T401 TYPICAL ABOVE CEILING SINGLE DATA OUTLET

SCALE: N.T.S.

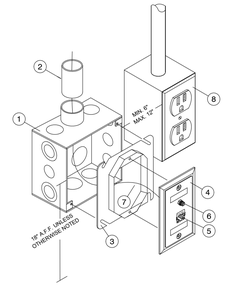


KEYED NOTES:

1. 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. DOUBLE GANG PLASTER RING (BY DIV 26).
4. SURFACE MOUNT BOX INSIDE THE 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH DOUBLE GANG BOX (BY DIV 27).
5. RJ-45 INSERT (BY DIV 27).

2/T401 TYPICAL WALL-MOUNTED WIRELESS ACCESS POINT

SCALE: N.T.S.

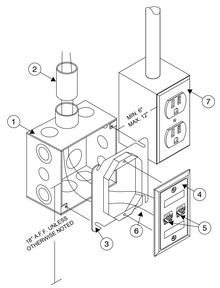


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CATV "F" CONNECTOR (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

3/T401 TYPICAL CATV/DATA OUTLET

SCALE: N.T.S.

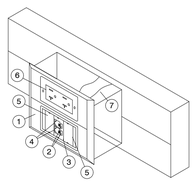


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

4/T401 TYPICAL DUAL DATA OUTLET CONFIGURATION

SCALE: N.T.S.

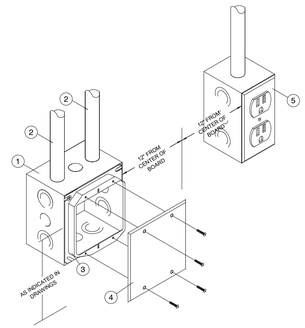


KEYED NOTES:

1. SINGLE GANG FACEPLATE (BY DIV 27).
2. DESIGNATION ICON BUTTON (BY DIV 27).
3. FLUSH MOUNTED KEYSTONE INSERT (UNLOADED) (BY DIV 27).
4. 8 CONDUCTOR JACK TO BE TERMINATED ON DATA RACK (BY DIV 27).
5. BLANK INSERT (BY DIV 27).
6. ELECTRICAL RECEPTACLE SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).
7. CABLE AS SPECIFIED (BY DIV 27).

5/T401 TYPICAL SURFACE RACEWAY WORKSTATION

SCALE: N.T.S.

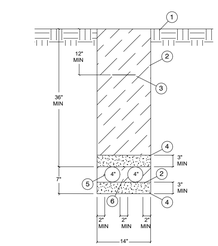


KEYED NOTES:

1. 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1 1/4-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF THE MAIN CORRIDOR.
3. DOUBLE GANG PLASTER RING (BY DIV 26).
4. DOUBLE GANG BLANK FACEPLATE (BY DIV 27).
5. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

6/T401 TYPICAL IFPM ROUGH-IN CONFIGURATION

SCALE: N.T.S.

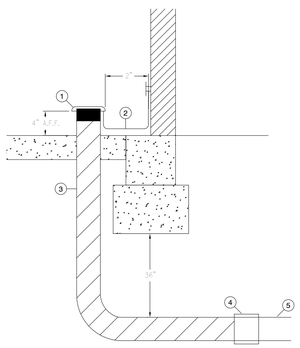


KEYED NOTES:

1. FINISHED GRADE (BY DIV 26).
2. SELECT COMPACTED BACKFILL (BY DIV 26).
3. DETECTABLE WARNING TAPE (BY DIV 26).
4. COMPACTED SAND (BY DIV 26).
5. COMMUNICATIONS CONDUIT (BY DIV 26).
6. DUCT SPACERS (TYPICAL BETWEEN ALL CONDUITS) (BY DIV 26).

7/T401 TYPICAL COMMUNICATIONS DUCT BANK DETAIL - (2) 4-INCH CONDUITS

SCALE: N.T.S.

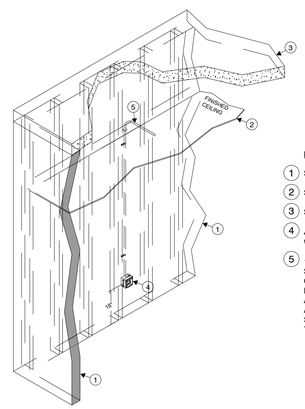


KEYED NOTES:

1. GROUNDING BUSHING (BY DIV 26).
2. #6 GROUND WIRE TO TMGB/TGB (BY DIV 26).
3. 4-INCH RIGID STEEL CONDUIT WRAPPED WITH PASCO PROTECTIVE TAPE SYSTEM (BY DIV 26).
4. PVC FEMALE ADAPTER (BY DIV 26).
5. SCHEDULE 40 PVC (BY DIV 26).

8/T401 TYPICAL TECHNOLOGY DUCT ENTRY INTO BUILDING

SCALE: N.T.S.



KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. SCHEDULED DECK ABOVE.
4. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX WITH DOUBLE GANG PLASTER RING (BY DIV 26).
5. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH. (BY DIV 26).

9/T401 TYPICAL TECHNOLOGY CONDUIT ROUGH-IN

SCALE: N.T.S.

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10/11/2024

NOTES:
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No.	Description	Date

KEY PLAN

TECHNOLOGY TYPICAL DETAILS

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

T401

Scale: 3/4" = 1'-0"

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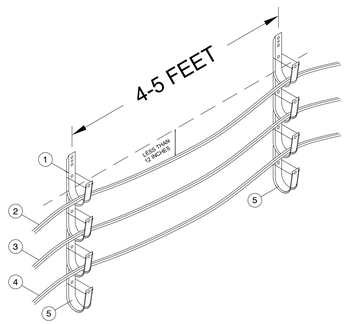


KEYED NOTES:

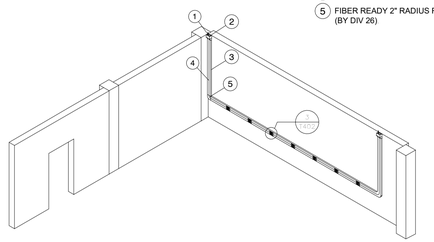
1. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
2. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
3. A/V CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. SECURITY CABLE ABOVE ACCESSIBLE CEILING (BY DIV 28).
5. SPARE J-HOOK (BY DIV 27).

1 / T402 TYPICAL J-HOOK CABLE PATHWAY

SCALE: N.T.S.

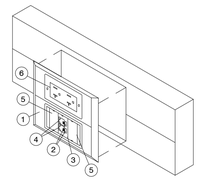
KEYED NOTES:

1. POWER CONDUIT (BY DIV 26).
2. ENTRANCE END FITTING (BY DIV 26).
3. TWO COMPARTMENT BASE (BY DIV 26).
4. TWIN SNAP COVER (BY DIV 26).
5. FIBER READY 2" RADIUS FULL CAPACITY FLAT ELBOW (BY DIV 26)



2 / T402 TYPICAL COMPUTER LAB STUDENT RACEWAY

SCALE: N.T.S.

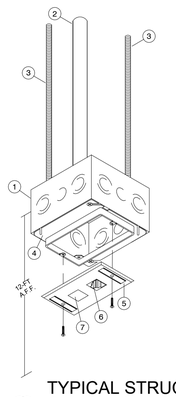


KEYED NOTES:

1. SINGLE GANG FACEPLATE (BY DIV 27).
2. DESIGNATION ICON BUTTON (BY DIV 27).
3. FLUSH MOUNTED KEYSTONE INSERT (UNLOADED) (BY DIV 27).
4. 8 CONDUCTOR JACK TO BE TERMINATED ON DATA RACK (BY DIV 27).
5. BLANK INSERT (BY DIV 27).
6. ELECTRICAL RECEPTACLE SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

3 / T402 TYPICAL SURFACE RACEWAY WORKSTATION

SCALE: N.T.S.

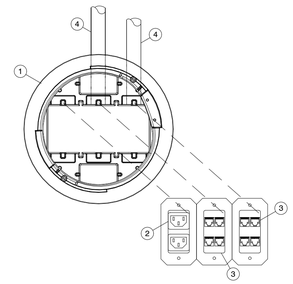


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT AT BUILDING STRUCTURE (BY DIV 26).
3. ALL THREAD TO BUILDING STRUCTURE.
4. SINGLE GANG PLASTER RING (BY DIV 26).
5. SINGLE GANG WALL PLATE WITH DESIGNATION WINDOW (BY DIV 27).
6. DATA INSERT (BY DIV 27).
7. BLANK INSERT (BY DIV 27).

4 / T402 TYPICAL STRUCTURE MOUNTED IP CAMERA/WIRELESS ACCESS POINT CONFIGURATION

SCALE: N.T.S.



KEYED NOTES:

1. LARGE-FORMAT FLOOR BOX/POKETHROUGH AS SPECIFIED BY MEP. REFER TO DIV 26 SPECIFICATIONS (BY DIV 26).
2. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).
3. DATA INSERTS - QUANTITY AS SHOWN ON TECHNOLOGY DRAWINGS (BY DIV 27).
4. 1-INCH EMT CONDUIT FROM FLOOR BOX WITH 200 LBS PULL STRING STUBBED OUT TO THE ACCESSIBLE LOCATION, CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).

5 / T402 TYPICAL FLOOR POKE-THROUGH

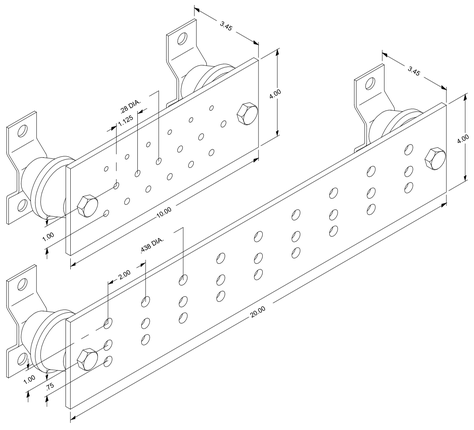
SCALE: N.T.S.

TBB/GE CONDUCTOR SIZING	
LENGTH IN LINEAR M (FT)	SIZE (AWG)
LESS THAN 4 (13)	6
4 - 6 (14-20)	4
6 - 8 (21 - 26)	3
8 - 10 (27 - 33)	2
10 - 13 (34 - 41)	1
13 - 16 (42 - 52)	1/0
16 - 20 (53 - 66)	2/0
20 - 26 (67 - 84)	3/0
26 - 32 (85 - 105)	4/0
32 - 38 (106 - 125)	250 kcmil
38 - 46 (126 - 150)	300 kcmil
46 - 53 (151 - 175)	350 kcmil
53 - 76 (176 - 250)	500 kcmil
76 - 91 (251 - 300)	600 kcmil
GREATER THAN 91 (301)	750 kcmil

ROUTE THE TBB TO EACH TGB IN AS STRAIGHT A PATH AS POSSIBLE. THE TBB SHOULD BE INSTALLED AS A CONTINUOUS CONDUCTOR, AVOIDING SPLICES WHERE POSSIBLE.

6 / T402 TBB CONDUCTOR SIZING

SCALE: N.T.S.

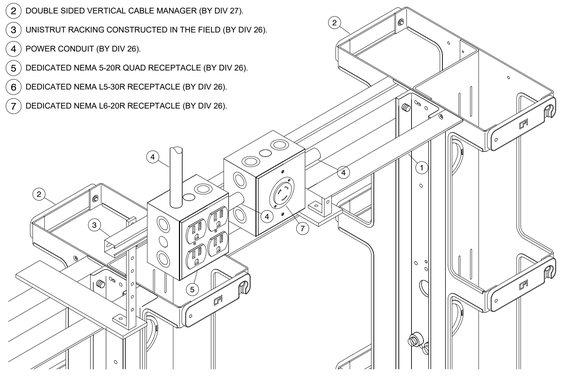


7 / T402 WALL-MOUNTED BUS BAR

SCALE: N.T.S.

KEYED NOTES:

1. FLOOR MOUNTED RELAY RACK (BY DIV 27).
2. DOUBLE SIDED VERTICAL CABLE MANAGER (BY DIV 27).
3. UNISTRUT RACKING CONSTRUCTED IN THE FIELD (BY DIV 26).
4. POWER CONDUIT (BY DIV 26).
5. DEDICATED NEMA 5-20R QUAD RECEPTACLE (BY DIV 26).
6. DEDICATED NEMA L5-30R RECEPTACLE (BY DIV 26).
7. DEDICATED NEMA L6-20R RECEPTACLE (BY DIV 26).

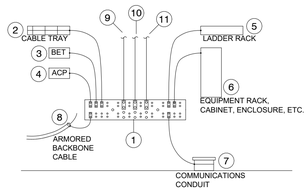


8 / T402 TYPICAL TOP OF RACK MOUNTED ELECTRICAL OUTLETS

SCALE: N.T.S.

GENERAL NOTES:

1. MAKE ALL BONDING CONNECTIONS WITH TWO-HOLE COMPRESSION LUGS.
2. SIZE ALL BONDING CONDUCTORS PER TELECOM BONDING CONDUCTOR SIZING TABLE.
3. THIS IS A TYPICAL DETAIL, NOT ALL EQUIPMENT REQUIRING BONDING MAY BE PRESENT IN EACH TELECOM ROOM.



KEYED NOTES:

1. TELECOMMUNICATIONS GROUNDING BUSBAR WITH BICSI STYLE HOLE PATTERN, SIZED PER [DRAWINGS/SPECIFICATIONS] (BY DIV 27).
2. BOND TO CABLE TRAY IN CORRIDOR. (BY DIV 26)
3. BOND TO BUILDING ENTRANCE TERMINALS AND PROTECTORS. (BY DIV 27)
4. BOND TO ACCESS CONTROL PANELS AND OTHER SECURITY ENCLOSURES. (BY DIV 28)
5. BOND TO OVERHEAD LADDER RACK; ENSURE ALL LADDER RACK SECTIONS ARE BONDED TOGETHER. (BY DIV 27)
6. BOND TO EACH EQUIPMENT RACK, CABINET, ENCLOSURE, ETC. (BY DIV 27)
7. BOND TO EACH CONTINUOUS COMMUNICATIONS CONDUIT THAT ENTERS THE TELECOM ROOM. (SLEEVES DO NOT NEED TO BE BONDED). (BY DIV 26)
8. BOND TO EACH ARMORED BACKBONE CABLE THAT TERMINATES IN THE TELECOM ROOM. (BY DIV 27)
9. FOR TELECOMMUNICATIONS MAIN GROUNDING BUSBAR, PROVIDE BONDING CONDUCTOR FOR TELECOMMUNICATIONS TO MAIN ELECTRICAL GROUND. (BY DIV 26)
10. FOR TELECOMMUNICATIONS GROUNDING BUSBARS ONLY: BONDING CONDUCTOR TO [BUILDING STEEL] [TELECOMMUNICATIONS BONDING BACKBONE] [GROUND BUS OF ELECTRICAL PANEL SERVING TELECOM ROOM POWER]. (BY DIV 26)
11. [FOR TELECOMMUNICATIONS MAIN GROUNDING BUSBAR, PROVIDE TELECOMMUNICATIONS BONDING BACKBONE PER TYPICAL GROUNDING DIAGRAM.] (BY DIV 26)

9 / T402 TELECOMMUNICATIONS BONDING BUSBAR DETAIL

SCALE: N.T.S.

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CONSTRUCTION DOCUMENTS

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
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BICSI ID # 311985
EXPIRES 12-31-25
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10/11/2024

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

TECHNOLOGY TYPICAL DETAILS

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

T402

Scale: 3/4" = 1'-0"

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AUDIOVISUAL SYMBOLS & LEGEND

AUDIOVISUAL SYMBOLS

ACP	AUDIOVISUAL CONTROL PROCESSOR.
AMP	SPEAKER AMPLIFIER.
AT#	CEILING-MOUNTED ANTENNA, # = TYPE AS SPECIFIED.
AT#	WALL-MOUNTED ANTENNA, # = TYPE AS SPECIFIED.
C	CEILING-MOUNTED CLOCK.
C	WALL-MOUNTED CLOCK.
C D	DOUBLE-SIDED WALL-MOUNTED CLOCK.
CAM	CEILING-MOUNTED AUDIOVISUAL CAMERA.
CAM	WALL-MOUNTED AUDIOVISUAL CAMERA.
CB	WALL-MOUNTED CALL BUTTON.
CE	CEILING MOUNTED EQUIPMENT ENCLOSURE.
CP#	WALL-MOUNTED CONTROL PANEL, # = TYPE AS SPECIFIED.
CT	MOBILE CART.
CTV	CATV LOCATION, CABLE TYPE AND TERMINATION AS SPECIFIED
DA	DISTRIBUTION AMPLIFIER
DS	DIGITAL SIGNAGE PLAYER.
DSP	AUDIO DIGITAL SIGNAL PROCESSOR
EQ#	EQUIPMENT RACK, # = TYPE AS SPECIFIED.
FB#	FLOOR BOX, # = TYPE AS SPECIFIED.
IP	IP ENCODER / DECODER.
L	LECTERN / PODIUM.
MC#	CEILING-MOUNTED MICROPHONE, # = TYPE AS SPECIFIED.
MC#	WALL-MOUNTED OR TABLETOP MOUNTED MICROPHONE, # = TYPE AS SPECIFIED.
MM#	CEILING-MOUNTED MULTIMEDIA PLATE, # = TYPE AS SPECIFIED.
MM#	WALL-MOUNTED MULTIMEDIA PLATE, # = TYPE AS SPECIFIED.
MX#	TABLETOP OR RACK MOUNTED MIXER
OS	CEILING-MOUNTED OCCUPANCY SENSOR.
OS	WALL-MOUNTED OCCUPANCY SENSOR.
PS	CEILING-MOUNTED PARTITION SENSOR.

AUDIOVISUAL SYMBOLS

P#	PROJECTOR, # = TYPE AS SPECIFIED.
R	WALL-MOUNTED ROUGH-IN LOCATION.
RS	ROOM SCHEDULER.
RX#	AUDIOVISUAL RECEIVER
S#	CEILING-MOUNTED SPEAKER, # = TYPE AS SPECIFIED.
S#	WALL-MOUNTED SPEAKER, # = TYPE AS SPECIFIED
SB	SOUND BAR.
SBC	SOUND BAR WITH CAMERA AND MICROPHONE
TC	TABLETOP CABLE CUBBY.
TX#	AUDIOVISUAL TRANSMITTER.
VC	WALL-MOUNTED VOLUME CONTROL.
VCC	VIDEO CONFERENCING COMPUTER.
WB#	AUDIOVISUAL WALL BOX, # = TYPE AS SPECIFIED.
WP	WIRELESS PRESENTATION
FP#	FLAT PANEL DISPAY, # = TYPE AS SPECIFIED.
IFP#	INTERACTIVE FLAT PANEL, # = TYPE AS SPECIFIED.
SCR#	PROJECTION SCREEN, # = TYPE AS SPECIFIED.
VW#	VIDEO WALL, # = TYPE AS SPECIFIED.
	DEVICE CONDUIT BELOW FLOOR.
	DEVICE CONDUIT ABOVE CEILING.

GENERAL SYMBOLS

# SHEET DRAWING TITLE SCALE: SCALE	DRAWING TITLE CALLOUT, # = DETAIL NUMBER.
# SHEET	DETAIL CALLOUT, # = DETAIL NUMBER.
# SHEET	SECTION CALLOUT, # = DETAIL NUMBER.
1 TA-302	ELEVATION CALLOUT, # = DETAIL NUMBER.
#	KEYED NOTE, # = KEYED NOTE NUMBER.
#	REVISION TRIANGLE, # = REVISION NUMBER (PER SHEET).
TR (IDF XXX)	INDICATES TELECOMMUNICATIONS REGION.

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AER	AERIAL
BYOD	BRING YOUR OWN DEVICE
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CLT	CLOSET
CO	CENTRAL OFFICE
DEMARC	DEMARCATION POINT
DPDT	DOUBLE PULL DOUBLE THROW
EMT	ELECTRIC METALLIC TUBE
F.O.C.	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
HE	PAINTERCOM HEAD-END
IMC	INTERMEDIATE METAL CONDUIT
ISP	INSIDE CABLE PLANT
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
MH	MANHOLE
MM	MULTIMODE
OSP	OUTSIDE CABLE PLANT
PB	PULLBOX
PR	PAIR
PBX	PRIVATE BRANCH EXCHANGE
PVC	POLYVINYL CHLORIDE
SM	SINGLE MODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TB	TERMINAL BLOCK
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR

NOTES

1. CONTRACTOR SHALL REVIEW DRAWINGS AND SPECIFICATIONS THAT MAKE UP THE CONTRACT DOCUMENTS AND COMPLETE ALL WORK INCLUDED THEREIN.
2. SCALE OF AUDIOVISUAL DRAWINGS IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CABLE LENGTHS, SIZE OF PATHWAYS, DIMENSIONS, ETC.
3. AUDIOVISUAL DRAWINGS SHALL BE USED TO COMPLEMENT THE WRITTEN SPECIFICATIONS.
4. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT AND SUBSEQUENTLY CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE ARCHITECT'S/DESIGN CONSULTANT'S INTERPRETATION.
5. IN THE EVENT OF A DISCREPANCY BETWEEN THE AUDIOVISUAL DRAWINGS AND SPECIFICATIONS THE GREATER QUANTITY AND COST SHALL BE UTLIZED.
6. CONFIRM MOUNTING HEIGHTS AND LOCATIONS WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.
7. THE CENTERLINE OF DEVICE INSTALL LOCATIONS ARE FOR REFERENCE AND DESIGN INTENT. CONFIRM WITH ARCHITECT, OWNER, AND FIELD CONDITIONS.
8. ALL DISPLAYS OR WALL MOUNTED DEVICES SHALL BE WITHIN ADA REQUIREMENTS. CONTRACTOR SHALL IDENTIFY ANY NON-COMPLIANT DEVICES AND BRING TO THE ATTENTION OF THE ARCHITECT AND CONSULTANT.

INDEX OF DRAWINGS

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EXPIRES 12-31-25
RCDD
10/11/2024

NOTES:
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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

AUDIOVISUAL SYMBOLS & LEGEND

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

TA000

Scale: 12" = 1'-0"

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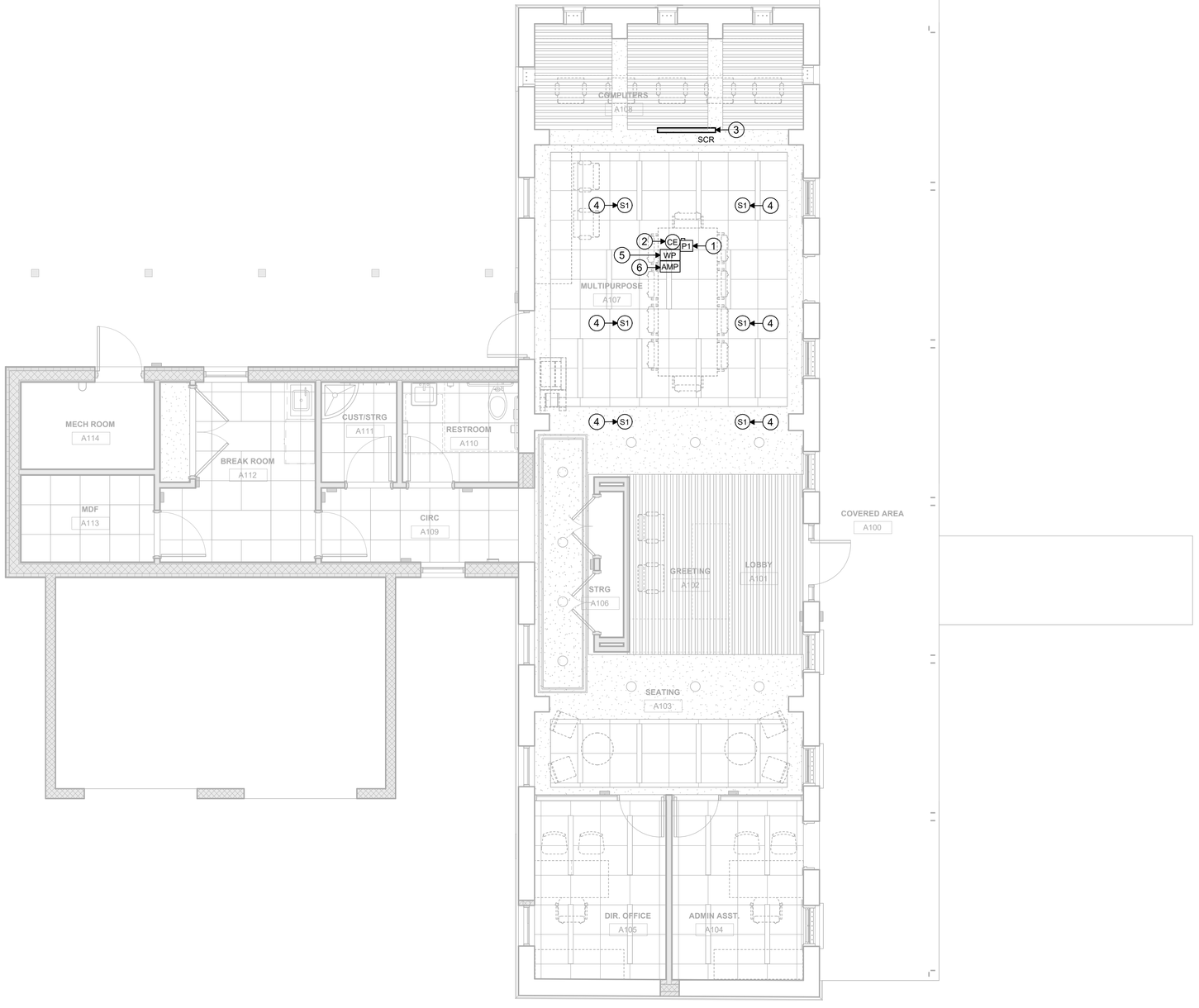

1 TA101 AUDIOVISUAL 1st FLOOR PLAN
1/4" = 1'-0"

GENERAL NOTES

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE FLOOR PLAN SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE AUDIOVISUAL DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26. AUDIOVISUAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL FOR CONDUIT, BACKBOX, AND RACEWAY REQUIREMENTS.
3. ALL POWER INDICATED ON THE AUDIOVISUAL DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR AUDIOVISUAL CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR AUDIOVISUAL CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. AUDIOVISUAL CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR AUDIOVISUAL DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED MANUFACTURER RECOMMENDATIONS.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES / ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE A LAY- IN TYPE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE A LAY-IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR OR THE NEAREST MDF/IDF. THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR OR THE NEAREST MDF/IDF TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, ANCHORAGES, AND OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
14. THE SCOPE OF THIS DESIGN IS FOR ROUGH IN AND PATHWAYS ONLY. AUDIOVISUAL DEVICES AND EQUIPMENT SHALL BE PROVIDED AND INSTALLED BY OTHERS AND THE OWNER. UNLESS OTHERWISE NOTED.

AUDIOVISUAL KEYED NOTES

1. CEILING MOUNTED PROJECTOR BY OWNER. COORDINATE WITH DIV. 26 FOR ROUGH IN, PATHWAYS AND POWER LOCATION.
2. CEILING ENCLOSURE WITH INTEGRATED POWER AND DATA RECEPTACLES. POWER REQUIRED; DATA REQUIRED. COORIDNATE WITH DIV 26 FOR ROUGH IN, CONDUIT PATHWAYS, AND POWER LOCATION. COORDINATE WITH DIV 27 FOR DATA LOCATION. PROVIDE DROP COLUMN TO LEGNTH AS REQUIRED.
3. CEILING MOUNTED, MOTORIZED PROJECTION SCREEN BY OWNER. COORDINATE WITH DIV. 26 FOR ROUGH IN, PATHWAYS AND POWER LOCATION.
4. CEILNG MOUNTED PENDANT SPEAKER BY OWNER. PROVIDE PATHWAYS AND ROUGH IN AS REQUIRED.
5. WIRELESS PRESENTATION DEVICE BY OTHERS. POWER REQUIRED; DATA REQUIRED. INSTALLS IN CEILING ENCLOSURE -- 'CE.'
6. SPEAKER AMPLIFIER BY OTHERS. POWER REQUIRED. INSTALLS IN CEILNG ENCLOSURE -- 'CE.' COORDINATE WITH DIV. 26 FOR CONDUIT PATHWAYS FROM SPEAKER CABLING FROM 'CE' TO SPEAKER LOCATIONS AS NEEDED.

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10/11/2024

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

AUDIOVISUAL 1st FLOOR PLAN

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

TA101

Scale: 1/4" = 1'-0"

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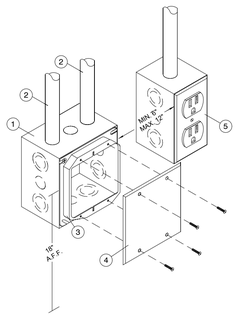

KEYED NOTES:

1. 4-11/16" X 4-11/16" X 2-1/8" RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM BACK BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED (BY DIV 26).
3. DOUBLE-GANG PLASTER RING - DEVICE OPENING MUST HAVE RIGHT-ANGLE CORNERS TO AVOID PHYSICAL CONFLICTS WITH A|V DEVICE(S) (BY DIV 26).
4. BLANK PLATE (BY DIV 26). COORDINATE FINISH WITH ARCHITECT.
5. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

1 / TA601 TYPICAL AUDIO/VISUAL ROUGH-IN DETAIL

SCALE: N.T.S.

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No.	Description	Date

KEY PLAN

AUDIOVISUAL TYPICAL DETAILS

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

TA601

Scale: 3/4" = 1'-0"

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SECURITY SYMBOLS & LEGEND

ACCESS CONTROL SYMBOLS

AD	INTERFACE TO AUTOMATIC DOOR CONTROL AND MONITORING.
BI	INTERFACE TO RETRACTABLE VEHICLE BOLLARD.
BR	BIOMETRIC READER.
CH	DOOR BELL CHIME.
CR	CARD READER.
CR1	CARD READER MULLION MOUNT.
CR2	ELEVATOR CARD READER.
CR3	CARD READER/INTERCOM UNIT.
CR4	CARD READER/INTERCOM PEDESTRIAN PEDESTAL.
D	DURESS BUTTON MOUNTED IN KNEE SPACE OF DESK, TABLE OR COUNTER PROVIDE ARMORED CABLE FROM DURESS BUTTON TO JUNCTION BOX.
D	WALL MOUNTED DURESS BUTTON.
DB	DOOR BELL.
DC	DOOR CONTACT.
DC1	OVERHEAD DOOR CONTACT. PROVIDE ARMORED CABLE FROM SWITCH TO JUNCTION BOX.
DMA	DOOR MANAGEMENT ANNUNCIATOR.
DR	SINGLE DOOR RELEASE PUSHBUTTON UNDER COUNTER. ARMORED CABLE FROM PUSHBUTTON TO JUNCTION BOX.
EL	INTERFACE TO ELEVATOR CONTROL/MONITORING.
FA	INTERFACE TO FIRE ALARM SYSTEM.
GC	INTERFACE TO PARKING GATE CONTROL/MONITORING.
IC	AUDIO INTERCOM SUBSTATION.
IM	INTERCOM MASTER STATION AS INDICATED BLOCK DIAGRAM AND/OR DETAILS.
KS	KEYSWITCH.
LD	LOCKDOWN BUTTON UNDER COUNTER. ARMORED CABLE FROM LOCKDOWN BUTTON TO JUNCTION BOX.
LD	LOCKDOWN BUTTON.
OD	INTERFACE TO OVERHEAD DOOR CONTROL/MONITORING.
RD	INTERFACE TO MOTORIZED REVOLVING DOOR CONTROL/MONITORING.
REX	REQUEST-TO-EXIT IS INTEGRAL WITH ELECTRIFIED LOCKING HARDWARE. PROVIDED AND INSTALLED BY OTHERS.
RX	REQUEST-TO-EXIT MOTION SENSOR MOUNTED CEILING-MOUNTED.
RX	REQUEST-TO-EXIT MOTION SENSOR DOOR FRAME-MOUNTED.
SD	INTERFACE TO SLIDING DOOR CONTROL/MONITORING.
SR	SECURITY SYSTEM RISER, DATA GATHERING PANEL AND LOW VOLTAGE POWER SUPPLY DISTRIBUTION LOCATION.
VI	VIDEO INTERCOM SUBSTATION.
VM	DESKTOP VIDEO INTERCOM MASTER STATION.
WD	WIRELESS DURESS BUTTON MOUNTED IN KNEE SPACE OF DESK, TABLE, OR COUNTER.

ACCESS CONTROL SYMBOLS

WDRR	WIRELESS DOOR RELEASE RECEIVER DEVICE.
WDRT	WIRELESS DOOR RELEASE TRANSMITTER DEVICE.
WR	WIRELESS DURESS BUTTON RECEIVER DEVICE.
WT	WIRELESS DURESS BUTTON TRANSMITTER DEVICE.
	PRE-WIRE AND BLANK COVER PLATE FOR FUTURE DEVICE.

ELECTRONIC SURVEILLANCE SYMBOLS

	FIXED SURVEILLANCE CAMERA, CAMERA MODEL AND MOUNTING HEIGHT AS SPECIFIED.
	CEILING-MOUNTED FIXED SURVEILLANCE CAMERA, CAMERA MODEL AND MOUNTING HEIGHT AS SPECIFIED.
	180° SURVEILLANCE CAMERA, CAMERA MODEL AND MOUNTING HEIGHT AS SPECIFIED.
	CEILING-MOUNTED 180° SURVEILLANCE CAMERA, CAMERA MODEL AND MOUNTING HEIGHT AS SPECIFIED.
	360° SURVEILLANCE CAMERA, CAMERA MODEL AND MOUNTING HEIGHT AS SPECIFIED.
	CEILING-MOUNTED 360° SURVEILLANCE CAMERA, CAMERA MODEL AND MOUNTING HEIGHT AS SPECIFIED.
	PAN, TILT & ZOOM SURVEILLANCE CAMERA, CAMERA MODEL AND MOUNTING HEIGHT AS SPECIFIED.
CLG	CEILING-MOUNTED PAN, TILT & ZOOM SURVEILLANCE CAMERA, CAMERA MODEL AND MOUNTING HEIGHT AS SPECIFIED.

GENERAL SYMBOLS

# SHEET — DRAWING TITLE SCALE: SCALE	DRAWING TITLE CALLOUT, # = DETAIL NUMBER.
# SHEET	DETAIL CALLOUT, # = DETAIL NUMBER.
# SHEET	SECTION CALLOUT, # = DETAIL NUMBER.
SHEET #	ELEVATION CALLOUT, # = DETAIL NUMBER.
#	KEYED NOTE, # = KEYED NOTE NUMBER.
#	REVISION TRIANGLE, # = REVISION NUMBER (PER SHEET).
TR (IDF XXX)	INDICATES TELECOMMUNICATIONS REGION

INTRUSION DETECTION SYMBOLS

AL	ALARM ANNUNCIATOR LIGHT.
AP	ANNUNCIATOR PANEL AS INDICATED IN BLOCK DIAGRAMS AND/OR DETAILS.
AV	AUDIO VISUAL ANNUNCIATOR.
FA	INTERFACE TO FREEZER/TEMPERATURE ALARM. PROVIDED AND INSTALLED BY OTHERS.
FC	FUTURE CABLE AS SPECIFIED.
GB	CEILING-MOUNTED GLASS BREAK SENSOR.
GB	GLASS BREAK SENSOR.
KP	PERSONAL IDENTIFICATION NUMBER KEYPAD.
M	SOUND DETECTION MICROPHONE.
MD	360° MOTION DETECTOR MOUNTED TO CEILING.
MD	MOTION DETECTOR.
MD LR	LONG RANGE MOTION DETECTOR.
RA	INTERFACE TO REFRIGERATOR/TEMPERATURE ALARM. PROVIDED AND INSTALLED BY OTHERS.
ST	STROBE LIGHT SURFACE MOUNTED TO CEILING.
ST	STROBE LIGHT.
V	VIBRATION DETECTOR.

MISCELLANEOUS SECURITY SYMBOLS

B	ALERTUS BEACON MOUNTED AT 60" A.F.F. UNLESS OTHERWISE NOTED
EP	EMERGENCY PHONE.
LS	FLOOR MOUNTED LIQUID SENSOR. PROVIDE ARMORED CABLE FROM SENSOR TO JUNCTION BOX.
S	INTERCOM SPEAKER FLUSH MOUNTED IN CEILING.
	ALERTUS LED MARQUEE (SINGLE SIDED)
	ALERTUS LED MARQUEE (DOUBLE SIDED)

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AER	AERIAL
B	BURIED
CAT.3/5	CATEGORY 3/5
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CLT	CLOSET
CO	CENTRAL OFFICE
DEMARC	DEMARCATION POINT
DPDT	DOUBLE PULL DOUBLE THROW
EMT	ELECTRIC METALLIC TUBE
F.O.C.	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
HE	PA/INTERCOM HEAD-END
IRC	INTERMEDIATE RIGID CONDUIT
ISP	INSIDE CABLE PLANT
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
MH	MANHOLE
MM	MULTIMODE
OSP	OUTSIDE CABLE PLANT
PB	PULLBOX
PR	PAIR
PBX	PRIVATE BRANCH EXCHANGE
PVC	POLYVINYL CHLORIDE
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NOTES

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4. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO PLACING A BID. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER AND SUBSEQUENTLY CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE ARCHITECT'S/ENGINEER'S INTERPRETATION (BY DIVISION 28).
5. SECURITY DEVICES SHALL TERMINATE IN THE MDF/IDF LOCATED WITHIN THE SECURITY REGION (SR) OUTLINED ON THE TS-SERIES DRAWINGS.
6. ANY REFERENCE TO OR INDICATION OF DOOR HARDWARE IS SHOWN FOR REFERENCE ONLY. COORDINATION WITH THE DIVISION 8 DESIGN CONSULTANT / CONTRACTOR FOR DOOR HARDWARE CLARIFICATION, INFORMATION, AND REQUIREMENTS (BY DIVISION 8).
7. THE TS-SERIES DRAWINGS REPRESENT DIVISION 28 SECURITY INSTALLATION REQUIREMENTS, ANY REFERENCE TO OTHER DIVISIONS SUCH AS DIVISION 8, 26, 27, 14, ETC. IS SHOWN ON THESE DOCUMENTS AS A GENERAL DEPICTION OF THE INSTALLATION AND DOES NOT REPRESENT THE ACTUAL DEVICES, PATHWAYS, AND RELATED INSTALLATION REQUIREMENTS. THE CONTRACTOR SHALL REFER TO THE OTHER DIVISIONS OF WORK FOR THE COMPLETE REQUIREMENTS FOR THOSE DIVISION S OF WORK.
8. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SECURITY DEVICES IN CONFORMANCE WITH CURRENT ADA REQUIREMENTS.

INDEX OF DRAWINGS

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BICSI ID # 311985
EXPIRES 12-31-25
RCDD

10/11/2024

NOTES:
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CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

SECURITY SYMBOLS & LEGEND

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

TS000

Scale: 12" = 1'-0"

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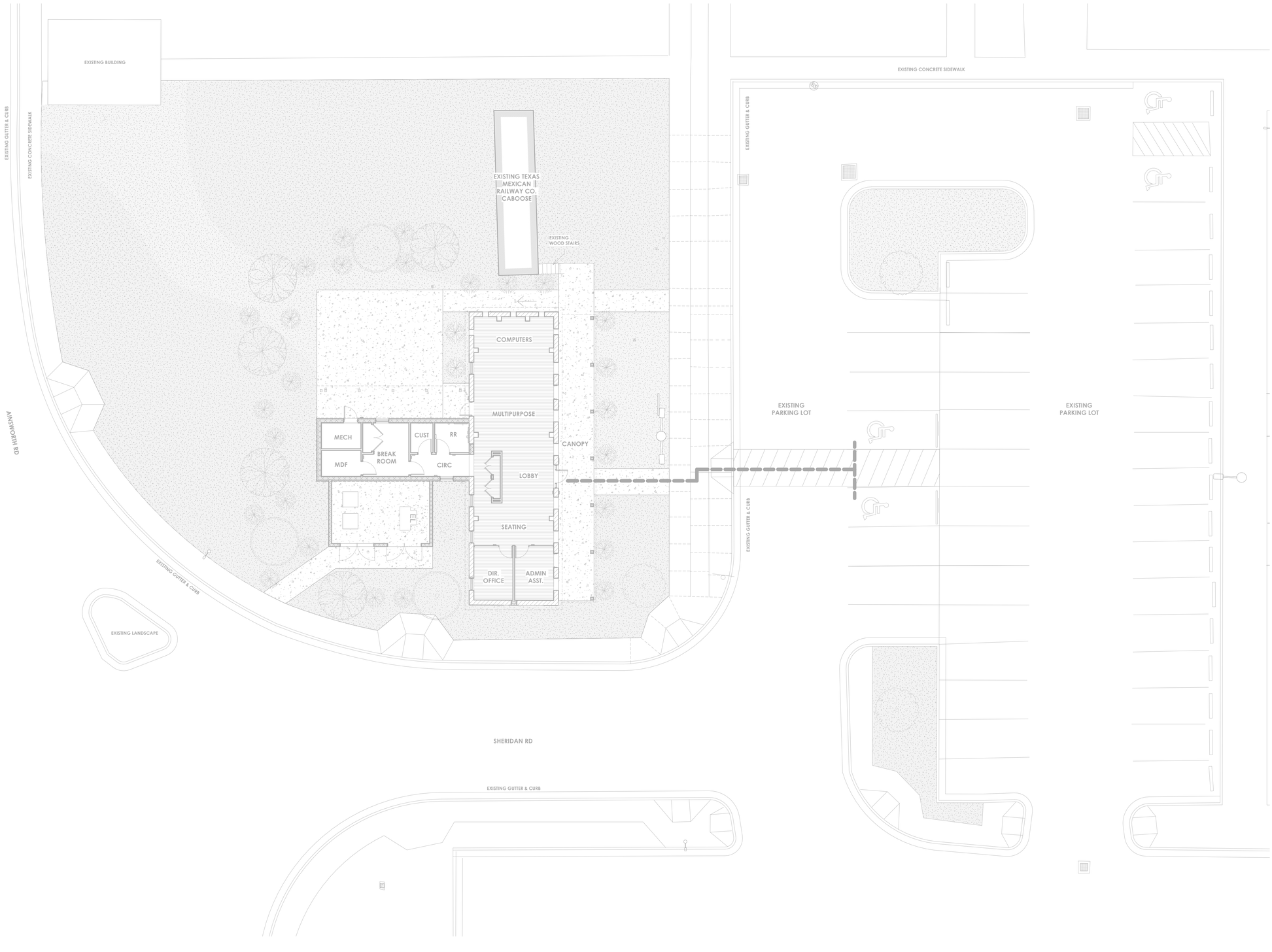

1 TS001 SECURITY SITE PLAN
3/32" = 1'-0"

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No.	Description	Date

KEY PLAN

SECURITY SITE PLAN

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

TS001

Scale: 3/32" = 1'-0"

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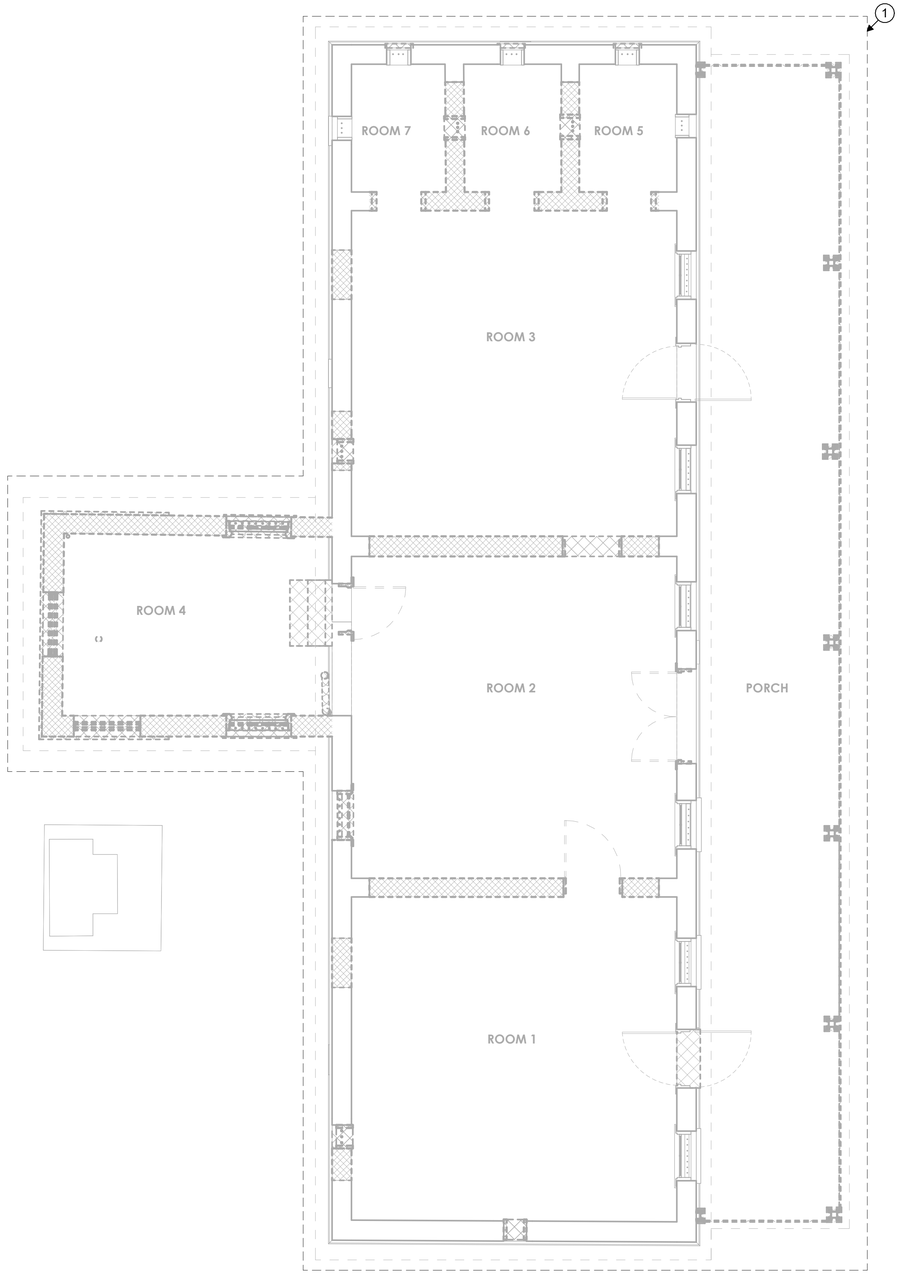

1 TS100 SECURITY DEMO FLOOR PLAN
1/4" = 1'-0"

GENERAL NOTES – DEMOLITION:

1. ALL SECURITY SYSTEMS SHALL REMAIN OPERATIONAL AT ALL TIMES DURING BUSINESS HOURS AS DEFINED BY THE OWNER. ANY SECURITY SYSTEM DOWNTIME SHALL BE SCHEDULED WITH THE ARCHITECT/ENGINEER AND OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE. CONTRACTOR SHALL DEVELOP A PHASING PLAN AND SCHEDULE OF ANY REQUIRED SECURITY SYSTEM DOWNTIME FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER AND OWNER PRIOR TO ANY CONSTRUCTION ACTIVITIES (BY DIVISION 28).
2. THE EQUIPMENT ROOMS AND APPLICABLE SECURITY ROOMS ENVIRONMENTAL CONTROLS SHALL BE MAINTAINED AT ALL TIMES. THE EQUIPMENT ROOMS AND TELECOM ROOMS TEMPERATURE SHALL REMAIN BETWEEN 60 - 70 DEGREES F WITH RELATIVE HUMIDITY OF 30% - 50% NON-CONDENSING. THE TEMPERATURE RANGE OF THE EQUIPMENT ROOMS AND SECURITY/TELECOM ROOMS SHALL BE MAINTAINED BETWEEN + - 9 DEGREES F.
3. OWNER SHALL BE RESPONSIBLE FOR POWERING DOWN AND STARTING-UP OF ALL SECURITY SYSTEMS. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT/ENGINEER AND OWNER AND PROVIDE A MINIMUM OF TEN (10) WORKING DAYS NOTICE FOR SCHEDULING OF ANY REQUIRED DOWNTIME (BY DIVISION 28).
4. ALL EXISTING CONDITIONS AS SHOWN ARE APPROXIMATELY CORRECT. NOT ALL EXISTING CONDITIONS ARE SHOWN. CONTRACTOR SHALL VISIT THE SITE TO FIELD VERIFY ALL EXISTING CONDITIONS AS REQUIRED TO PROPERLY PROVIDE A BID/PROPOSAL AND PERFORM ALL REQUIRED WORK. SUBMIT ANY QUESTIONS OR UNCERTAINTIES TO THE ARCHITECT/ENGINEER/OWNER PRIOR TO BIDDING OR BEGINNING WORK (BY DIVISION 28).
5. UNLESS STATED OTHERWISE, ALL EXISTING NON-REUSABLE HORIZONTAL SECURITY CABLE AND J-HOOK PATHWAYS REQUIRED TO SUPPORT SECURITY SYSTEMS ARE TO BE REMOVED IN THEIR ENTIRETY AS INDICATED ON TSD-SERIES DRAWINGS. ALL OTHER FIBER OPTIC CABLE, COPPER BACKBONE, AND SECURITY BACKBONE CABLE OR OTHER CRITICAL COMPONENTS FOR THE CAMPUS AND THE DISTRICT FIBER RING AND SHALL REMAIN PROTECTED AND OPERATIONAL AT ALL TIMES.
6. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR DATA, VOICE, AND SECURITY CABLING BACK TO THE ORIGINAL RATING (BY DIVISION 28).
7. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED ALSS/STRUCTURES FOR DATA, VOICE, AND SECURITY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS (BY DIVISION 28)
8. THE CONTRACTOR SHALL CONFIRM THAT EACH SECURITY DEVICE TO BE REMOVED, STORED, AND RE-INSTALLED IS OPERATIONAL PRIOR TO BEGINNING WORK (BY DIVISION 28)
9. CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING SECURITY DEVICES WITH ARCHITECT/DESIGN CONSULTANT AND OWNER DURING CONSTRUCTION (BY DIVISION 28).
10. CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING SECURITY EQUIPMENT WITH THE ARCHITECT/DESIGN CONSULTANT AND OWNER DURING CONSTRUCTION (BY DIVISION 28)

KEYED NOTES – DEMOLITION:

(1) APPROXIMATE LOCATION OF AREAS AFFECTED BY CONSTRUCTION. UNLESS NOTED OTHERWISE ALL EXISTING SECURITY PANEL(S), SECURITY DEVICE(S), AND ASSOCIATED SECURITY CABLING WITHIN THESE AREAS SHALL BE REMOVED. ALL ABANDONED SECURITY CABLING AND NON-REUSABLE SECURITY PATHWAYS SHALL BE REMOVED IN THEIR ENTIRETY (FROM END TO END). NO ABANDONED SECURITY CABLING IS TO BE LEFT ABOVE CEILING OR IN CONDUIT PATHWAYS. MATERIALS SHALL BE PROPERLY DISPOSED OF IN CONFORMANCE WITH THE LAHJ. (BY DIV. 28) NOTE: DOOR HARDWARE, ASSOCIATED PERIPHERAL DEVICES, EQUIPMENT, AND LOCAL CABLING IS BY DIVISION 08. COORDINATE WITH ARCHITECT AND DIVISION 08 FOR EXACT REQUIREMENTS.

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NOTES:
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No.	Description	Date

KEY PLAN

SECURITY DEMO FLOOR PLAN

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

TS100

Scale: 1/4" = 1'-0"

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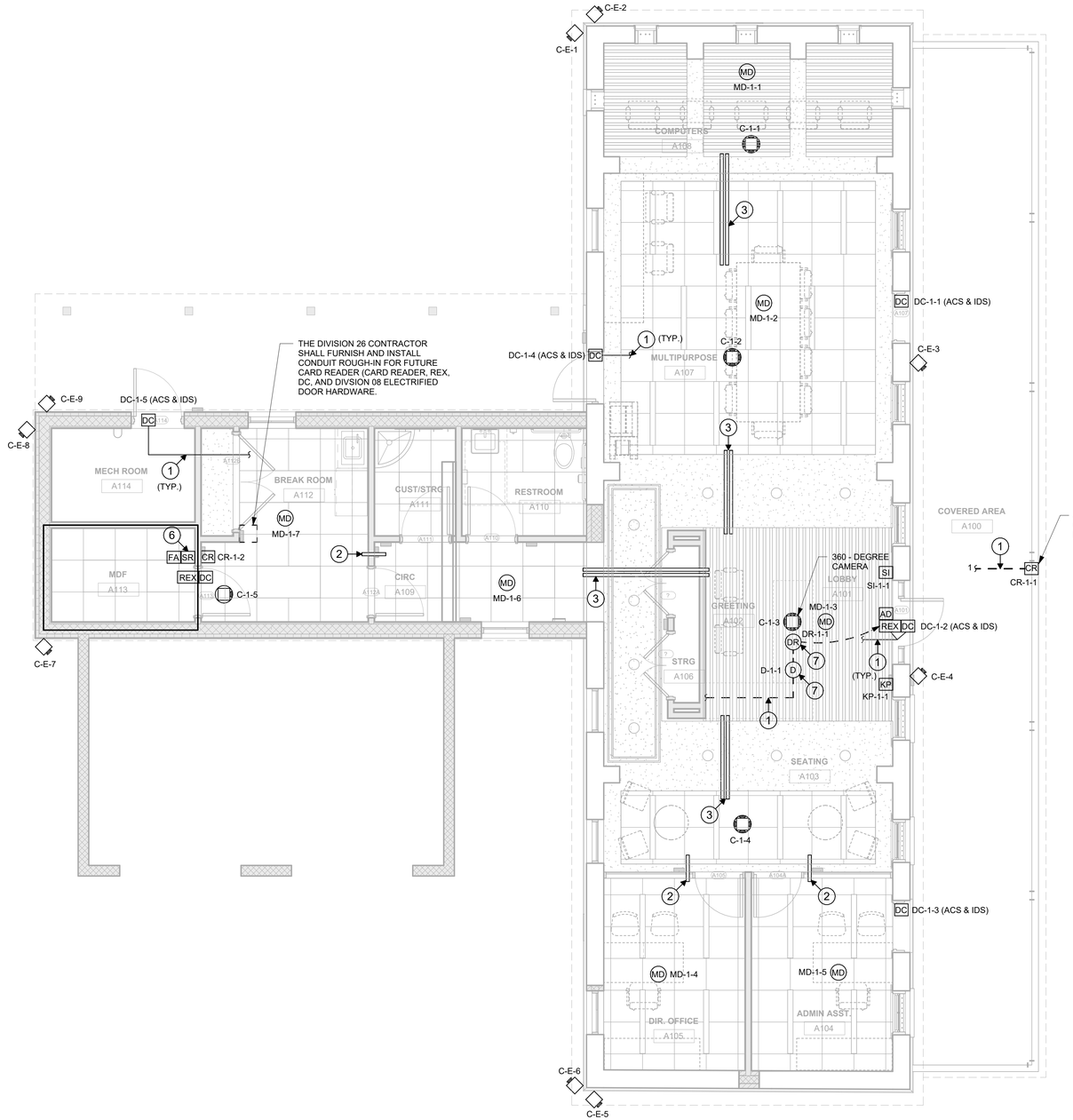

1 TS101 SECURITY 1st FLOOR PLAN
1/4" = 1'-0"

KEYED NOTES

1. APPROXIMATE ROUTE CONDUIT AND/OR RACEWAY SHALL TAKE TO A LAY-IN TYPE CEILING. THE CONDUIT AND/OR RACEWAY SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO THE WALLS AND IN THE MOST DIRECT MANNER POSSIBLE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR TO MINIMIZE THE CABLE LENGTH, ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. ANY EXPOSED SURFACE MOUNT CONDUIT AND/OR SURFACE MOUNT RACEWAY REQUIRED SHALL BE SUBMITTED TO THE ARCHITECT/DESIGN CONSULTANT AND OWNER IN WRITING IN THE FORM OF AN RFI FOR OWNER APPROVAL PRIOR TO INSTALLATION. (BY DIV. 26) ANY PATCHING AND PAINTING REQUIRED BY OTHERS.
2. (1) 2-INCH EMT CONDUIT SLEEVES ABOVE ACCESSIBLE CEILING WITH NYLON BUSHINGS ON EACH END AND SECURED TO WALL. CONDUIT SLEEVES SHALL BE USED FOR LOW VOLTAGE SECURITY CABLE ONLY (BY DIV. 26).
3. (2) 2-INCH EMT CONDUIT SLEEVES ABOVE ACCESSIBLE CEILING WITH NYLON BUSHINGS ON EACH END AND SECURED TO WALL. CONDUIT SLEEVES SHALL BE USED FOR LOW VOLTAGE SECURITY CABLE ONLY (BY DIV. 26).
4. (1) 4-INCH EMT CONDUIT SLEEVES ABOVE ACCESSIBLE CEILING WITH NYLON BUSHINGS ON EACH END AND SECURED TO WALL. CONDUIT SLEEVES SHALL BE USED FOR LOW VOLTAGE SECURITY CABLE ONLY (BY DIV. 26).
5. (2) 4-INCH EMT CONDUIT SLEEVES ABOVE ACCESSIBLE CEILING WITH NYLON BUSHINGS ON EACH END AND SECURED TO WALL. CONDUIT SLEEVES SHALL BE USED FOR LOW VOLTAGE SECURITY CABLE ONLY (BY DIV. 26).
6. APPROXIMATE LOCATION OF NEW SECURITY PANEL(S) BY DIVISION 28. 120VAC POWER PER ACS, IDS, AND POWER SUPPLY SECURITY PANEL BY DIVISION 26. TWO (2) DATA CABLE PER ACS SECURITY PANEL BY DIVISION 27. ONE (1) VOICE AND ONE (1) DATA CABLE PER IDS SECURITY PANEL BY DIVISION 27. CONTRACTORS SHALL COORDINATE THE EXACT LOCATION OF THE NEW SECURITY PANEL(S) WITH THE OWNER PRIOR TO INSTALLATION (BY DIV. 26, DIV. 27 & DIV. 28).
7. APPROXIMATE LOCATION OF UNDER COUNTER DURESS BUTTON AND DOOR RELEASE BUTTON. SECURITY CABLING FROM DURESS BUTTON TO ROUGH-IN SHALL BE PROTECTED WITH ARMORED CABLE (BY DIV. 28). CONTRACTOR SHALL COORDINATE EXACT LOCATION OF UNDER COUNTER DURESS BUTTON AND DOOR RELEASE BUTTON WITH THE OWNER PRIOR TO INSTALLATION OF CONDUIT PATHWAY, ROUGH-IN, SECURITY CABLING AND SECURITY DEVICE (BY DIV. 26 & DIV. 28).

GENERAL NOTES

1. THE CONTRACTOR SHALL READ AND REVIEW THE ASSOCIATED SPECIFICATIONS / DRAWINGS PRIOR TO BIDDING ON THIS WORK.
2. CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO PROVIDE A FULLY FUNCTIONAL TURNKEY SYSTEM REGARDLESS OF ANY ITEMS NOT LISTED OR DESCRIBED IN THIS SPECIFICATION OR ASSOCIATED DRAWINGS.
3. ALL CONDUIT PATHWAYS, ROUGH-INS, CONDUIT SLEEVES, ETC. INDICATED ON THE SECURITY DRAWINGS ARE TO BE PROVIDED AND INSTALLED (BY DIVISION 26).
4. ALL POWER INDICATED ON THE SECURITY DRAWINGS SHALL BE PROVIDED AND INSTALLED (BY DIVISION 26).
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR DATA, VOICE, AND SECURITY CABLING BACK TO THE ORIGINAL RATING (BY DIVISION 26 & 28).
6. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR DATA, VOICE, AND SECURITY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS (BY DIVISION 26 & 28).
7. CABLING FOR DATA, VOICE, AND SECURITY SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VOICE, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC., (BY DIVISION 26 & 28).
8. ALL CONDUITS FOR DATA, VOICE, AND SECURITY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE DATA ROOM TO MINIMIZE THE CABLE LENGTH (BY DIVISION 26).
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS (BY DIVISION 26).
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES (BY DIVISION 26).
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION (BY DIVISION 26).
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION (BY DIVISION 26).
13. ALL DEVICES ARE SHOWN DIAGRAMMATICALLY. COORDINATE EXACT PLACEMENT WITH ARCHITECT/DESIGN CONSULTANT AND OWNER PRIOR TO INSTALLATION.
14. ALL CONDUITS FOR SECURITY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE A LAY-IN TYPE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE A LAY-IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR. THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, ANCHORAGES, AND OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
15. CONTRACTOR SHALL REFER TO THE DOOR HARDWARE SPECIFICATIONS TO DETERMINE THE DOOR HARDWARE AND ASSOCIATED LOCK POWER REQUIREMENTS FOR EACH CARD READER / ACCESS CONTROLLED LOCATIONS AS IDENTIFIED ON THE TS-SERIES SHEETS (BY DIVISION 28)
16. CONTRACTOR SHALL REFERENCE THE T-SERIES SHEETS FOR ENLARGED PLANS & ELEVATIONS DRAWINGS FOR THE ACCESS CONTROL SYSTEM DEDICATED HIGH VOLTAGE POWER OUTLETS, DATA CABLES, AND PANEL LOCATION PROVISIONS WITHIN EACH ASSOCIATED MDF/IDF (BY DIV. 26, DIV. 27, AND DIV. 28)
17. SECURITY CONTRACTOR SHALL FURNISH AND INSTALL RS-485 COMMUNICATION CABLE(S) AS BETWEEN THE ACCESS CONTROL PANELS AND FROM THE MDF TO EACH ASSOCIATED IDF AS REQUIRED, IN ORDER TO PROVIDE A COMPLETE AND FULLY FUNCTIONAL TURNKEY ACCESS CONTROL SYSTEM.
18. CONTRACTOR SHALL COORDINATE EXTERIOR CAMERA PLACEMENT(S) WITH THE LANDSCAPE CONTRACTOR AND OTHER TRADES PRIOR TO ROUGH-IN. IF TREES, SHRUBS, OR GUTTERS/DOWNSPOUTS OBSTRUCT THE CAMERA VIEW, THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT / DESIGN CONSULTANT / OWNER FOR RELOCATION OF EXTERIOR CAMERA(S).
19. CONDUIT / RACEWAY PATHWAYS FOR SECURITY CABLING ARE TO BE FIELD COORDINATED. CONTRACTOR MEANS AND METHODS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SECURITY DEVICES IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.
20. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SECURITY DEVICES IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.

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No.	Description	Date

KEY PLAN

SECURITY 1st FLOOR PLAN

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

TS101

Scale: 1/4" = 1'-0"

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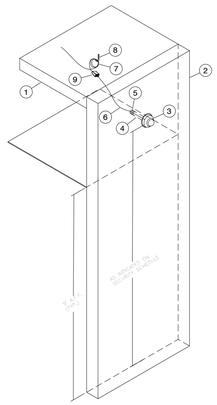
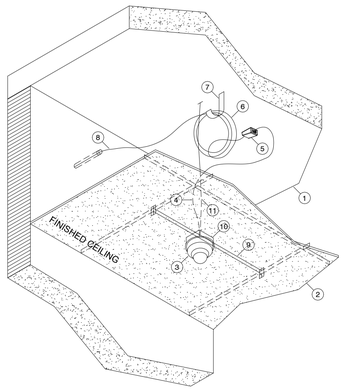


KEYED NOTES:

1. CEILING DECK AS SCHEDULED (BY OTHERS).
2. EXTERIOR WALL AS SCHEDULED (BY OTHERS).
3. EXTERIOR SURFACE MOUNTED VIDEO SURVEILLANCE CAMERA AS SCHEDULED (BY DIV.28)
4. 3/4 - INCH CONDUIT FROM ABOVE ACCESSIBLE CEILING, STUBBED THROUGH THE SCHEDULED WALL AND THEN APPROXIMATELY 1-INCH FROM THE EXTERIOR SURFACE. COORDINATE THE EXACT CONDUIT STUB OUT LENGTH WITH THE DIVISION 28 CONTRACTOR. PROVIDE 200 LB PULL STRING AND NYLON BUSHINGS (BY DIV. 26).
5. WEATHERTIGHT GASKET / SILICONE TO PREVENT MOISTURE FROM ENTERING THE CAMERA OR PENETRATION. (BY DIV. 26).
6. PATCH CORD AS SPECIFIED (BY DIV. 27).
7. 20 FOOT SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV. 27).
8. J-HOOK ABOVE ACCESSIBLE CEILING (BY DIV. 26).
9. DATA BISCUIT/JACK AS SPECIFIED (BY DIV. 27)

TYPICAL EXTERIOR WALL-MOUNTED SURVEILLANCE CAMERA WITH CONDUIT STUB-OUT

1 / TS-400 SCALE: N.T.S.

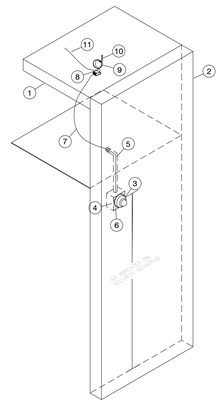


KEYED NOTES:

1. CEILING DECK AS SCHEDULED.
2. LAY-IN CEILING AS SCHEDULED.
3. CEILING MOUNTED INTERIOR IP VIDEO SURVEILLANCE DOME CAMERA AS SCHEDULED (BY DIV.28)
4. PATCH CORD (BY DIV 27).
5. SURFACE MOUNT DATA OUTLET ABOVE ACCESSIBLE CEILING (BY DIV 27).
6. 20 FOOT SERVICE LOOP ABOVE ACCESIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV 27).
7. J-HOOK ABOVE ACCESSIBLE CEILING (BY DIV 27).
8. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
9. HEAVY DUTY T-GRID, SURVEILLANCE CAMERA SUPPORT ATTACHED TO CEILING GRID (BY DIV 26).
10. DOUBLE GANG BACKBOX WITH DUAL-GANG MUD RING (BY DIV 26).
11. GUIDEWIRE FROM DOUBLE GANG BACKBOX WITH DUAL-GANG MUD RING TO STRUCTURE (BY DIV 26).

TYPICAL INTERIOR CEILING MOUNTED SURVEILLANCE CAMERA

2 / TS-400 SCALE: N.T.S.



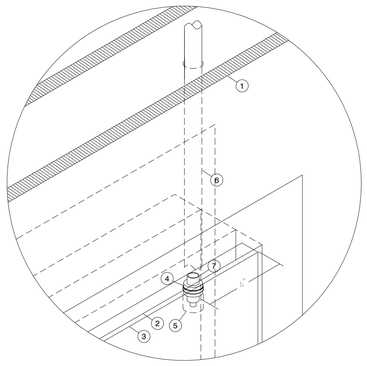
KEYED NOTES:

1. CEILING DECK AS SCHEDULED.
2. INTERIOR WALL AS SCHEDULED.
3. INTERIOR WALL MOUNTED IP VIDEO SURVEILLANCE DOME CAMERA AS SCHEDULED (BY DIV.28)
4. 4 11/16" x 4 11/16" x 2 1/8" RECESSED DOUBLE GANG BOX (BY DIV 26).
5. 3/4-INCH CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING (BY DIV 26).
6. DOUBLE GANG PLASTER RING (BY DIV 26).
7. PATCH CORD AS SPECIFIED (BY DIV.27).
8. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING (BY DIV 27).
9. 20 FOOT SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV 27).
10. J-HOOK ABOVE ACCESSIBLE CEILING (BY DIV 27).
11. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).

TYPICAL INTERIOR WALL MOUNTED SURVEILLANCE CAMERA

3 / TS-400 SCALE: N.T.S.

NOTE: 6" x 4" x 4" JUNCTION BOX TO BE INSTALLED ABOVE NEAREST ACCESSIBLE CEILING IN HARD LID AND OPEN AREA.

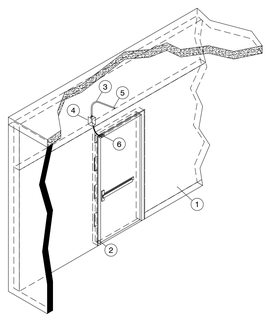


KEYED NOTES:

1. SCHEDULED PARTITION.
2. HEAD OF DOOR FRAME. PROVIDE TAB AT DOOR FRAME TO SECURE CONDUIT DIRECTLY ABOVE DOOR POSITION SWITCH.
3. SCHEDULED DOOR.
4. 3/4" DIAMETER HOLE IN THE HEAD OF FRAME FOR CONCEALED DOOR CONTACT.
5. 3/4" DIAMETER X 1 1/4" DEEP HOLE IN TOP OF DOOR FOR CONCEALED DOOR CONTACT MAGNET.
6. 1/2" CONDUIT FROM 6" X 6" X 4" JUNCTION BOX ABOVE DOOR (BY DIV 26).
7. DOOR CONTACT AS SCHEDULED (BY DIV.28)

TYPICAL DOOR CONTACT SINGLE DOOR RECESSED

4 / TS-400 SCALE: N.T.S.



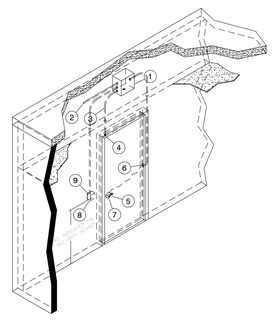
KEYED NOTES:

1. GYPSUM BOARD WALLS.
2. WOOD DOOR CASING / TRIM.
3. 3/4-INCH CONDUIT FROM DOUBLE GANG BOX WITH 200LB PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING CABLES (BY DIV. 26).
4. RECESSED MOUNT SINGLE GANG BOX WITH COVER AND TAMPER SCREWS. (BY DIV. 26).
5. SECURITY CABLE A SPECIFIED (BY DIV. 26).
6. SURFACE MOUNT DOOR CONTACT WITH RECESSED ARMORED CABLE AS SCHEDULED (BY DIV.28)

TYPICAL SURFACE MOUNT DOOR CONTACT WITH ARMORED CABLE

5 / TS-400 SCALE: N.T.S.

NOTE: 12" WIDE x 12" HIGH x 8" DEEP JUNCTION BOX TO BE INSTALLED ABOVE NEAREST ACCESSSIBLE CEILING IN HARDLID AND OPEN AREAS.



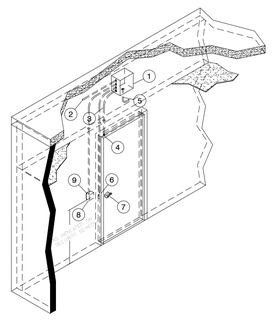
KEYED NOTES:

1. (1) 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX MOUNTED ABOVE ACCESSIBLE CEILING ON SECURE SIDE OF DOOR (BY DIV. 26).
2. (1) 1-INCH CONDUIT FROM 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX TO ABOVE ACCESSIBLE CEILING ON SECURE SIDE OF DOOR FOR ACCESS CONTROL CABLE (BY DIV. 26).
3. (1) 1/2-INCH CONDUIT FROM 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX TO HEAD OF DOOR FRAME FOR CONCEALED DOOR POSITION SWITCH. STUB CONDUIT INTO HEAD OF DOOR FRAME 6-INCHES FROM THE STRIKE SIDE OF THE DOOR. PROVIDE A 3-INCH BLOCKOUT FOR GROUTED DOORS (BY DIV. 26).
4. CONCEALED DOOR POSITION SWITCH (BY DIV. 28).
5. (1) REQUEST TO EXIT MOTION SENSOR INTEGRAL TO LEVERSET (BY DIV. 8).
6. (1) 3/4-INCH CONDUIT FROM 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX DOWN DOOR FRAME FOR POWER TRANSFER HINGE (BY DIV. 26).
7. (1) ELECTRIFIED LEVERSET ON SECURE SIDE OF DOOR (BY DIV. 8).
8. (1) 3/4-INCH CONDUIT FROM 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX TO A RECESSED DOUBLE GANG BOX WITH A SINGLE GANG PLASTER RING FOR CARD READER ON UNSECURE SIDE OF DOOR (BY DIV. 26).
9. (1) CARD READER ON UNSECURE SIDE OF DOOR (BY DIV. 28).

TYPICAL WALL MOUNTED CARD READER WITH ELECTRIFIED LEVERSET AND REQUEST TO EXIT INTEGRAL SWITCH

6 / TS-400 SCALE: N.T.S.

NOTE: 12" WIDE x 12" HIGH x 8" DEEP JUNCTION BOX TO BE INSTALLED ABOVE NEAREST ACCESSIBLE CEILING IN HARDLID AND OPEN AREAS.

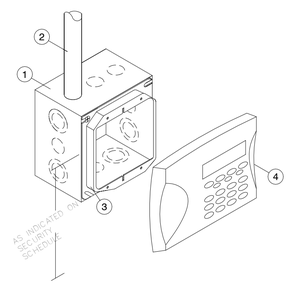


KEYED NOTES:

1. (1) 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX MOUNTED ABOVE ACCESSIBLE CEILING ON SECURE SIDE OF DOOR (BY DIV. 26).
2. (1) 1-INCH CONDUIT FROM 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX TO ABOVE ACCESSIBLE CEILING ON SECURE SIDE OF DOOR FOR ACCESS CONTROL CABLE (BY DIV. 26).
3. (1) 1/2-INCH CONDUIT FROM 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX TO HEAD OF DOOR FRAME FOR CONCEALED DOOR POSITION SWITCH. STUB CONDUIT INTO HEAD OF DOOR FRAME 6-INCHES FROM THE STRIKE SIDE OF THE DOOR. PROVIDE A 3-INCH BLOCKOUT FOR GROUTED DOORS (BY DIV. 26).
4. CONCEALED DOOR POSITION SWITCH (BY DIV. 28).
5. (1) 1/2-INCH CONDUIT FROM 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX TO ACCESSIBLE CEILING ABOVE DOOR ON SECURE SIDE OF DOOR FOR REQUEST TO EXIT MOTION SENSOR (BY DIV. 26).
6. (1) 3/4-INCH CONDUIT FROM 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX DOWN DOOR FRAME TO CUT OUT FOR ELECTRIC STRIKE (BY DIV. 26).
7. (1) ELECTRIFIED LEVERSET ON SECURE SIDE OF DOOR (BY DIV. 8).
8. (1) 3/4-INCH CONDUIT FROM 12-INCH WIDE X 12-INCH HIGH X 8-INCH DEEP JUNCTION BOX TO A RECESSED DOUBLE GANG BOX WITH A SINGLE GANG PLASTER RING FOR CARD READER ON UNSECURE SIDE OF DOOR (BY DIV. 26).
9. (1) CARD READER ON UNSECURE SIDE OF DOOR (BY DIV. 28).

TYPICAL WALL MOUNTED CARD READER WITH ELECTRIC STRIKE AND CEILING MOUNTED REQUEST TO EXIT MOTION SENSOR

7 / TS-400 SCALE: N.T.S.



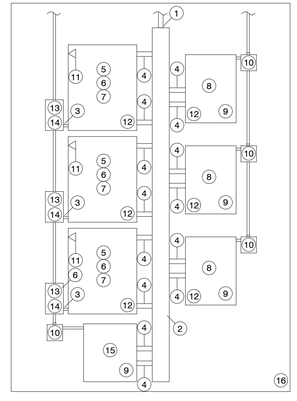
KEYED NOTES:

1. RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED TO CABLE TRAY (BY DIV 26).
3. DOUBLE GANG PLASTER RING (BY DIV 26).
4. ARM/DISARM KEYPAD AS SCHEDULED (BY DIV.28).

TYPICAL ARM/DISARM KEYPAD DETAIL

8 / TS-400 SCALE: N.T.S.

NOTE: EACH RESPONSIBLE PARTY/CONTRACTOR SHALL COORDINATE AND CONFIRM THE EXACT LOCATION, REQUIREMENTS AND LAYOUT WITH THE ARCHITECT/DESIGN CONSULTANT AND OWNER PRIOR TO INSTALLATION.



KEYED NOTES:

1. SECURITY CABLE FROM FIELD,(DIV.28).
2. 8-INCH X 8-INCH D GUTTER RACEWAY WITH COVER. (BY DIV. 26).
3. 1-INCH METALLIC CONDUIT (BY DIV. 28).
4. 3-INCH METALLIC CONDUIT (BY DIV. 28).
5. ACCESS CONTROL ENCLOSURE AND PANELS (BY DIV. 28).
6. ACCESS CONTROL PANELS POWER SUPPLY (BY DIV. 28).
7. INPUT/OUTDATE PANEL(S) (BY DIV. 28).
8. PROVISIONED SPACE FOR ELECTRIFIED DOOR HARDWARE POWER SUPPLY WHERE APPLICABLE. REFER TO THE DIVISION 08 SPECIFICATIONS AND REQUIREMENTS (BY DIV. 08).
9. 120VAC EMERGENCY, NON-STITCHED, DEDICATED 20AMP HARDWIRED CIRCUIT ON GENERATOR BACKUP(BY DIV. 26).
10. ELECTRICAL JUNCTION BOX (BY DIV. 26).
11. NETWORK OUTLET (BY DIV. 27).
12. THE DIV 28 FIRE ALARM CONTRACTOR, DIV.8 DOOR HARDWARE CONTRACTOR, AND DIV.28 SECURITY CONTRACTOR SHALL COORDINATE FOR CONNECTION REQUIREMENTS OF THE FIRE ALARM RELAY(S). EACH CONTRACTORS SHALL FURNISH AND INSTALL THE REQUIRED MODULES AND CONNECTIONS WITHIN THEIR OWN EQUIPMENT.FIRE RELAY(S) CONNECTIONS/CABLES SHALL BE HANDED OFF TO THE DIV.28 SECURITY CONTRACTOR FOR MAKING UP CONNECTIONS TO THE DIV.8 POWER SUPPLY AS REQUIRED BY THE LAHJ (BY DIV.28 FIRE ALARM CONTRACTOR, DIV 8 DOOR HARDWARE CONTRACTOR, AND DIV.28 SECURITY CONTRACTOR).
13. MANUFACTURER TRANSFORMER AND TRANSFORMER ENCLOSURE (BY DIV.28).
14. 120VAC EMERGENCY, NON-STICHED,DEDICATED 20AMP DUPLEX CIRCUIT ON GENERATOR BACKUP (BY DIV. 26).
15. ACCESS CONTROL EXTERNAL POWER SUPPLY (BY DIV. 28).
16. FIRE RATED PLYWOOD AS SCHEDULED (REFER TO DIV. 27).

TYPICAL SECURITY RISER BACKBOARD DETAIL

9 / TS4.1 SCALE: N.T.S.

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RCDD
10/11/2024

NOTES:
DO NOT SCALE DRAWINGS.
CONTACT ARCHITECT IN CASE OF DISCREPANCY.

No.	Description	Date

KEY PLAN

SECURITY TYPICAL DETAILS

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

TS401

Scale: 3/4" = 1'-0"

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LCC VETERANS HALL RENOVATIONS - VIDEO SURVEILLANCE SYSTEM DEVICE SCHEDULE

CAMERA NO.	CAMERA TYPE	INTERIOR / EXTERIOR	MOUNT	DEVICE HEIGHT (TO CENTER)	NOTES
C-E-1	SINGLE LENS IP DOME	EXTERIOR	WALL	11-FEET A.F.G.	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-E-2	SINGLE LENS IP DOME	EXTERIOR	WALL	11-FEET A.F.G.	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-E-3	SINGLE LENS IP DOME	EXTERIOR	WALL	11-FEET A.F.G.	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-E-4	SINGLE LENS IP DOME	EXTERIOR	WALL	11-FEET A.F.G.	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-E-5	SINGLE LENS IP DOME	EXTERIOR	WALL	11-FEET A.F.G.	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-E-6	SINGLE LENS IP DOME	EXTERIOR	WALL	11-FEET A.F.G.	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-E-7	SINGLE LENS IP DOME	EXTERIOR	WALL	11-FEET A.F.G.	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-E-8	SINGLE LENS IP DOME	EXTERIOR	WALL	11-FEET A.F.G.	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-E-9	SINGLE LENS IP DOME	EXTERIOR	WALL	9-FEET A.F.F.	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-1-1	SINGLE LENS 360 DEGREE IP DOME	INTERIOR	CEILING	N/A	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-1-2	SINGLE LENS 360 DEGREE IP DOME	INTERIOR	CEILING	N/A	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-1-3	SINGLE LENS 360 DEGREE IP DOME	INTERIOR	CEILING	N/A	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-1-4	SINGLE LENS 360 DEGREE IP DOME	INTERIOR	CEILING	N/A	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.
C-1-5	SINGLE LENS IP DOME	INTERIOR	CEILING	N/A	COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN, CABLING, AND CAMERA INSTALLATION. COORDINATE FINAL CAMERA VIEWS WITH THE OWNER FOR FINAL ACCEPTANCE.

LCC VETERANS HALL RENOVATIONS - ACCESS CONTROL SYSTEM DEVICE SCHEDULE

CARD READER #	DEVICE TYPE	MOUNT	DOOR TYPE	DEVICE HEIGHT (TO CENTER)	TERMINATION POINT	NOTES
CR-1-1	CARD READER	WALL	SINGLE	46-INCHES A.F.F.	MDF A113	COORDINATE EXACT REQUIREMENTS WITH THE OWNER PRIOR TO ROUGH-IN, CABLING, AND DEVICE INSTALLATION. COORDINATE WITH DIVISION 8 FOR DOOR HARDWARE REQUIREMENTS.
CR-1-2	CARD READER	WALL	SINGLE	46-INCHES A.F.F.	MDF A113	COORDINATE EXACT REQUIREMENTS WITH THE OWNER PRIOR TO ROUGH-IN, CABLING, AND DEVICE INSTALLATION. COORDINATE WITH DIVISION 8 FOR DOOR HARDWARE REQUIREMENTS.
DR-1-1	DOOR RELEASE BUTTON	UNDER DESK	SINGLE	SEE TYPICAL DETAIL	MDF A113	COORDINATE EXACT REQUIREMENTS WITH THE OWNER PRIOR TO ROUGH-IN, CABLING, AND DEVICE INSTALLATION. COORDINATE WITH DIVISION 8 FOR DOOR HARDWARE REQUIREMENTS.

LCC VETERANS HALL RENOVATIONS - INTRUSION DETECTION SYSTEM DEVICE SCHEDULE

INTRUSION DEVICE #	DEVICE TYPE	MOUNT	DEVICE HEIGHT (TO CENTER)	TERMINATION POINT	NOTES
DC-1-1	EXTERIOR DOOR CONTACT	SURFACE	N/A	MDF A113	CABLING FROM DOOR CONTACT SHALL BE PROTECTED WITH ARMORED JACKET.
DC-1-2	EXTERIOR DOOR CONTACT	SURFACE	N/A	MDF A113	CABLING FROM DOOR CONTACT SHALL BE PROTECTED WITH ARMORED JACKET.
DC-1-3	EXTERIOR DOOR CONTACT	SURFACE	N/A	MDF A113	CABLING FROM DOOR CONTACT SHALL BE PROTECTED WITH ARMORED JACKET.
DC-1-4	EXTERIOR DOOR CONTACT	SURFACE	N/A	MDF A113	CABLING FROM DOOR CONTACT SHALL BE PROTECTED WITH ARMORED JACKET.
DC-1-5	EXTERIOR DOOR CONTACT	RECESSED	N/A	MDF A113	CABLING FROM DOOR CONTACT SHALL BE PROTECTED WITH ARMORED JACKET.
MD-1-1	PANORAMIC MOTION	CEILING	N/A	MDF A113	SECURITY DEVICE SHALL BE PROPERLY SUPPORTED.
MD-1-2	PANORAMIC MOTION	CEILING	N/A	MDF A113	SECURITY DEVICE SHALL BE PROPERLY SUPPORTED.
MD-1-3	PANORAMIC MOTION	CEILING	N/A	MDF A113	SECURITY DEVICE SHALL BE PROPERLY SUPPORTED.
MD-1-4	PANORAMIC MOTION	CEILING	N/A	MDF A113	SECURITY DEVICE SHALL BE PROPERLY SUPPORTED.
MD-1-5	PANORAMIC MOTION	CEILING	N/A	MDF A113	SECURITY DEVICE SHALL BE PROPERLY SUPPORTED.
MD-1-6	PANORAMIC MOTION	CEILING	N/A	MDF A113	SECURITY DEVICE SHALL BE PROPERLY SUPPORTED.
MD-1-7	PANORAMIC MOTION	CEILING	N/A	MDF A113	SECURITY DEVICE SHALL BE PROPERLY SUPPORTED.
KP-1-1	KEYPAD	WALL	46-INCHES A.F.F.	MDF A113	KEYPAD WITH PROTECTIVE COVER
S-1-1	HORN/SIREN	WALL	96-INCHES A.F.F.	MDF A113	
D-1-1	DURESS BUTTON	UNDER COUNTER	COORDINATE	MDF A113	(LATCHING) SECURITY CABLING FROM DURESS BUTTON TO ROUGH-IN SHALL BE PROTECTED WITH ARMORED CABLE. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.

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10/11/2024

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No.	Description	Date

KEY PLAN

SECURITY SCHEDULES

Drawn by:	CCG
Checked by:	ERIC
Project number:	Project Number
Project Issue Date:	10/11/2024

TS501

Scale: 12" = 1'-0"