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ARCHITECTURAL ABBREVIATIONS

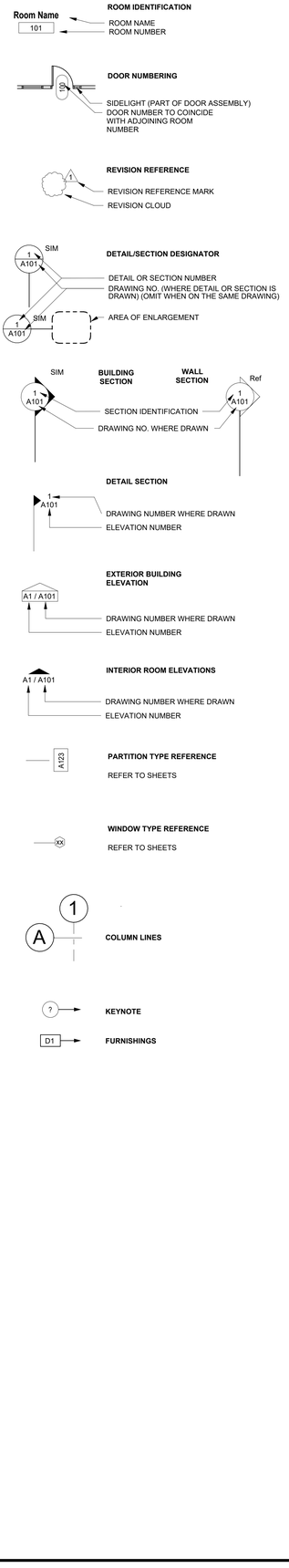
&	AND
@	AT
A	ANGLE
A/C	AIR CONDITIONER / CONDITIONING
ABV	ABOVE
ACCS	ACCESSORIES
ACSDR	ACCESS DOOR
ACSFLR	ACCESS FLOOR
ACST / ACOUS	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
ADDL	ADDITIONAL
ADDM	ADDENDUM
ADJ	ADJUSTABLE / ADJACENT
ADMIN	ADMINISTRATION
AFC	ABOVE FINISHED COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFS	ABOVE FINISHED SLAB
AGGR	AGGREGATE
AHR	ANCHOR
AHU	AIR HANDLING UNIT
AL / ALUM	ALUMINUM
ALNMT	ALIGNMENT
ALT	ALTERNATE
ANOD	ANODIZED
AP	ACCESS PANEL
APC	ACOUSTICAL PANEL CEILING
APPROX	APPROXIMATELY
APPVD	APPROVED
ARCH	ARCHITECT(URAL)
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AUTO	AUTOMATIC
AVG	AVERAGE
BD	BOARD
BG	BUMPER GUARD
BITUM	BITUMINOUS
BL	BLACK
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BMS	BALANCE MAGNETIC SWITCH
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BS	BOTH SIDES
CAB	CABINET
CAS	CASEWORK
CB	CATCH BASIN
CEM	CEMENT
CER	CERAMIC
CF	CUBIC FOOT
CFMF	COLD FORMED METAL FRAMING
CG	CORNER GUARD
CH	CEILING HEIGHT
CHAM	CHAMFER
CHBD	CHALKBOARD
CI	CAST IRON
CI	CONTRACTOR INSTALLED
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN/CLEAR OUT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CPR	COPPER
CPT	CARPET(ED)(ING)
CT	CERAMIC TILE
CTR	COUNTER
DBL	DOUBLE
DEFS	DIRECT APPLIED EXTERIOR FINISH SYSTEM
DEG	DEGREE
DEMO	DEMOLISH
DEP	DEPRESSION
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DWG	DRAWING
E	EAST
EA	EACH
EF	EACH FREE
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSED / ENCLOSURE
ENG	ENGINEER
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EQ	EQUAL(LY)
EQPT	EQUIPMENT
EST	ESTIMATE
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FA	FIRE ALARM
FAST	FASTEN(ER)
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FEC (R)	FIRE EXTINGUISHER CABINET, RECESSED
FEC (SR)	FIRE EXTINGUISHER CABINET, SEMI-RECESSED
FEW	FIRE EXTINGUISHER, WALL MOUNTED
FF	FINISHED FLOOR
FGL	FIBERGLASS
FIN	FINISH(ED)
FIXT	FIXTURE
FL	FLOOR
FLASH	FLASH(ING)
FLUOR	FLUORESCENT
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUDS
FOW	FACE OF WALL
FP	FIREPROOF
FPL	FIREPLACE
FR	FRAME
FRC	FIBER REINFORCED CONCRETE
FRGP	FIBER REINFORCED GYPSUM PLASTER
FRT	FIRE RETARDANT TREATED
FS	FLOOR SINK
FTG	FOOTING
FURR	FURRING
FUT	FUTURE
GA	GAUGE
GALV	GALVANIZE(D)
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GL	GLASS / GLAZING
GND	GROUND
GR	GRADE
GRV	GRAVEL
GT	GLASS TILE
GYP	GYPSUM
GYP BD	GYPSUM BOARD
HB	HOSE BIB
HC	HOLLOW CORE
HCP	HANDICAPPED
HD	HEAVY DUTY
HD	HARD
HDR	HEADER
HDWR	HARDWARE
HI	HIGH
HM	HOLLOW METAL
HMI	HOLLOW METAL INSULATED
HOR / HORIZ	HORIZONTAL
HP	HIGH POINT
HR	HANDRAIL
HR	HOUR
HT	HEIGHT
HVAC	HEATING / VENTILATION / AIR CONDITIONING
HW	HARDWARE
HYD	HYDRANT
ID	INSIDE DIAMETER
IN	INCH / INCHES
INCL	INCLUDE(D) / INCLUDING
INSUL	INSULATE / INSULATION
INT	INTERIOR
JAN	JANITOR
JT	JOINT
KIT	KITCHEN
LAB	LABORATORY
LAM	LAMINATE(D)
LAV	LAVATORY
LB(S)	POUND(S)
LF	LINEAR FOOT (FEET)
LH	LEFT HAND
LIB	LIBRARY
LKR	LOCKER
LNS	LINOLEUM SHEET
LNT	LINOLEUM TILE
LP	LOW POINT
LT	LIGHT
LVR	LOUVER
LWT	LIGHT WEIGHT
MACH	MACHINE
MAINT	MAINTENANCE
MATL	MATERIAL
MAX	MAXIMUM
MC	MEDICINE CABINET
ME	MECHANICAL EQUIPMENT
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER(R)
MH	MANHOLE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MLD / MLDG	MOULDING
MO	MASONRY OPENING
MR	MOISTURE RESISTANT
MTD	MOUNTED
MTL	METAL
MUL	MULLION
N	NORTH
NA OR N/A	NOT AVAILABLE / APPLICABLE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO / #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OVERALL
OBS	OBSCURE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFF	OFFICE
OPG / OPNG	OPENING
OPP	OPPOSITE
OZ	OUNCE
PART	PARTIAL
PAT	PATTERN
PBD	PARTICLE BOARD
PC / PCC	PRECAST CONCRETE
PED	PEDESTAL
PER	PERIMETER
PERF	PERFORATED
PERP	PERPENDICULAR
PF	PRE-FINISHED
PIP	POURED-IN-PLACE
PL	PROPERTY LINE
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PMF	PRESSED METAL FRAMES
POP	POINT OF PRESENCE
PR	PAIR
PRCST	PRE-CAST
PREFAB	PREFABRICATED
PROP	PROPERTY
PRT	PORCELAIN TILE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
PTD	PAPER TOWEL DISPENSER
PTD/WR	PAPER TOWEL DISPENSER & WASTE RECEPTACLE
PTDF	PRESSURE TREATED DOUGLAS FIR
PTN	PARTITION
PTR	PAPER TOWEL RECEPTACLE
PVC	POLYVINYL CHLORIDE
Q	QUARTZ
QT	QUARRY TILE
QTY	QUANTITY
R	RISER
RAD	RADIUS
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REG	REGISTER
REINF	REINFORCE(D)
REQ	REQUIRED
RESIL	RESILIENT
RESS	RESILIENT SHEET
REST	RESILIENT TILE
RET	RETAINING
REV	REVISE / REVISION
RFG	ROOFING
RFL	REFLECTED
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
RS	RUBBER SHEET FLOORING
RST	RUBBER STAIR TREADS
RSTR	RUBBER STAIR TREADS & RISERS
RT	RUBBER TILE
RWD	REDWOOD
RWL	RAIN WATER LEADER
S	SOUTH
SC	SOLID CORE
SCD	SEAT COVER DISPENSER
SCHED	SCHEDULE
SCN	SCREEN
SCR	SCREEN
SD	SOAP DISPENSER / STORM DRAIN
SDC	SEALED CONCRETE
SECT	SECTION
SF	SQUARE FEET
SHT	SHEET
SHTG	SHEATHING
SHWR	SHOWER
SIM	SIMILAR
SND	SANITARY NAPKIN DISPENSER
SNR	SANITARY NAPKIN RECEPTACLE
SOG	SLAB ON GRADE
SPEC	SPECIFY / SPECIFICATION
SPK	SPEAKER
SQ	SQUARE
SQFT	SQUARE FEET
SQIN	SQUARE INCH(ES)
SS	STAINLESS STEEL
ST	STONE
STA	STATION
STC	STAINED CONCRETE
STD	STANDARD
STDS	STUDS
STIFF	STIFFENER
STL	STEEL
STN	STAINED
STOR	STORAGE
STRUCT	STRUCTURE / STRUCTURAL
SUSP	SUSPENDED
SW	SWITCH
SYM	SYMMETRICAL
SYN	SYNTHETIC
SYS	SYSTEM
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TB	TOWEL BAR
TBD	TO BE DETERMINED
TC	TOP OF CURB
TEL	TELEPHONE
TEMP	TEMPORARY / TEMPERATURE
TER	TERRAZZO
THK	THICK
THRU	THROUGH
TOC	TOP OF CONCRETE
TOS	TOP OF SLAB
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TPTN	TOILET PARTITION
TV	TELEVISION
TYP	TYPICAL
UC	UNDERCUT
UG	UNDERGROUND
UL	UNDERWRITER'S LABORATORY
UNF / UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
UR	URINAL
V	VOLT
VAC	VACUUM
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VENT	VENTILATE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VNR	VENEER
VOL	VOLUME
VST	VINYL STAIR TREADS
VSTR	VINTYL STAIR TREADS & RISERS
VT	VINYL TILE
VTR	VENT THRU ROOF
VWC	VINYL WALLCOVERING
W	WEST
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WCV	WALLCOVERING
WD	WOOD
WF	WIDE FLANGE
WG	WIRE GLASS
WH	WALL HOSE / HYDRANT
WI	WROUGHT IRON
WIN	WINDOW
WK	WORK
WNSCT	WAINSCOT
WP	WATERPROOF(ING)
WPT	WORK POINT
WR	WATER RESISTANT
WRR	WOOD RISER
WT	WEIGHT
YD	YARD

MATERIAL INDICATIONS

SECTION ELEVATION

- CONCRETE
- PRECAST CONCRETE
- CMU
- BRICK
- CAST/CUT STONE
- NATURAL STONE
- STEEL
- ALUMINUM
- BRASS/BRONZE
- FINISHED WOOD
- EXTERIOR PLASTER AND LATHE
- CERAMIC/QUARRY TILE
- GLASS/MIRROR
- EARTH
- GRAVEL
- SAND
- CONT. WOOD BLOCKING
- DISCONT. WOOD BLOCKING
- PLYWOOD
- SPRAY APPLIED FIREPROOFING
- BATT/BLANKET INSULATION
- RIGID INSULATION
- GYPSUM BOARD
- BACKER ROD & SEALANT
- JOINT FILLER
- ACOUSTICAL CEILING

ARCHITECTURAL SYMBOLS



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TA.102	AUDIO/VISUAL - REFLECTIVE CEILING PLAN - LEVEL 1	•	•
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SECURITY			
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TY.101	SECURITY - FLOOR PLAN - LEVEL 1	•	•
TY.201	SECURITY - ROOF PLAN	•	•
TY.401	SECURITY - ENLARGED PLAN - LEVEL 1 - IDF/IT 108	•	•
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TY.502	SECURITY - DETAILS	•	•
TY.601	SECURITY - SCHEDULES	•	•

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Project Status:

ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title

SHEET INDEX, SYMBOLS LEGEND, ABBREVIATIONS, VICINITY MAP

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP
Checked By:	DO
Date:	07/22/25
Job No.:	1503

G-002

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

ACCESSIBILITY NOTES

1. AN EXIT IS A CONTINUOUS AND UNOBSTRUCTED MEAN OF EGRESS TO A PUBLIC WAY AND SHALL INCLUDE INTERVENING ROOMS, DOORS, AISLES, AND YARDS. A PUBLIC WAY IS ANY STREET, ALLEY OR SIMILAR PARCEL OF LAND UNOBSTRUCTED FROM GROUND TO SKY WHICH IS DEDICATED FOR PUBLIC USE AND HAVING A CLEAR WIDTH OF NOT LESS THAN 10 FEET.
2. ALL ENTRANGES AND GROUND FLOOR EXIT DOORS SHALL BE MADE ACCESSIBLE.
3. ALL REQUIRED EXIT DOORWAYS SHALL BE OF SIZE TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3' WIDTH AND 6'-8" IN HEIGHT U.N.O.
4. MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS ARE PROHIBITED IN EXIT PATH. WHEN EXIT DOORS USED IN PAIRS AND APPROVED AUTOMATIC FLUSH BOLTS ARE USED, THE DOOR LEAF HAVING THE AUTOMATIC FLUSH BOLTS SHALL HAVE NO DOOR KNOB OR URFACEMOUNTED HARDWARE. THE UNLATCHING OF ANY LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.
5. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, BY PANIC BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE HARDWARE.
6. HAND ACTIVATED DOOR HARDWARE SHALL BE CENTERED BETWEEN 30" AND 44" ABOVE THE FLOOR.
7. EXIT DOORS SHALL OPEN TO A CLEAR WIDTH OF NOT LESS THAN 32".
8. WHERE A PAIR OF DOORS IS PROVIDED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR OPENING WIDTH OF 32".
9. THERE SHALL BE A LEVEL AND CLEAR FLOOR OR LANDING ON EACH SIDE OF A DOOR. THE LEVEL AREA SHALL HAVE A LENGTH IN THE DIRECTION OF THE DOOR SWING OF AT LEAST 60" AND A LENGTH OPPOSITE THE DIRECTION OF THE DOOR SWING OF 48".
10. THE WIDTH OF THE LEVEL AREA ON THE SIDE TO WHICH THE DOOR SWINGS SHALL EXTEND 24" PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS AND 18" PAST THE STRIKE EDGE FOR INTERIOR DOORS.
11. PROVIDE A CLEAR SPACE OF 12" PAST THE STRIKE EDGE OF THE DOOR ON THE OPPOSITE SIDE TO WHICH THE DOOR SWINGS IF THE DOOR IS EQUIPPED WITH BOTH A LATCH AND CLOSER.
12. THE FLOOR OR LANDING SHALL NOT BE MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY.
13. THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARD.
14. THE MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 15 LBS FOR EXTERIOR DOORS AND 5 LBS FOR INTERIOR DOORS.
15. CIRCULATION AISLES AND PEDESTRIAN WAYS SHALL BE SIZED ACCORDING TO FUNCTIONAL REQUIREMENTS BUT SHALL NOT BE LESS THAN 36" IN CLEAR WIDTH.
16. EVERY PORTION OF EVERY BUILDING IN WHICH ARE INSTALLED SEATS, TABLES, MERCHANDISE, EQUIPMENT, OR SIMILAR MATERIALS SHALL BE PROVIDED WITH AISLES LEADING TO AN EXIT.
17. EVERY AISLE SHALL NOT BE LESS THAN 3' WIDTH IF SERVING ONLY ONE SIDE, AND NOT LESS THAN 3'-8" WIDTH IF SERVING BOTH SIDES.
18. OBJECTS PROTRUDING FROM WALLS WITH THEIR LEADING EDGES BETWEEN 27" AND 80" ABOVE THE FINISHED FLOOR SHALL PROTRUDE NO MORE THAN 4" INTO WALKS, HALLS, PASSAGEWAYS OR AISLES.
19. FREE STANDING OBJECTS MOUNTED ON POSTS MAY OVERHANG 12" MAXIMUM FROM 27" TO 80" ABOVE THE FINISHED FLOOR.
20. CLEAR FLOOR SPACE THAT ALLOWS A FORWARD OR PARALLEL APPROACH BY A PERSON USING A WHEELCHAIR SHALL BE PROVIDED AT CONTROLS, RECEPTACLES, AND OTHER OPERABLE EQUIPMENT.
21. THE HIGHEST AND LOWEST OPERABLE PART OF ALL CONTROLS, RECEPTACLES, AND OTHER OPERABLE EQUIPMENT SHALL BE PLACED WITHIN 48" OF THE FLOOR BUT NOT LOWER THAN 15" IF FORWARD APPROACHED AND WITHIN 54" BUT NOT LOWER THAN 9" IF SIDE APPROACHED. ELECTRICAL AND COMMUNICATION SYSTEM RECEPTACLES SHALL NOT BE PLACED LESS THAN 15" ABOVE THE FLOOR.
22. CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO OPERATE CONTROLS SHALL BE NO GREATER THAN 5 LBS.
23. THE MINIMUM CLEAR FLOOR SPACE REQUIRED TO ACCOMMODATE A SINGLE STATIONARY WHEELCHAIR IS 30" BY 48". THE MINIMUM CLEAR FLOOR SPACE MAY BE POSITIONED FOR FORWARD OR PARALLEL APPROACH.
24. THE MINIMUM CLEAR WIDTH FOR A SINGLE WHEELCHAIR PASSAGE SHALL BE 32" AT A POINT AND 36" CONTINUOUSLY.
25. THE MINIMUM CLEAR WIDTH FOR 2 WHEELCHAIRS TO PASS SHALL BE 60".
26. THE MINIMUM CLEAR WIDTH REQUIRED FOR A WHEELCHAIR TO TURN AROUND AN OBSTRUCTION SHALL BE 36" WHERE THE OBSTRUCTION IS 48" OR MORE IN LENGTH AND 42" WHERE THE OBSTRUCTION IS LESS THAN 48" IN LENGTH.
27. IF SEATING FOR PEOPLE IN WHEELCHAIRS IS PROVIDED AT FIXED TABLES OR COUNTERS, KNEE SPACES AT LEAST 27" HIGH, 30" WIDE, AND 19" DEEP SHALL BE PROVIDED.
28. THE TOPS OF TABLES AND COUNTERS SHALL BE 28" TO 34" FROM THE FLOOR.
29. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE THE STANDARD USED TO IDENTIFY FACILITIES THAT ARE ACCESSIBLE AND SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE EQUAL TO COLOR NO. 15090 IN FEDERAL STANDARD 595B.
30. ALL BUILDING ENTRANCES THAT ARE ACCESSIBLE AND AT EVERY MAJOR JUNCTION ALONG OR LEADING TO AN ACCESSIBLE ROUTE OF TRAVEL SHALL BE IDENTIFIED WITH A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.
31. WHEN PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, RAISED LETTERS SHALL BE PROVIDED AND SHALL BE ACCOMPANIED BY BRAILLE. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH OUTSIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING AT DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. MOUNTING HEIGHT SHALL BE 60" ABOVE THE FLOOR TO THE CENTERLINE OF THE SIGN. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3' OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF THE DOOR.
32. WHEN RAISED CHARACTERS OR SYMBOLS ARE USED, THEY SHALL CONFORM TO THE FOLLOWING:
33. LETTERS AND NUMBERS SHALL BE RAISED OR RECESSED 1/32" MINIMUM AND SHALL BE SANS-SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE.
34. RAISED CHARACTERS OR SYMBOLS SHALL BE A MINIMUM OF 5/8" HIGH.
35. PICTORIAL SYMBOL SIGNS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE A MINIMUM OF 6" IN HEIGHT.
36. CONTRACTOR SHALL NOTIFY ARCHITECT SHOULD ANY OF THE ABOVE GENERAL NOTES BE IN CONFLICT WITH THE TEXAS ACCESSIBILITY STANDARDS.

ELECTRICAL NOTES

1. ALL CONDUIT FEEDS TO ELECTRICAL DEVICES MOUNTED ON WALLS SHALL BE PLACED WITHIN THE WALL FOR CONCEALMENT, REGARDLESS OF THE HEIGHT OF THE WALL MOUNTED DEVICE U.N.O.
2. ALL ELECTRICAL POWER OUTLETS SHALL BE COMMERCIAL GRADE IN ALL AREAS. FACE PLATES SHALL BE STAINLESS STEEL WITH STAINLESS STEEL FLAT HEAD SCREW FASTENERS TO MATCH. ALL DEVICE AND FACEPLATE COLORS ARE TO BE VERIFIED WITH THE ARCHITECT.
3. EXPOSED CONDUIT SHALL BE INSTALLED STRAIGHT, LEVEL, UNIFORMLY SPACED, AND PARALLEL TO EXPOSED STRUCTURAL ELEMENTS.
4. THE DESIGN INTENT FOR UNDERSLAB CONDUIT IS TO SUPPLY POWER & DATA TO FLOOR RECEPTACLES AND "FLOATING" WALLS. "FLOATING" WALLS ARE WALL PARTITIONS WHICH DO NOT CONNECT TO THE ROOF DECK OR STRUCTURE ABOVE, DO NOT CONNECT TO A FINISHED CEILING, OR DO NOT CONNECT TO AN EXTERIOR PERIMETER BUILDING WALL. THE DESIGN INTENT IS TO PREVENT HAVING CONDUIT HANG DOWN OR DROP DOWN FROM THE CEILING INTO VISUALLY EXPOSED OPEN PLENUM SPACE.
5. NO UNDER SLAB CONDUIT SHALL EXTEND TO CEILING MOUNTED DEVICES UNLESS CONCEALED FROM VIEW.
6. NO OVERHEAD OR CEILING MOUNTED CONDUIT SHALL EXTEND DOWN FROM THE CEILING TO FLOOR OR WALL DEVICES UNLESS CONCEALED FROM VIEW.
7. POWER DISTRIBUTION TO OVERHEAD LIGHTS AND OTHER OVERHEAD EQUIPMENT SHALL BE SUPPLIED BY CONDUIT RUNS PLACED IN THE CEILING, WITH CEILING HOME RUNS LOCATED BELOW STEEL BEAMS AND WITHIN THE OPEN WEB JOIST CAVITY.
8. NO CONDUIT SHALL BE PLACED ON ANY EXPOSED COLUMN SURFACES UNLESS SPECIFICALLY INDICATED WITHIN THE ARCHITECTURAL DETAILS, OR SPECIFICALLY COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION.
9. EXPOSED CEILING CONDUITS SHALL BE GANGED TOGETHER WHEREVER POSSIBLE, AND SHALL BE ROUTED PARALLEL OR PERPENDICULAR TO EXPOSED STRUCTURAL ELEMENTS. DIAGONAL ROUTING SHALL NOT BE ACCEPTED.
10. THERE SHALL BE NO EXPOSED CONDUITS ON/OR SPANNING ACROSS SKYLIGHT AREAS OR CLERESTORY.
11. EXPOSED CEILING CONDUIT SHALL BE INSTALLED STRAIGHT, LEVEL, AND UNIFORMLY SPACED.
12. STRUCTURED CEILING SOFFITS SHALL HAVE POWER FED FROM CONCEALED CONDUITS WHICH EXTEND FROM THE PERIMETER WALL.
13. EXIT SIGNS ARE INDICATED FOR DESIGN INTENT. VERIFY PROPOSED LOCATIONS ARE ACCEPTABLE TO THE BUILDING AUTHORITY AND NOTIFY ARCHITECT OF REQUIRED CHANGES DIRECTED BY THE BUILDING AUTHORITY PRIOR TO INSTALLATION.
14. ALL WALL RECEPTACLES AND SWITCHES SHALL BE WHITE, UNLESS INDICATED OTHERWISE.
15. COORDINATE CONDUIT REQUIREMENTS FOR MECHANICAL SYSTEM DEVICES SUCH AS THERMOSTATS AND CO2 SENSORS TO COMPLY WITH THE NOTES HEREIN.
16. SEE NOTE 7 ON THE REFLECTED CEILING PLAN GENERAL NOTES ON THIS SHEET.

LIGHTING GENERAL NOTES

1. SCHEDULED LIGHT FIXTURE ARE PROPRIETARY PRODUCTS AND SHALL BE INTERPRETED AS THE BASIS-OF-DESIGN; THE SCHEDULED FIXTURES SHALL TAKE PRECEDENCE OVER OTHER PRODUCTS INDICATED ELSEWHERE IN THE CONTRACT DOCUMENTS; ALTERNATIVE FIXTURES MAY BE USED IF EQUAL TO THE BASIS OF DESIGN; ALTERNATIVE FIXTURES SHALL MATCH THE PERFORMANCE, QUALITY , PROFILE, AND LAMPING OF THE BASIS-OF-DESIGN FIXTURE; CONTRACTOR SHALL CONSULT WITH ARCHITECT BEFORE PROCEEDING WITH AN ALTERNATIVE PRODUCT TO THAT WHICH IS SPECIFICALLY IDENTIFIED IN THE DRAWINGS.
2. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION OF ALL LIGHT FIXTURES, FIXTURE MOUNTING HEIGHTS, AND FIXTURE MOUNTING DETAILS; NOTIFY ARCHITECT OF ANY CONFLICTS BETWEEN THE INDICATED MOUNTING REQUIREMENTS AND THE MANUFACTURER'S RECOMMENDED INSTALLATION DETAILS PRIOR TO ORDERING AND PURCHASING OF FIXTURES.
3. ALL FIXTURE FINISHES ARE TO BE VERIFIED WITH THE ARCHITECT.
4. SUBMIT PRODUCT DATA FOR ALL LIGHTING SYSTEM COMPONENTS INCLUDING, BUT NOT LIMITED TO, COLOR, FINISH, MOUNTING HARDWARE, AND LAMPING. PROVIDE DETAILS FOR ANY NON-STANDARD MOUNTING CONFIGURATIONS. STANDARD FIXTURE MOUNTING IS ASSUMED TO BE MANUFACTURER'S STANDARD OR CUSTOM LENGTH SUSPENSION SYSTEM AND POWER CORD CONNECTION DIRECTLY TO THE ROOF DECK, ROOF STRUCTURE, AND ROOF DECK MOUNTED J-BOXES, WHERE APPLICABLE.
5. SEE NOTE 7 ON THE REFLECTED CEILING PLAN NOTES.

MECHANICAL NOTES

1. PROVIDE CONDUIT RUNS FOR REQUIRED THERMOSTATS AND CO2 SENSORS BASED ON CRITERIA INDICATED IN THE ELECTRICAL NOTES ABOVE. RUN CONDUIT FOR WALL MOUNTED DEVICES UNDER THE FLOOR, AND RUN CONDUIT FOR CEILING MOUNTED DEVICES WITHIN THE CEILING. DO NOT EXTEND CONDUIT FROM CEILING TO WALL UNLESS CONDUIT IS COMPLETELY CONCEALED FROM VIEW.
2. REFER TO REFLECTED CEILING PLAN SHEETS FOR ADDITIONAL NOTES.

REFLECTED CEILING PLAN NOTES

1. THE GENERAL NOTES HEREIN ADDRESS ARCHITECTURAL DESIGN INTENT FOR ALL BUILDING SYSTEM COMPONENTS INSTALLED ABOVE THE FLOOR AND WITHIN THE CEILING AREAS, INCLUDING MECHANICAL, ELECTRICAL, PLUMBING, AND ARCHITECTURAL. CONTRACTOR SHALL REFER TO THESE GENERAL NOTE REQUIREMENTS FOR CLARIFICATION ON ARCHITECTURAL DESIGN INTENT FOR ALL EXPOSED BUILDING COMPONENTS AND SYSTEMS. FURTHERMORE, CONTRACTOR SHALL ISSUE A RFI REQUEST FOR CLARIFICATION ON ANY RELATED ITEMS EXPOSED TO VIEW, FOR WHICH INFORMATION IS GIVEN HEREIN, AND CONTRADICTED ELSEWHERE WITHIN THE DOCUMENTS.
2. MINIMIZE EXPOSED ACCESS HATCHES IN LOBBY AREAS, WHERE FINISHED CEILING IS GYP. BOARD, PLACE EQUIPMENT IN ADJACENT ACCESSIBLE CEILING AREAS ADJACENT TO HARD LID GYP. BOARD CEILINGS.
3. ELEMENTS INDICATED ON THE ARCHITECTURAL CEILING PLANS, INCLUDING LIGHTS, AIR DIFFUSERS, SPRINKLER HEADS (WHERE INDICATED), DUCT RUNS, PIPING, SPEAKERS, ETC., INDICATE THE ARCHITECTURAL DESIGN INTENT. NOTIFY ARCHITECT OF ANY REQUIRED VARIATIONS TO THE INDICATED DESIGN INTENT PRIOR TO SUBMITTING BIDS FOR THE WORK, PURCHASING MATERIALS OR COMMENCEMENT OF SYSTEM INSTALLATION.
4. ALL ACCESS HATCHES TO BE KEYED ALIKE.
5. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR THE LOCATION OF ALL EXPOSED MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS, INCLUDING DUCTS, DIFFUSERS, RETURN GRILLES, THERMOSTATS, LIGHT FIXTURES, CONDUITS, SENSORS, SWITCHES, OUTLETS, FIRE SPRINKLER PIPES, SPRINKLER HEADS AND EQUIPMENT REQUIRING VISIBLE ACCESS HATCHES, INCLUDING JUNCTION BOXES, PULL BOXES, CLEAN OUTS, VALVES, SWITCHES, ETC., WHERE THE EXPOSED MECHANICAL, ELECTRICAL OR PLUMBING COMPONENT IS IMPORTANT TO THE ARCHITECTURAL DESIGN INTENT, AND INDICATED ON THE ARCHITECTURAL PLANS. WHERE ITEMS ARE NOT SPECIFICALLY INDICATED ON THE ARCHITECTURAL PLANS, THE CONTRACTOR SHALL FOLLOW PROCEDURES OUTLINED ON THE SPECIFIC MEP PLANS, BUT ONLY AFTER VERIFICATION FROM ARCHITECT.
6. WHERE DISCREPANCIES OCCUR BETWEEN ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS, INCLUDING THE QUANTITY OF FIXTURES INDICATED, THE CONTRACTOR SHALL ASK THE ARCHITECT IN WRITING FOR AN INTERPRETATION PRIOR TO PLACING A BID FOR THE WORK. OTHERWISE, THE LARGEST QUANTITY AND/OR MOST EXPENSIVE PRODUCT INDICATED SHALL APPLY.
7. ALL KNOWN CEILING ELEMENTS HAVE BEEN INDICATED ON THE ARCHITECTURAL PLANS, INCLUDING LIGHT FIXTURES, AIR DIFFUSERS, AND DUCT WORK. ITEMS NOT INDICATED INCLUDE EXPOSED CONDUIT. NOTIFY ARCHITECT OF ANY REQUIRED VARIATIONS TO THE INDICATED ARCHITECTURAL LAYOUTS PRIOR TO PURCHASING MATERIALS OR COMMENCEMENT OF SYSTEM INSTALLATION.
8. NOTIFY ARCHITECT OF ANY VARIATIONS BETWEEN THE NOTES HEREIN AND DRAWINGS, DETAILS, OR SPECIFICATIONS PRIOR TO PURCHASING MATERIALS OR COMMENCEMENT OF SYSTEM INSTALLATION.

FIRE DEPARTMENT NOTES

1. AN AUTOMATIC FIRE SPRINKLER SHALL BE PROVIDED THROUGHOUT AN E OCCUPANCY GROUP I FIRE AREA. THE SYSTEM SHALL BE DESIGNED, INSTALLED, INSPECTED, AND MAINTAINED IN ACCORDANCE WITH THE 2015 IFC, AND NFPA STANDARD 13, 2012 EDITION.
2. AN AUTOMATIC FIRE SPRINKLER SHALL BE DESIGN BUILD BY CONTRACTOR. CONTRACTOR SHALL SUBMIT DESIGN DOCUMENTS TO ARCHITECT TO REVIEW FOR GENERAL DESIGN COMPLIANCE, AND TO FIRE DISTRICT AS REQUIRED FOR PERMIT.
3. PROVIDE PRELIMINARY SHOP DRAWINGS TO ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO SUBMITTAL TO STATE FIRE MARSHALL. DO NOT SUBMIT DRAWINGS TO THE FIRE MARSHALL BEFORE RECEIVING APPROVAL ON LAYOUT FROM ARCHITECT.
4. WINDOWLESS BUILDINGS SHALL BE PROVIDED WITH AN ENGINEERED SMOKE CONTROL SYSTEM TO PROVIDE VENTILATION IN ACCORDANCE WITH IBC/IFC SECTION 909 FOR EACH WINDOWLESS SMOKE COMPARTMENT. REFER TO MECHANICAL DOCUMENTS.
5. AN ENGINEERED SMOKE CONTROL SYSTEM SHALL UNDERGO SPECIAL INSPECTIONS AND TESTS SUFFICIENT TO VERIFY THE PROPER COMMISSIONING.
6. PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH IFC SECTION 906.2 AND NFPA 10.
7. PLANS FOR ALL FIRE PROTECTION SYSTEMS (SPRINKLER, FIRE ALARM, SMOKE CONTROL, STANDPIPE, ETC.) MUST BE APPROVED BY THE FIRE DISTRICT PRIOR TO COMMENCEMENT OF ANY WORK ON A FIRE PROTECTION SYSTEM, WHETHER THE SYSTEM IS REQUIRED OR NOT. PLANS MUST BE SUBMITTED BY CONTRACTOR AND MUST INCLUDE AT LEAST 2 COMPLETE SETS OF SYSTEM DRAWINGS AND SPECIFICATIONS FOR ALL DEVICES TO BE INSTALLED.

FIRE SPRINKLER/FIRE ALARM NOTES

1. FIRE SPRINKLERS SHALL BE DESIGNED BY A LICENSED FIRE PROTECTION ENGINEER HIRED BY THE FIRE PROTECTION CONTRACTOR. ALL REQUIRED SUBMITTALS SHALL BE PREPARED FOR REVIEW BY ARCHITECT, FOR CONFORMANCE WITH ARCHITECTURAL DESIGN INTENT, AND BY THE AUTHORITIES HAVING JURISDICTION, FOR CONFORMANCE WITH LOCAL, STATE, AND NATIONAL CODES AND ORDINANCES.
2. FIRE SPRINKLER DESIGN SHALL INCLUDE CALCULATIONS FOR THE SIZE OF THE REQUIRED FIRE MAIN, SPRINKLER DISTRIBUTION LAYOUT, FIRE ALARM SYSTEM, AND SHALL INCLUDE ALL RELATED SYSTEM COMPONENTS AS DIRECTED BY THE AUTHORITY HAVING JURISDICTION.
3. ALL FIRE SPRINKLERS AND FIRE ALARMS TO BE LABELED IN A MANNER SIMILAR TO ELECTRICAL EQUIPMENT AS NOTED IN SPECIFICATIONS.
4. FIRE SPRINKLER PIPING SHALL NOT BE DESIGNED OR LOCATED TO BE EXPOSED TO VIEW WITHIN AN OPEN SKYLIGHT, LIGHT WELL, OR IN FRONT OF A CLERESTORY WINDOW, UNLESS SPECIFICALLY INDICATED AS SUCH WITHIN THE DOCUMENTS. FURTHERMORE, WHERE SKYLIGHTS, LIGHT WELLS, OR CLERESTORIES EXIST AND SPRINKLERS ARE REQUIRED, CONTRACTOR SHALL SIDE-WALL AND/OR CONCEAL THE SPRINKLER SYSTEM COMPONENT IN A MANNER ACCEPTABLE TO ARCHITECT AND THE LOCAL FIRE DEPARTMENT.
5. CONTRACTOR SHALL ROUTE ALL FIRE SPRINKLER PIPING IN CONCEALED SPACES WHERE SUCH PIPING MUST CROSS OVER A SKYLIGHT, LIGHT WELL OR CLERESTORY. WHERE NO CONCEALED SPACES EXISTS, CONTRACTOR SHALL REQUEST CLARIFICATION FROM ARCHITECT PRIOR TO PLACING A BID FOR THE WORK.
6. SPRINKLER HEADS AND OTHER VISIBLE CEILING COMPONENTS INDICATED ARE PART OF THE ARCHITECTURAL DESIGN INTENT, AND QUANTITIES INDICATED MAY EXCEED MINIMUM QUANTITIES REQUIRED FOR SYSTEM PERFORMANCE. PROVIDE THE QUANTITIES FOR THE LAYOUT INDICATED, AND NOTIFY ARCHITECT IF ADDITIONALQUANTITIES ARE REQUIRED.
7. IT IS THE DESIGN INTENT TO CONSEAL SPRINKLER PIPING. SIDEWALL ALL HEADS IN EXPOSED AREAS WHERE POSSIBLE.
8. ALL SPRINKLER HEADS WITHIN PAINTED GYPSUM BOARD OR ACT CEILINGS SHALL BE WHITE COLORED CONCEALED TYPE HEADS UNLESS OTHERWISE NOTED.
9. SPRINKLER PIPE DISTRIBUTION LINES SHALL BE PLACED BELOW STEEL BEAMS WITHIN THE OPEN WEB JOIST CAVITY, IN CONCEALED AREAS.
10. SPRINKLER PIPE DISTRIBUTION LINES SHALL BE PLACED PERPENDICULAR OR PARALLEL TO EXPOSED STRUCTURAL BEAMS AND JOISTS, COORDINATE LOCATION WITH THE ARCHITCT.
11. SUBMIT COORDINATION DRAWINGS INDICATING COMPLIANCE WITH THE ARCHITECTURAL DESIGN INTENT PRIOR TO FABRICATION AND INSTALLATION OF SYSTEM.
12. ALL EXPOSED SPRINKLER PIPING, FITTINGS, HANGARS AND OTHER COMPONENTS SHALL BE PAINTED TO MATCH THE EXPOSED CEILING DECK AND STRUCTURE.
13. REFER TO FIRE PROTECTION DRAWINGS.

EXTERIOR ENCLOSURE GENERAL NOTES

1. IN ADDITION TO THE INTENT OF THE WORK INDICATED ON THE DRAWINGS, ALL EXTERIOR ENCLOSURE WORK SHALL COMPLY WITH THE SPECIFIC TECHNICAL REQUIREMENTS OF THE PROJECT SPECIFICATION AND THE FOLLOWING CRITERIA.
2. THE EXTERIOR ENCLOSURE SYSTEM INCLUDES, BUT IS NOT LIMITED TO, MASONRY, PLASTER, BUILDING CLADDING SYSTEMS, WEATHER BARRIERS AND MEMBRANES, MOISTURE AND VAPOR BARRIERS, DAMPPROOFING, WATERPROOFING, ROOFING, METAL FABRICATIONS, COLD FORMED METAL STUD FRAMING, BUILDING INSULATION, FLASHING AND SHEET METAL, LIMESTONE PLASTER FINISHES, GLAZING SYSTEMS, LOUVERS AND VENTS, AND ANY OTHER MATERIAL, COMPONENT, FINISH, OR SUPPORT SYSTEM FOR THE BUILDING SKIN, INTENDED TO PROTECT THE BUILDING FROM THE EXTERIOR ENVIRONMENT.
3. THE PROFILES, SHAPES, RELATIONSHIPS, CONNECTIONS, DETAILS, AND MATERIALS INDICATED ARE A SCHEMATIC REPRESENTATION OF THE DESIGN AND TECHNICAL INTENT. THE CONCEPT INDICATED IS TO BE DEVELOPED, ENGINEERED, AND DETAILED BY THE CONTRACTOR AS REQUIRED TO PROVIDE A HIGH-QUALITY WATER TIGHT, AIR TIGHT, AND THERMALLY RESISTANT EXTERIOR ENCLOSURE SYSTEM COMPLYING WITH ALL INDICATED DESIGN AND TECHNICAL INTENT CRITERIA. PROVIDE ALL REQUIRED DESIGN, ENGINEERING, TESTING, MATERIALS, FASTENERS, ANCHORS, BRACING, SUPPORTS, WEEP SYSTEMS, FLASHINGS, SEALANTS, FABRICATION, ERECTION, ETC. REQUIRED TO FABRICATE AND INSTALL A HIGH QUALITY EXTERIOR ENCLOSURE.
4. IN ANY MODIFICATIONS TO EXISTING EXTERIOR ASSEMBLIES, NEW WORK SHALL MEET THE FOLLOWING CRITERIA: THE EXTERIOR ENCLOSURE SYSTEM DESIGN AND INSTALLATION SHALL ACCOMMODATE THE FOLLOWING:
   a. BUILDING MOVEMENT DUE TO GRAVITY LOADS, DEFLECTION AND VIBRATION;
   b. BUILDING LOADS DUE TO WIND LOADS, DEFLECTION AND VIBRATION;
   c. BUILDING MOVEMENT AND LOADING OF RAIN AND SNOW;
   d. RECOGNIZED SEISMIC FORCES;
   e. THERMAL EXPANSION AND CONTRACTION;
   f. DIFFERENTIAL AIR PRESSURE;
   g. DIFFERENTIAL VAPOR PRESSURE.
5. IN ANY MODIFICATIONS TO EXISTING EXTERIOR ASSEMBLIES, NEW WORK SHALL MEET THE FOLLOWING CRITERIA: THE EXTERIOR ENCLOSURE DESIGN AND INSTALLATION SHALL PROVIDE THE REQUIRED RESISTIVITY TO THE FOLLOWING AND THEIR COMBINED EFFECTS:
   a. WATER INFILTRATION;
   b. DIFFERENTIAL AIR PRESSURE;
   c. DIFFERENTIAL VAPOR PRESSURE;
   d. THERMAL DIFFERENTIALS.
6. ALL EXTERIOR SOFFITS AND CEILING PLANES SHALL BE RIGIDLY FRAMED TO RESIST POSITIVE AND NEGATIVE WIND LOADS, IN ADDITION TO GRAVITY AND OTHER LOADS.
7. IN ANY MODIFICATIONS TO EXISTING EXTERIOR ASSEMBLIES, NEW WORK SHALL MEET THE FOLLOWING CRITERIA: THE EXTERIOR WALL ASSEMBLY SHALL HAVE A MINIMUM THERMAL TRANSMISSION RESISTIVITY ("R") VALUE OF R19 IN VERTICAL WALLS, SOFFITS AND HORIZONTAL CEILINGS, AND R30 IN ROOFS. PROVIDE CONTINUOUS INSULATION WITHIN THE VERTICAL AND HORIZONTAL EXTERIOR ENCLOSURE.
8. ANCHORAGE ASSEMBLIES ARE TO BE DESIGNED AS REQUIRED TO BE NOISELESS IN ACCOMMODATED DYNAMIC MOVEMENTS INCLUDING THERMAL CONTRACTION AND EXPANSION, WIND, AND SEISMIC DRIFT. ANCHORAGE ASSEMBLIES SHALL TRANSMIT EXTERIOR ENCLOSURE DEAD LOADS AND DYNAMIC LOADS TO THE BUILDING STRUCTURE.
9. PROVIDE AND INSTALL ALL REQUIRED BRACKETS, ASSEMBLIES, EMBEDS, ETC. IN ADDITION TO THE STRUCTURAL FRAMING MEMBERS INDICATED ON THE STRUCTURAL DRAWINGS. PROVIDE ADDITIONAL SUPPORT FRAMING AND/OR STEEL REQUIRED FOR THE ANCHORAGE AND SUPPORT OF EXTERIOR ENCLOSURE SYSTEMS AND COMPONENTS, INCLUDING STEEL NOT INDICATED ON THE STRUCTURAL DRAWINGS. PROVIDE ENGINEERING CALCULATIONS AND DETAILS FOR ALL PROPOSED MODIFICATIONS REQUIRED TO ANCHOR THE EXTERIOR ENCLOSURE SYSTEM(S).
10. ALL REQUIRED SEALANTS AND FILLERS ARE TO BE INSTALLED TO PROVIDE A COMPLETE WEATHER TIGHT SYSTEM WITH WEEPS AS REQUIRED TO DRAIN INTERNAL MOISTURE TO THE EXTERIOR. EXTERIOR SEALANTS ARE TO BE 20-YEAR WARRANTED OF APPROPRIATE MODULUS FOR ANTICIPATED MOVEMENT CONDITIONS.
11. PROVIDE POSITIVE DRAINAGE ON ALL SURFACES EXPOSED TO DIRECT OR INDIRECT WATER OR MOISTURE ACCUMULATION. SUCH SURFACES SHALL WEEP WATER OR MOISTURE TO THE EXTERIOR.

ARCHITECTURAL SYSTEMS AND FINISHES

1. COLORS INDICATED ON THE MATERIALS AND FINISH KEY ARE CUSTOM COLORS TO MATCH THE COLOR INDICATED. COLORS FROM MANUFACTURER'S STANDARD CHARTS WILL NOT BE ACCEPTED UNLESS THOSE COLORS MATCH THE COLORS INDICATED. CONTRACTOR MAY USE ANY ACCEPTABLE ALTERNATE PAINT MANUFACTURER THAT CAN MATCH THE SPECIFIED COLOR.
2. ALL EXTERIOR WALL STUD FRAMING SHALL BE STRUCTURAL COLD FORMED STUDS, DESIGNED AND ENGINEERED BY THE CONTRACTOR FOR THE DESIGN LOADS AND FOR ANCHORAGE OF ADJACENT BUILDING COMPONENTS. STUD GAUGES INDICATED ON THE DRAWINGS ARE MINIMUMS ONLY, AND DO NOT REPRESENT AN ENGINEERED DESIGN FOR THE DETAILED APPLICATION.
3. INTERIOR STUD WALL FRAMING DESIGN IS INDICATED ON THE PARTITION SCHEDULE. SPECIFIED GAUGES ARE MINIMUMS TO BE UTILIZED FOR TYPICAL APPLICATIONS AND CONDITIONS. CONTRACTOR SHALL PROVIDE ADDITIONAL BRACING AT SPECIFIC LOCATIONS WHERE THE SPECIFIED OR DETAILED STUD APPLICATION WILL NOT MEET THE MINIMUM DESIGN OR DEFLECTION CRITERIA.
4. NON-LOAD BEARING INTERIOR STUDS SUBJECT TO LOCALIZED STRUCTURAL LOADS FROM OTHER BUILDING SYSTEMS OR COMPONENTS, INCLUDING BUT NOT LIMITED TO, ANCHORAGE REQUIREMENTS FOR DOORS, WINDOWS, STOREFRONTS, CURTAINWALLS, CABINETS, BUILT-IN FURNITURE, ETC. SHALL BE DESIGNED AND ENGINEERED BY THE CONTRACTOR, IF SUCH DESIGN IS NOT SPECIFICALLY INDICATED IN THE DOCUMENTS.
5. MISCELLANEOUS STUD FRAMING FOR SOFFITS AND OTHER ARCHITECTURAL ELEMENTS ARE INDICATED FOR GENERAL DESIGN INTENT AND PROFILE ONLY. CONTRACTOR SHALL PROVIDE ADDITIONAL BRACING AND FRAMING AS NECESSARY TO MEET THE DESIGN AND DEFLECTION CRITERIA.
6. INTERIOR WALL, SOFFIT, AND CEILING FRAMING SHALL MEET A MINIMUM OF 5 PSF WIND LOAD AND L/240 DEFLECTION DESIGN CRITERIA. INTERIOR ELEVATOR OR MECHANICAL SHAFT FRAMING SHALL MEET A MINIMUM OF 10

302 FLOOR OR GROUND SURFACES

302.1 GENERAL. FLOOR AND GROUND SURFACES SHALL BE STABLE, FIRM, AND SLIP RESISTANT AND SHALL COMPLY WITH 302.
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.
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.
303.2 VERTICAL. CHANGES IN LEVEL OF 1/4 INCH (6.4 MM) HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL.
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.
303.4 RAMPS. CHANGES IN LEVEL GREATER THAN 1/2 INCH (13 MM) HIGH SHALL BE RAMPED, AND SHALL COMPLY WITH 405 OR 406.



FIG. 303.2 VERTICAL CHANGE IN LEVEL

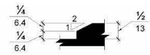


FIG. 303.3 BEVELED CHANGE IN LEVEL

304 TURNING SPACE

304.1 GENERAL. TURNING SPACE SHALL COMPLY WITH 304.
304.2 FLOOR OR GROUND SURFACES. FLOOR OR GROUND SURFACES OF A TURNING SPACE SHALL COMPLY WITH 302. CHANGES IN LEVEL ARE NOT PERMITTED.
304.3 SIZE. TURNING SPACE SHALL COMPLY WITH 304.3.1 OR 304.3.2.
304.3.1 CIRCULAR SPACE. THE TURNING SPACE SHALL BE A SPACE OF 60 INCHES (1525 MM) DIAMETER MINIMUM. THE SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH 306.
304.3.2 T-SHAPED SPACE. THE TURNING SPACE SHALL BE A T-SHAPED SPACE WITHIN A 60 INCH (1525 MM) SQUARE MINIMUM WITH ARMS AND BASE 36 INCHES (915 MM) WIDE MINIMUM. EACH ARM OF THE T SHALL BE CLEAR OF OBSTRUCTIONS 12 INCHES (305 MM) MINIMUM IN EACH DIRECTION AND THE BASE SHALL BE CLEAR OF OBSTRUCTIONS 24 INCHES (610 MM) MINIMUM. THE SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH 306 ONLY AT THE END OF EITHER THE BASE OR ONE ARM.

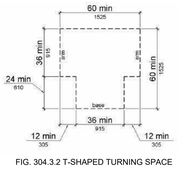


FIG. 304.3.2 T-SHAPED TURNING SPACE

304.4 DOOR SWING. DOORS SHALL BE PERMITTED TO SWING INTO TURNING SPACES.

305 CLEAR FLOOR OR GROUND SPACE

305.1 GENERAL. CLEAR FLOOR OR GROUND SPACE SHALL COMPLY WITH 305.
305.2 FLOOR OR GROUND SURFACES. FLOOR OR GROUND SURFACES OF A CLEAR FLOOR OR GROUND SPACE SHALL COMPLY WITH 302. CHANGES IN LEVEL ARE NOT PERMITTED.
305.3 SIZE. THE CLEAR FLOOR OR GROUND SPACE SHALL BE 30 INCHES (760 MM) MINIMUM BY 48 INCHES (1220 MM) MINIMUM

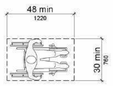


FIG. 305.3 CLEAR FLOOR OR GROUND SPACE

305.4 KNEE AND TOE CLEARANCE. UNLESS OTHERWISE SPECIFIED, CLEAR FLOOR OR GROUND SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH 306.
305.5 POSITION. UNLESS OTHERWISE SPECIFIED, CLEAR FLOOR OR GROUND SPACE SHALL BE POSITIONED FOR EITHER FORWARD OR PARALLEL APPROACH TO AN ELEMENT.

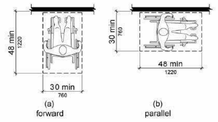


FIG. 305.5 POSITION OF CLEAR FLOOR OR GROUND SPACE

305.6 APPROACH. ONE FULL UNOBSTRUCTED SIDE OF THE CLEAR FLOOR OR GROUND SPACE SHALL ADJOIN AN ACCESSIBLE ROUTE OR ADJOIN ANOTHER CLEAR FLOOR OR GROUND SPACE.
305.7 MANEUVERING CLEARANCE. WHERE A CLEAR FLOOR OR GROUND SPACE IS LOCATED IN AN ALCOVE OR OTHERWISE CONFINED ON ALL OR PART OF THREE SIDES, ADDITIONAL MANEUVERING CLEARANCE SHALL BE PROVIDED IN ACCORDANCE WITH 305.7.1 AND 305.7.2.
305.7.1 FORWARD APPROACH. ALCOVES SHALL BE 36 INCHES (915 MM)WIDE MINIMUM WHERE THE DEPTH EXCEEDS 24 INCHES (610 MM).
305.7.2 PARALLEL APPROACH. ALCOVES SHALL BE 60 INCHES (1525 MM) WIDE MINIMUM WHERE THE DEPTH EXCEEDS 15 INCHES (380 MM).

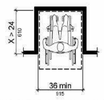


FIG. 305.7.1 MANEUVERING CLEARANCE IN AN ALCOVE, FORWARD APPROACH

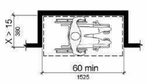


FIG. 305.7.1 MANEUVERING CLEARANCE IN AN ALCOVE, PARALLEL APPROACH

306 KNEE AND TOE CLEARANCE

306.1 GENERAL. WHERE SPACE BENEATH AN ELEMENT IS INCLUDED AS PART OF CLEAR FLOOR OR GROUND SPACE OR TURNING SPACE, THE SPACE SHALL COMPLY WITH 306. ADDITIONAL SPACE SHALL NOT BE PROHIBITED BENEATH AN ELEMENT BUT SHALL NOT BE CONSIDERED AS PART OF THE CLEAR FLOOR OR GROUND SPACE OR TURNING SPACE.
306.2 TOE CLEARANCE.
306.2.1 GENERAL. SPACE UNDER AN ELEMENT BETWEEN THE FINISH FLOOR OR GROUND AND 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL BE CONSIDERED TOE CLEARANCE AND SHALL COMPLY WITH 306.2.
306.2.2 MAXIMUM DEPTH. TOE CLEARANCE SHALL EXTEND 25 INCHES (635 MM) MAXIMUM UNDER AN ELEMENT.
306.2.3 MINIMUM REQUIRED DEPTH. WHERE TOE CLEARANCE IS REQUIRED AT AN ELEMENT AS PART OF A CLEAR FLOOR SPACE, THE TOE CLEARANCE SHALL EXTEND 17 INCHES (430 MM) MINIMUM UNDER THE ELEMENT.
306.2.4 ADDITIONAL CLEARANCE. SPACE EXTENDING GREATER THAN 6 INCHES (150 MM) BEYOND THE AVAILABLE KNEE CLEARANCE AT 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL NOT BE CONSIDERED TOE CLEARANCE.
306.2.5 WIDTH. TOE CLEARANCE SHALL BE 30 INCHES (760 MM) WIDE MINIMUM.

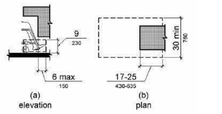


FIG. 306.2 TOE CLEARANCE

306.3 KNEE CLEARANCE.
306.3.1 GENERAL. SPACE UNDER AN ELEMENT BETWEEN 9 INCHES (230 MM) AND 27 INCHES (685 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL BE CONSIDERED KNEE CLEARANCE AND SHALL COMPLY WITH 306.3.
306.3.2 MAXIMUM DEPTH. KNEE CLEARANCE SHALL EXTEND 25 INCHES (635 MM) MAXIMUM UNDER AN ELEMENT AT 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND.
306.3.3 MINIMUM REQUIRED DEPTH. WHERE KNEE CLEARANCE IS REQUIRED UNDER AN ELEMENT AS PART OF A CLEAR FLOOR SPACE, THE KNEE CLEARANCE SHALL BE 11 INCHES (280 MM) DEEP MINIMUM AT 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND, AND 8 INCHES (205 MM) DEEP MINIMUM AT 27 INCHES (685 MM) ABOVE THE FINISH FLOOR OR GROUND.
306.3.4 CLEARANCE REDUCTION. BETWEEN 9 INCHES (230 MM) AND 27 INCHES (685 MM) ABOVE THE FINISH FLOOR OR GROUND, THE KNEE CLEARANCE SHALL BE PERMITTED TO REDUCE AT A RATE OF 1 INCH (25 MM) IN DEPTH FOR EACH 6 INCHES (150 MM) IN HEIGHT.
306.3.5 WIDTH. KNEE CLEARANCE SHALL BE 30 INCHES (760 MM) WIDE MINIMUM.

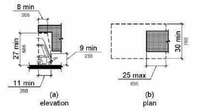


FIGURE 306.3 KNEE CLEARANCE

307 PROTRUDING OBJECTS

307.1 GENERAL. PROTRUDING OBJECTS SHALL COMPLY WITH 307.
307.2 PROTRUSION LIMITS. OBJECTS WITH LEADING EDGES MORE THAN 27 INCHES (685 MM) AND NOT MORE THAN 80 INCHES (2030 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL PROTRUDE 4 INCHES (100 MM) MAXIMUM HORIZONTALLY INTO THE CIRCULATION PATH

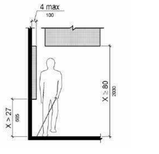


FIG. 307.2 LIMITS OF PROTRUDING OBJECTS

307.3 POST-MOUNTED OBJECTS. FREE-STANDING OBJECTS MOUNTED ON POSTS OR PYLONS SHALL OVERHANG CIRCULATION PATHS 12 INCHES (305 MM) MAXIMUM WHEN LOCATED 27 INCHES (685 MM) MINIMUM AND 80 INCHES (2030 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. WHERE A SIGN OR OTHER OBSTRUCTION IS MOUNTED BETWEEN POSTS OR PYLONS AND THE CLEAR DISTANCE BETWEEN THE POSTS OR PYLONS IS GREATER THAN 12 INCHES (305 MM), THE LOWEST EDGE OF SUCH SIGN OR OBSTRUCTION SHALL BE 27 INCHES (685 MM) MAXIMUM OR 80 INCHES (2030 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

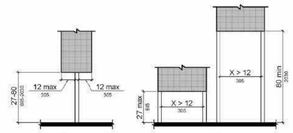


FIG. 307.3 POST-MOUNTED PROTRUDING OBJECTS

307.4 VERTICAL CLEARANCE. VERTICAL CLEARANCE SHALL BE 80 INCHES (2030 MM) HIGH MINIMUM. GUARDRAILS OR OTHER BARRIERS SHALL BE PROVIDED WHERE THE VERTICAL CLEARANCE IS LESS THAN 80 INCHES (2030 MM) HIGH. THE LEADING EDGE OF SUCH GUARDRAIL OR BARRIER SHALL BE LOCATED 27 INCHES (685 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.
307.5 REQUIRED CLEAR WIDTH. PROTRUDING OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH REQUIRED FOR ACCESSIBLE ROUTES.

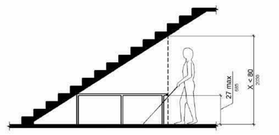


FIG. 307.4 VERTICAL CLEARANCE

308 REACH RANGES

308.1 GENERAL. REACH RANGES SHALL COMPLY WITH 308
308.2 FORWARD REACH.
308.2.1 UNOBSTRUCTED. WHERE A FORWARD REACH IS UNOBSTRUCTED, THE HIGH FORWARD REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM AND THE LOW FORWARD REACH SHALL BE 15 INCHES (380 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

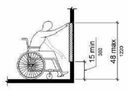


FIG. 308.2.1 UNOBSTRUCTED FORWARD REACH

308.1 GENERAL. REACH RANGES SHALL COMPLY WITH 308
308.2 FORWARD REACH.
308.2.1 UNOBSTRUCTED. WHERE A FORWARD REACH IS UNOBSTRUCTED, THE HIGH FORWARD REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM AND THE LOW FORWARD REACH SHALL BE 15 INCHES (380 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.
308.2.2 OBSTRUCTED HIGH REACH. WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR FLOOR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION. THE HIGH FORWARD REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM WHERE THE REACH DEPTH IS 20 INCHES (510 MM) MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 20 INCHES (510 MM), THE HIGH FORWARD REACH SHALL BE 44 INCHES (1120 MM) MAXIMUM AND THE REACH DEPTH SHALL BE 25 INCHES (635 MM) MAXIMUM.

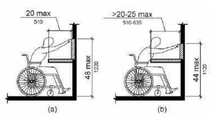


FIG. 308.2.2 OBSTRUCTED HIGH FORWARD REACH

308.3 SIDE REACH.
308.3.1 UNOBSTRUCTED. WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE SIDE REACH IS UNOBSTRUCTED, THE HIGH SIDE REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM AND THE LOW SIDE REACH SHALL BE 15 INCHES (380 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND. 308.3.1 UNOBSTRUCTED. WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE SIDE REACH IS UNOBSTRUCTED, THE HIGH SIDE REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM AND THE LOW SIDE REACH SHALL BE 15 INCHES (380 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

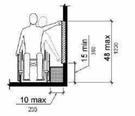


FIG. 308.3.1 UNOBSTRUCTED SIDE REACH

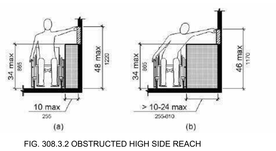


FIG. 308.3.2 OBSTRUCTED HIGH SIDE REACH

308.3.2 OBSTRUCTED HIGH REACH. WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES (865 MM) MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES (610 MM) MAXIMUM. THE HIGH SIDE REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM FOR A REACH DEPTH OF 10 INCHES (255 MM)308.3.2 OBSTRUCTED HIGH REACH. WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES (865 MM) MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES (610 MM) MAXIMUM. THE HIGH SIDE REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM FOR A REACH DEPTH OF 10 INCHES (255 MM) MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 10 INCHES (255 MM), THE HIGH SIDE REACH SHALL BE 46 INCHES (1170 MM) MAXIMUM FOR A REACH DEPTH OF 24 INCHES (610 MM) MAXIMUM.

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 EXCLUSIVE OF THE FLARED SIDES, ELEVATORS, AND PLATFORM LIFTS. ALL COMPONENTS OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF CHAPTER 4.

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.
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.
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.
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.

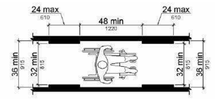
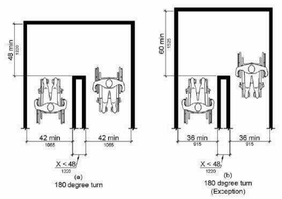


FIG. 403.5.1 CLEAR WIDTH OF AN ACCESSIBLE ROUTE



404 DOORS, DOORWAYS, AND GATES

404.1 GENERAL. DOORS, DOORWAYS, AND GATES THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH 404.
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).
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.
404.2.4.1 SWINGING DOORS AND GATES. SWINGING DOORS AND GATES SHALL HAVE MANEUVERING CLEARANCES COMPLYING WITH TABLE 404.2.4.1.
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.
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.
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.
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.
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.
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.
404.2.10 POWER-ASSISTED DOORS AND GATES. 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.
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 POWER-ASSISTED 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.
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.
404.3.7 REVOLVING DOORS, REVOLVING GATES, AND TURNSTILES. REVOLVING DOORS, REVOLVING GATES, AND TURNSTILES SHALL NOT BE PART OF AN ACCESSIBLE ROUTE.

Table 404.2.4.1 Maneuvering Clearances at Manual Swinging Doors and Gates

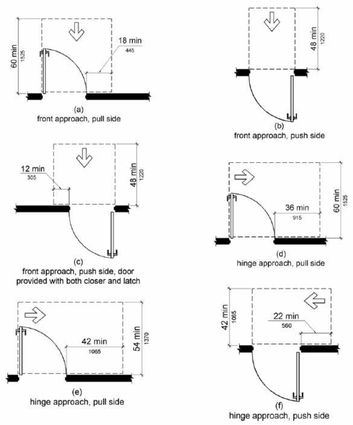
Type of Use		Minimum Maneuvering Clearance	
Approach Direction	Door or Gate Side	Perpendicular to Doorway	Parallel to Doorway (beyond latch side unless noted)
From front	Pull	60 inches (1525 mm)	18 inches (455 mm)
From front	Push	48 inches (1220 mm)	0 inches (0 mm)[1]
From hinge side	Pull	60 inches (1525 mm)	36 inches (915 mm)
From hinge side	Pull	54 inches (1370 mm)	42 inches (1065 mm)
From hinge side	Push	42 inches (1065 mm)[2]	22 inches (560 mm)[3]
From latch side	Pull	48 inches (1220 mm)[4]	24 inches (610 mm)
From latch side	Push	42 inches (1065 mm)[4]	24 inches (610 mm)

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.

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 stop/latch side unless noted)
From Front	48 inches (1220 mm)	0 inches (0 mm)
From side[1]	42 inches (1065 mm)	0 inches (0 mm)
From pocket/hinge side	42 inches (1065 mm)	22 inches (560 mm)[2]
From stop/latch side	42 inches (1065 mm)	24 inches (610 mm)

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



405 RAMPS

405.1 GENERAL. RAMPS ON ACCESSIBLE ROUTES SHALL COMPLY WITH 405
405.2 SLOPE. RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 1:12.
405.3 CROSS SLOPE. CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48
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.
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 COMP

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.
407.4.6.1 LOCATION. CONTROLS SHALL BE LOCATED WITHIN ONE OF THE REACH RANGES SPECIFIED IN 308.
407.4.6.2 BUTTONS. CAR CONTROL BUTTONS WITH FLOOR DESIGNATIONS SHALL COMPLY WITH 407.4.6.2 AND SHALL BE RAISED OR FLUSH.
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.
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.
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 FIGURE 407.4.7.1.3.
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.
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.
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.

502 PARKING SPACES

502.1 GENERAL. CAR AND VAN PARKING SPACES SHALL COMPLY WITH 502. WHERE PARKING SPACES ARE MARKED WITH LINES, WIDTH MEASUREMENTS OF PARKING SPACES AND ACCESS AISLES SHALL BE MADE FROM THE CENTERLINE OF THE MARKINGS.
502.2 VEHICLE SPACES. CAR PARKING SPACES SHALL BE 96 INCHES (2440 MM) WIDE MINIMUM AND VAN PARKING SPACES SHALL BE 132 INCHES (3350 MM) WIDE MINIMUM, SHALL BE MARKED TO DEFINE THE WIDTH, AND SHALL HAVE AN ADJACENT ACCESS AISLE COMPLYING WITH 502.3. 502.2 VEHICLE SPACES. CAR PARKING SPACES SHALL BE 96 INCHES (2440 MM) WIDE MINIMUM AND VAN PARKING SPACES SHALL BE 132 INCHES (3350 MM) WIDE MINIMUM, SHALL BE MARKED TO DEFINE THE WIDTH, AND SHALL HAVE AN ADJACENT ACCESS AISLE COMPLYING WITH 502.3.
502.3 ACCESS AISLE. ACCESS AISLES SERVING PARKING SPACES SHALL COMPLY WITH 502.3. ACCESS AISLES
SHALL ADJOIN AN ACCESSIBLE ROUTE. TWO PARKING SPACES SHALL BE PERMITTED TO SHARE A COMMON ACCESS AISLE.
502.3.1 WIDTH. ACCESS AISLES SERVING CAR AND VAN PARKING SPACES SHALL BE 60 INCHES (1525 MM) WIDE MINIMUM.
502.3.2 LENGTH. ACCESS AISLES SHALL EXTEND THE FULL LENGTH OF THE PARKING SPACES THEY SERVE.
502.3.3 MARKING. ACCESS AISLES SHALL BE MARKED SO AS TO DISCOURAGE PARKING IN THEM.
502.3.4 LOCATION. ACCESS AISLES SHALL NOT OVERLAP THE VEHICULAR WAY. ACCESS AISLES SHALL BE PERMITTED TO BE PLACED ON EITHER SIDE OF THE PARKING SPACE EXCEPT FOR ANGLED VAN PARKING SPACES WHICH SHALL HAVE ACCESS AISLES LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACES.
502.4 FLOOR OR GROUND SURFACES. PARKING SPACES AND ACCESS AISLES SERVING THEM SHALL COMPLY WITH 302. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE PARKING SPACES THEY SERVE. CHANGES IN LEVEL ARE NOT PERMITTED.
502.5 VERTICAL CLEARANCE. PARKING SPACES FOR VANS AND ACCESS AISLES AND VEHICULAR ROUTES SERVING THEM SHALL PROVIDE A VERTICAL CLEARANCE OF 98 INCHES (2490 MM) MINIMUM.
502.6 IDENTIFICATION. PARKING SPACE IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH 703.7.2.1. SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE." SIGNS SHALL BE 60 INCHES (1525 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE MEASURED TO THE BOTTOM OF THE SIGN.
502.7 RELATIONSHIP TO ACCESSIBLE ROUTES. PARKING SPACES AND ACCESS AISLES SHALL BE DESIGNED SO THAT CARS AND VANS, WHEN PARKED, CANNOT OBSTRUCT THE REQUIRED CLEAR WIDTH OF ADJACENT ACCESSIBLE ROUTES.

503 PASSENGER LOADING ZONES

503.1 GENERAL. PASSENGER LOADING ZONES SHALL COMPLY WITH 503.
503.2 VEHICLE PULL-UP SPACE. PASSENGER LOADING ZONES SHALL PROVIDE A VEHICULAR PULL-UP SPACE 96 INCHES (2440 MM) WIDE MINIMUM AND 20 FEET (6100 MM) LONG MINIMUM.
503.3 ACCESS AISLE. PASSENGER LOADING ZONES SHALL PROVIDE ACCESS AISLES COMPLYING WITH 503 ADJACENT TO THE VEHICLE PULL-UP SPACE. ACCESS AISLES SHALL ADJOIN AN ACCESSIBLE ROUTE AND SHALL NOT OVERLAP THE VEHICULAR WAY.
503.3.1 WIDTH. ACCESS AISLES SERVING VEHICLE PULL-UP SPACES SHALL BE 60 INCHES (1525 MM) WIDE MINIMUM.
503.3.2 LENGTH. ACCESS AISLES SHALL EXTEND THE FULL LENGTH OF THE VEHICLE PULL-UP SPACES THEY SERVE.
503.3.3 MARKING. ACCESS AISLES SHALL BE MARKED SO AS TO DISCOURAGE PARKING IN THEM.
503.4 FLOOR AND GROUND SURFACES. VEHICLE PULL-UP SPACES AND ACCESS AISLES SERVING THEM SHALL COMPLY WITH 302. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE VEHICLE PULL-UP SPACE THEY SERVE. CHANGES IN LEVEL ARE NOT PERMITTED.
503.5 VERTICAL CLEARANCE. VEHICLE PULL-UP SPACES, ACCESS AISLES SERVING THEM, AND A VEHICULAR ROUTE FROM AN ENTRANCE TO THE PASSENGER LOADING ZONE, AND FROM THE PASSENGER LOADING ZONE TO A VEHICULAR EXIT SHALL PROVIDE A VERTICAL CLEARANCE OF 114 INCHES (2895 MM) MINIMUM.

504 STARIWAYS

504.1 GENERAL. STAIRS SHALL COMPLY WITH 504.
504.2 TREADS AND RISERS. ALL STEPS ON A FLIGHT OF STAIRS SHALL HAVE UNIFORM RISER HEIGHTS AND UNIFORM TREAD DEPTHS. RISERS SHALL BE 4 INCHES (100 MM) HIGH MINIMUM AND 7 INCHES (180 MM) HIGH MAXIMUM. TREADS SHALL BE 11 INCHES (280 MM) DEEP MINIMUM.
504.3 OPEN RISERS. OPEN RISERS ARE NOT PERMITTED.
504.4 TREAD SURFACE. STAIR TREADS SHALL COMPLY WITH 302. CHANGES IN LEVEL ARE NOT PERMITTED.
504.5 NOSINGS. THE RADIUS OF CURVATURE AT THE LEADING EDGE OF THE TREAD SHALL BE 1/2 INCH (13 MM) MAXIMUM. NOSINGS THAT PROJECT BEYOND RISERS SHALL HAVE THE UNDERSIDE OF THE LEADING EDGE CURVED OR BEVELED. RISERS SHALL BE PERMITTED TO SLOPE UNDER THE TREAD AT AN ANGLE OF 30 DEGREES MAXIMUM FROM VERTICAL. THE PERMITTED PROJECTION OF THE NOSING SHALL EXTEND 1 1/2 INCHES (38 MM) MAXIMUM OVER THE TREAD BELOW.
504.6 HANDRAILS. STAIRS SHALL HAVE HANDRAILS COMPLYING WITH 505.
504.7 WET CONDITIONS. STAIR TREADS AND LANDINGS SUBJECT TO WET CONDITIONS SHALL BE DESIGNED TO PREVENT THE ACCUMULATION OF WATER.

505 HANDRAILS

505.1 GENERAL. HANDRAILS PROVIDED ALONG WALKING SURFACES COMPLYING WITH 403, REQUIRED AT RAMPS COMPLYING WITH 405, AND REQUIRED AT STAIRS COMPLYING WITH 504 SHALL COMPLY WITH 505.
505.2 WHERE REQUIRED. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS AND RAMPS.
505.3 CONTINUITY. HANDRAILS SHALL BE CONTINUOUS WITHIN THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN. INSIDE HANDRAILS ON SWITCHBACK OR DOGLEG STAIRS AND RAMPS SHALL BE CONTINUOUS BETWEEN FLIGHTS OR RUNS.
505.4 HEIGHT. TOP OF GRIPPING SURFACES OF HANDRAILS SHALL BE 34 INCHES (865 MM) MINIMUM AND 38 INCHES (965 MM) MAXIMUM VERTICALLY ABOVE WALKING SURFACES, STAIR NOSINGS, AND RAMP SURFACES. HANDRAILS SHALL BE AT A CONSISTENT HEIGHT ABOVE WALKING SURFACES, STAIR NOSINGS, AND RAMP SURFACES.
505.5 CLEARANCE. CLEARANCE BETWEEN HANDRAIL GRIPPING SURFACES AND ADJACENT SURFACES SHALL BE 1 1/2 INCHES (38 MM) MINIMUM.
505.6 GRIPPING SURFACE. HANDRAIL GRIPPING SURFACES SHALL BE CONTINUOUS ALONG THEIR LENGTH AND SHALL NOT BE OBSTRUCTED ALONG THEIR TOPS OR SIDES. THE BOTTOMS OF HANDRAIL GRIPPING SURFACES SHALL NOT BE OBSTRUCTED FOR MORE THAN 20 PERCENT OF THEIR LENGTH. WHERE PROVIDED, HORIZONTAL PROJECTIONS SHALL OCCUR 1 1/2 INCHES (38 MM) MINIMUM BELOW THE BOTTOM OF THE HANDRAIL GRIPPING SURFACE.
505.7 CROSS SECTION. HANDRAIL GRIPPING SURFACES SHALL HAVE A CROSS SECTION COMPLYING WITH 505.7.1 OR 505.7.2.
505.7.1 CIRCULAR CROSS SECTION. HANDRAIL GRIPPING SURFACES WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF 1 1/4 INCHES (32 MM) MINIMUM AND 2 INCHES (51 MM) MAXIMUM.
505.7.2 NON-CIRCULAR CROSS SECTIONS. HANDRAIL GRIPPING SURFACES WITH A NON-CIRCULAR CROSS SECTION SHALL HAVE A PERIMETER DIMENSION OF 4 INCHES (100 MM) MINIMUM AND 6 1/4 INCHES (160 MM) MAXIMUM, AND A CROSS-SECTION DIMENSION OF 2 1/4 INCHES (57 MM) MAXIMUM.505.7 CROSS SECTION. HANDRAIL GRIPPING SURFACES SHALL HAVE A CROSS SECTION COMPLYING WITH 505.7.1 OR 505.7.2.
505.7.1 CIRCULAR CROSS SECTION. HANDRAIL GRIPPING SURFACES WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF 1 1/4 INCHES (32 MM) MINIMUM AND 2 INCHES (51 MM) MAXIMUM.
505.7.2 NON-CIRCULAR CROSS SECTIONS. HANDRAIL GRIPPING SURFACES WITH A NON-CIRCULAR CROSS SECTION SHALL HAVE A PERIMETER DIMENSION OF 4 INCHES (100 MM) MINIMUM AND 6 1/4 INCHES (160 MM) MAXIMUM, AND A CROSS-SECTION DIMENSION OF 2 1/4 INCHES (57 MM) MAXIMUM.
505.8 SURFACES. HANDRAIL GRIPPING SURFACES AND ANY SURFACES ADJACENT TO THEM SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS AND SHALL HAVE ROUNDED EDGES.
505.9 FITTINGS. HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
505.10 HANDRAIL EXTENSIONS. HANDRAIL GRIPPING SURFACES SHALL EXTEND BEYOND AND IN THE SAME DIRECTION OF STAIR FLIGHTS AND RAMP RUNS IN ACCORDANCE WITH 505.10.
505.10.1 TOP AND BOTTOM EXTENSION AT RAMPS. RAMP HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305 MM) MINIMUM BEYOND THE TOP AND BOTTOM OF RAMP RUNS. EXTENSIONS SHALL RETURN TO A WALL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT RAMP RUN.
505.10.2 TOP EXTENSION AT STAIRS. AT THE TOP OF A STAIR FLIGHT, HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305 MM) MINIMUM BEGINNING IMMEDIATELY ABOVE THE FIRST RISER NOSING. EXTENSIONS SHALL RETURN TO A WALL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.
505.10.3 BOTTOM EXTENSION AT STAIRS. AT THE BOTTOM OF A STAIR FLIGHT, HANDRAILS SHALL EXTEND AT THE SLOPE OF THE STAIR FLIGHT FOR A HORIZONTAL DISTANCE AT LEAST EQUAL TO ONE TREAD DEPTH BEYOND THE LAST RISER NOSING. EXTENSION SHALL RETURN TO A WALL, GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.

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.
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.
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 (76 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.
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.

603 TOILET & 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.
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.
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.
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.
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.

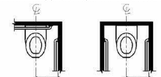


FIG. 604.2 WATER CLOSET LOCATION



FIG. 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 CLEARANCE REQUIRED AT OTHER FIXTURES, AND THE TURNING SPACE. NO OTHER FIXTURES OR OBSTRUCTIONS SHALL BE LOCATED WITHIN THE REQUIRED WATER CLOSET CLEARANCE.
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.
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.
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.
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.

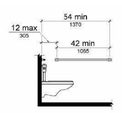


FIG. 604.5.1 SIDE WALL GRAB BAR AT WATER CLOSETS

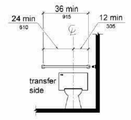


FIG. 604.5.2 REAR WALL GRAB BAR AT WATER CLOSETS

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.

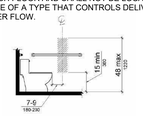


FIG. 604.7 DISPENSER OUTLET LOCATION

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.
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.

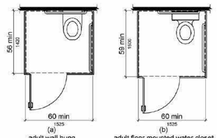


FIG. 604.8.1.1 SIZE OF WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT

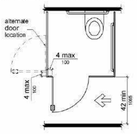


FIG. 604.8.1.2 WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT DOORS

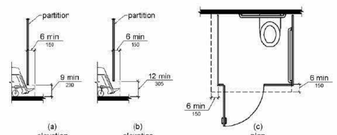


FIG. 604.8.1.4 WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT TOE CLEARANCE

Advisory Specifications for Water Closets Serving Children Ages 3 through 12

	Ages 3 and 4	Ages 5 through 8	Ages 9 through 12
Water Closet Centerline	12 inches (305 mm)	12 to 15 inches (305 to 380 mm)	15 to 18 inches (380 to 455 mm)
Toilet Seat Height	11 to 12 inches (280 to 305 mm)	12 to 15 inches (305 to 380 mm)	15 to 17 inches (380 to 430 mm)
Grab Bar Height	18 to 20 inches (455 to 510 mm)	20 to 25 inches (510 to 635 mm)	25 to 27 inches (635 to 685 mm)
Dispenser Height	14 inches (355 mm)	14 to 17 inches (355 to 430 mm)	17 to 19 inches (430 to 485 mm)

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 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.
604.8.2.3 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) MINI

APPLICABLE BUILDING CODES

BUILDING CODE 2018 IBC- ONLY CHAPTERS 2-10, WITH HARRIS COUNTY AMENDMENTS
FIRE CODE 2018 IFC, WITH HARRIS COUNTY AMENDMENTS
MECHANICAL CODE STATE OF TEXAS ADOPTED IMC - NOT REVIEWED/INSPECTED BY HARRIS COUNTY
ELECTRICAL CODE STATE OF TEXAS ADOPTED 2014 NFPA 70 (NEC) - NOT REVIEWED BY HARRIS COUNTY
PLUMBING CODE STATE OF TEXAS ADOPTED IPC - NOT REVIEWED/INSPECTED BY HARRIS COUNTY
FIRE PROTECTION STANDARDS:
2013 NFPA 13 FIRE SPRINKLERS - COMMERCIAL BUILDINGS
2013 NFPA 72 FIRE ALARM
2013 NFPA 10 PORTABLE FIRE EXTINGUISHERS
2011 NFPA 12 CARBON DIOXIDE EXTINGUISHING SYSTEMS
2009 NFPA 12A HALON 1301 EXTINGUISHING SYSTEMS
2013 NFPA 14 INSTALLATION OF STANDPIPE AND HOSE SYSTEMS
2012 NFPA 15 WATER SPRAY FIXED SYSTEMS
2011 NFPA 16 INSTALLATION OF FOAM-WATER SPRINKLER AND FOAM -WATER SPRAY SYSTEMS
2013 NFPA 17 DRY CHEMICAL EXTINGUISHING SYSTEMS
2013 NFPA 17A WET CHEMICAL EXTINGUISHING SYSTEMS
2013 NFPA 20 INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
2013 NFPA 22 WATER TANKS FOR PRIVATE FIRE PROTECTION
2014 NFPA 25 INSPECTION/TESTING OF WATER BASED FIRE PROTECTION SYSTEMS
2012 NFPA 30 FLAMMABLE & COMBUSTIBLE LIQUIDS
2015 NFPA 92 SMOKE CONTROL SYSTEMS
2016 NFPA 110 EMERGENCY AND STANDBY POWER SYSTEMS
2012 NFPA 2001 CLEAN AGENT FIRE EXTINGUISHING SYSTEMS

STATE OF TEXAS ACCESSIBILITY STANDARDS

BUILDING CODE SUMMARY

OCCUPANCY CLASSIFICATION

302.1 OCCUPANCY CLASSIFICATION — ADMINISTRATIVE OFFICES: BUSINESS GROUP B
CLASSROOMS: BUSINESS GROUP B, EDUCATION
OCCUPANCY FOR STUDENTS ABOVE 12TH GRADE

OCCUPANCY CLASSIFICATION GROUP B

308.1 BUILDINGS SHALL BE CLASSIFIED AS OCCUPANCY CONDITION 1-5.

ALLOWABLE HEIGHT AND BUILDING AREA -

CONSTRUCTION TYPE: TYPE II-B, FULLY SPRINKLERED

TABLE 504.3: ALLOWABLE HEIGHT 75'-0"
TABLE 504.4: ALLOWABLE NUMBER OF STORIES 4-STORY

TABLE 506.2: ALLOWABLE AREA 92,000 SQFT
HEIGHT MODIFICATIONS [NONE REQUIRED]

OCCUPANCY SEPARATIONS

NONE REQUIRED; BUILDING IS DESIGNED AS A NON-SEPARATED MIXED USE OCCUPANCY

ACCESSORY OCCUPANCIES

508.3.1 SUBSIDIARY OCCUPANCIES NOT MORE THAN 10% OF THE FLOOR AREA OF THE STORY IN WHICH THEY ARE LOCATED ARE NOT REQUIRED TO BE SEAPARATED.

508.3.2.1 NONSEPARATED OCCUPANCIES SHALL BE INDIVIDUALLY CLASSIFIED IN ACCORDANCE WITH SECTION 302.1. CODE REQUIREMENTS SHALL APPLY TO EACH PORTION OF THE BUILDING BASED ON THE OCCUPANCY CLASSIFICATION OF THAT SPACE EXCEPT THAT THE MOST RESTRICTIVE APPLICABLE PROVISIONS OF SECTION 403 AND CHAPTER 9 SHALL APPLY TO THE ENTIRE BUILDING OR PORTION THEREOF.

CONSTRUCTION REQUIREMENTS

CONSTRUCTION TYPE: TYPE II-B, FULLY SPRINKLERED

TABLE 601 FIRE RESISTIVE REQUIREMENTS FOR BUILDING ELEMENTS

STRUCTURAL FRAME 0-HOUR
BEARING WALLS 0-HOUR
NONBEARING WALLS 0-HOUR
FLOOR CONSTRUCTION 0-HOUR
ROOF CONSTRUCTION 0-HOUR

TABLE 602 FIRE RESISTIVE REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE - NOT APPLICABLE DUE TO DISTANCE OF BUILDING TO PROPERTY LINE.

THE FOLLOWING SYMBOLS INDICATE NUMBERS OF GIVEN OCCUPANTS IN A GIVEN ROOM OR AREA:

DOOR XX / XX / XX — OCCUPANT LOAD / REQUIRED EXIT WIDTH / PROVIDED EXIT WIDTH

ROOM NAME 101 B XXXX SF — ROOM NAME / OCCUPANCY TYPE / ROOM AREA / ROOM NUMBER

TRAVEL PATH

XX — TOTAL TRAVEL DISTANCE TO EXIT FROM START OF EGRESS

X — CEILING MOUNTED EXIT SIGN

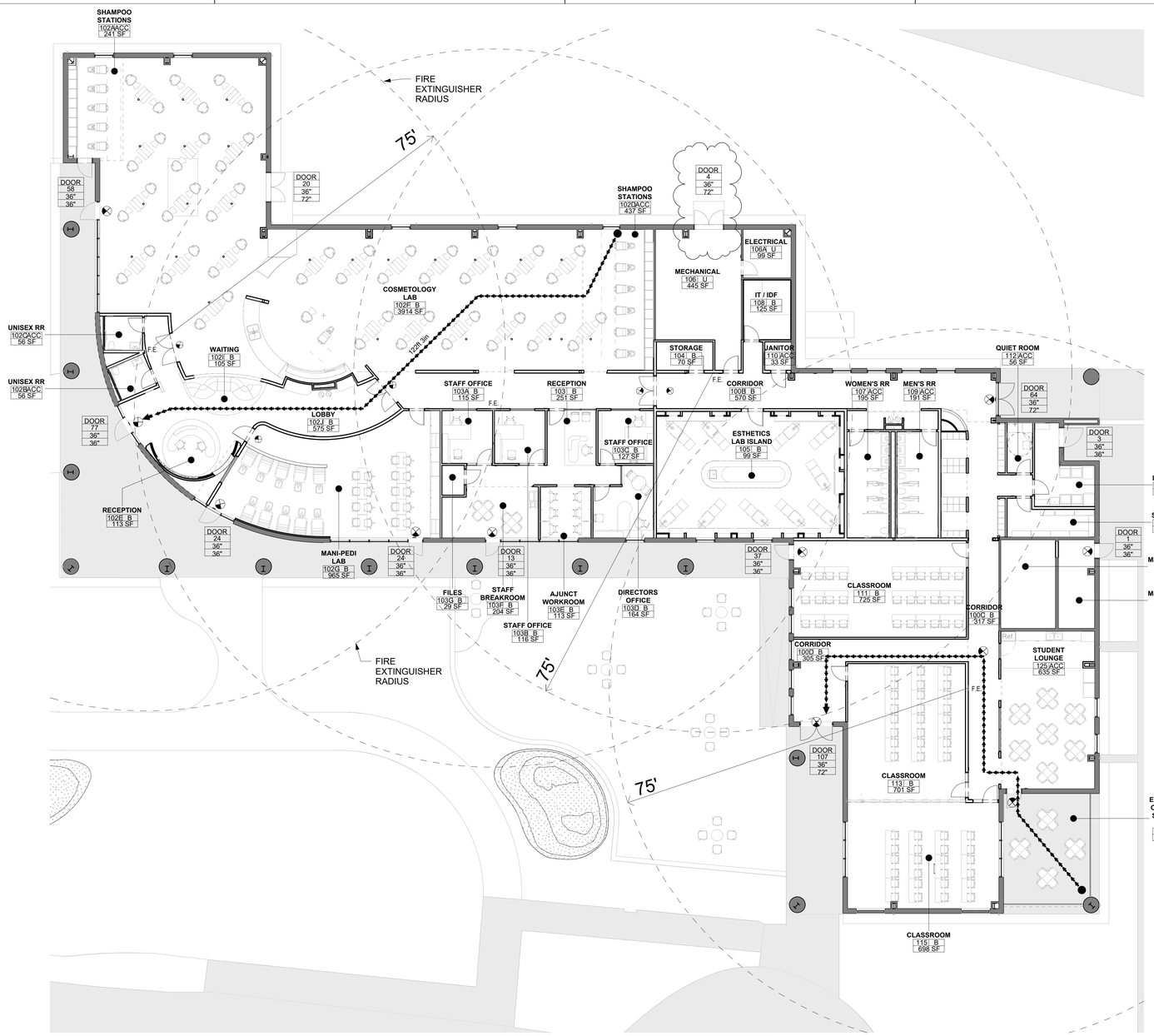
X — WALL MOUNTED EXIT SIGN

F.E. — FIRE EXTINGUISHER

FIRE RATING GRAPHIC SYMBOL

1-HOUR RATED PARTITION

2-HOUR RATED PARTITION



1 LEVEL 1 LIFE/SAFETY
SCALE: 3/32" = 1'-0"

INTERIOR FINISHES

TABLE 803.13 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	EXIT ENCLOSURES	CORRIDORS	ROOMS
B	B	C	C
A-2	B	B	C

MEANS OF EGRESS

TABLE 1004.1 DESIGN OCCUPANT LOAD

USE	OCCUPANT LOAD
BUSINESS	400
TOTAL OCCUPANT LOAD	**415**

TABLE 1005.1 EGRESS WIDTH PER OCCUPANT SERVED

STAIRWAYS 0.2 / OCCUPANT
OTHER COMPONENTS 0.15 / OCCUPANT

Required = .15 [398] = 64" Total Width Required

EXIT ACCESS

1013.2 EGRESS FROM A ROOM OR SPACE SHALL NOT PASS THROUGH ADJOINING OR INTERVENING ROOMS OR AREAS, EXCEPT WHERE SUCH ADJOINING ROOMS OR AREA ARE ACCESSORY TO THE AREA SERVED, ARE NOT HIGH HAZARD OCCUPANCY, AND PROVIDE A CLEAR PATH OF EGRESS TRAVEL TO AN EXIT.

1015.1 TWO EXITS OR EXIT ACCESS DOORWAYS ARE REQUIRED FROM ANY SPACE WHERE THE OCCUPANT LOAD EXCEEDS COMMON PATH OF TRAVEL VALUES IN 1014.3, AND THE OCCUPANT LOAD VALUES OF TABLE 1015.1.

TABLE 1016.1 CORRIDOR FIRE-RESISTANCE RATING

A, B OCCUPANCIES WITH SPRINKLER SYSTEM 0-HOUR

1016.3 EXCEPTION 3: MAXIMUM LENGTH OF DEAD END CORRIDORS IS 50'-0".

1018.1 MINIMUM EXITS REQUIRED, 1-500 OCCUPANTS 2

1007.1 MINIMUM ACCESSIBLE ENTRANCES/EXITS REQUIRED 2

ELECTRONIC LOCKS AND ACCESS-CONTROLLED EGRESS

1008.1.3.4.1 DEFINITIONS

FAIL SAFE SHALL MEAN THAT THE LOSS OF POWER TO THE PART OF THE SYSTEM THAT LOCKS THE DOOR SHALL AUTOMATICALLY UNLOCK THE DOOR

FAIL SECURE SHALL MEAN THAT THE LOSS OF POWER TO THE LOCKING SYSTEM WILL ALLOW THE DOORS TO REMAIN LOCKED

1008.1.3.4.2 ELECTRONIC LOCKS THAT ARE ELECTRONICALLY LOCKED FROM THE INGRESS SIDE AND CAN BE MECHANICALLY UNLOCKED FROM THE EGRESS SIDE, CAN BE FAIL SECURE FROM THE INGRESS SIDE.

ELECTRONIC LOCKS THAT UNLOCK ELECTRONICALLY FROM THE EGRESS SIDE SHALL BE FAIL SAFE AND MUST BE UNLOCKED BY A A LISTED DIRECT POWER-INTERRUPTING DEVICE WITHOUT TIME-DELAY.

PLUMBING SYSTEMS

TABLE 2902.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

USE	TOILETS	LAVATORIES	SHOWERS	DRINKING FOUNTAINS	SERVICE SINKS
B (197M/197F)	5M/5F	4M/4F	0	4	1
TOTAL	**10**	**8**	**0**	**4**	**1**

PROVIDED PLUMBING FIXTURES

USE	TOILETS	LAVATORIES	SHOWERS	DRINKING FOUNTAINS	SERVICE SINKS
B (197M/197F)	4M + 4F + 2U	3M + 3F + 2U	0	4	1
TOTAL	**10**	**8**	**0**	**4**	**1**

OCCUPANCY LOAD CALCULATOR

NUMBER	NAME	OCCUPANCY CLASSIFICATION	AREA	O.L.F	DESIGN OCCUPANT LOAD	NOTES / ADDL INFO
100E	LOCKER NOOKS	ACC	137 SF	30	5	
102A	SHAMPOO STATIONS	ACC	241 SF	0	0	Accessory
102B	UNISEX RR	ACC	56 SF	0	0	Accessory
102C	UNISEX RR	ACC	56 SF	0	0	Accessory
102D	SHAMPOO STATIONS	ACC	437 SF	0	0	Accessory
102E	RECEPTION	B	113 SF	150	1	
102F	COSMETOLOGY LAB	B	3914 SF	30	131	Vocational Training - OLF Increased to represent actual occupancy
102G	MANI-PEDI LAB	B	965 SF	20	49	Classroom Function
102I	WAITING	B	105 SF	150	1	
102J	LOBBY	B	575 SF	150	4	
102M	ALCOVE	B	35 SF	150	1	
103	RECEPTION	B	251 SF	150	2	
103A	STAFF OFFICE	B	115 SF	150	1	
103B	STAFF OFFICE	B	116 SF	150	1	
103C	STAFF OFFICE	B	127 SF	150	1	
103D	DIRECTORS OFFICE	B	164 SF	150	2	
103E	AJUNCT WORKROOM	B	113 SF	20	6	Office Function - OLF Increased to represent actual occupancy
103F	STAFF BREAKROOM	B	204 SF	150	2	
103G	FILES	B	29 SF	0	0	Accessory
104	STORAGE	B	70 SF	0	0	Storage accessory to B = B occupancy
105	ESTHETICS LAB	B	904 SF	30	31	Vocational Training
105	ESTHETICS LAB ISLAND	B	99 SF	30	4	Vocational Training
106	MECHANICAL	U	445 SF	300	2	Utility
106A	ELECTRICAL	U	99 SF	300	1	Utility
107	WOMEN'S RR	ACC	195 SF	0	0	Accessory
108	IT / IDF	B	125 SF	150	1	
109	MEN'S RR	ACC	191 SF	0	0	Accessory
110	JANITOR	ACC	33 SF	0	0	Accessory
111	CLASSROOM	B	725 SF	20	37	
112	QUIET ROOM	ACC	56 SF	0	0	Accessory
113	CLASSROOM	B	701 SF	20	36	
114	STORAGE	ACC	117 SF	0	0	Storage accessory to B = B occupancy
115	CLASSROOM	B	698 SF	20	35	
116	LAUNDRY	U	153 SF	300	1	Utility
121	MECHANICAL	U	211 SF	300	1	Utility
122	MECHANICAL	U	138 SF	300	1	Utility
125	STUDENT LOUNGE	ACC	635 SF	15	43	Assembly under 750 sf = B occupancy
127	ENCLOSED OUTDOOR STUDENT LOUNGE	ACC	424 SF	15	29	Assembly under 750 sf = B occupancy
Grand total			13775 SF		429Occupants	

LONE STAR COLLEGE NORTH HARRIS
SCHOOL OF COSMETOLOGY
2700 W W THORNE BLVD, 77073

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07.22.2025

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9820 WHITHOM DRIVE
713.222.7766

STRUCTURAL
MATRIX STRUCTURAL
5177 RICHMOND AVENUE, SUITE 70
713.664.0130

LANDSCAPE
ASAKURA ROBINSON
2500 SUMMER STREET, SUITE 3228
713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

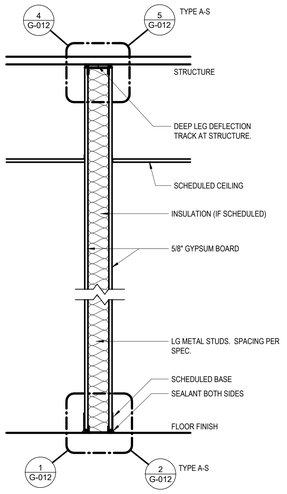
Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement

Sheet Title
LIFE SAFETY LEVEL 1 PLAN AND CODE SUMMARY

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,FF
Checked By:	DO
Date:	07/22/25
Job No.:	1503

G-010



3 EXISTING INTERIOR WALL
SCALE: 1" = 1'-0"

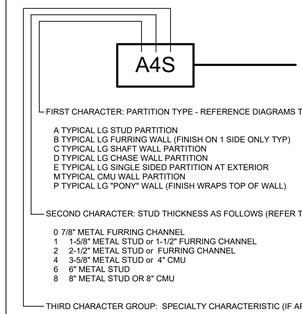
PARTITION TYPE NOTES

1. PARTITION TYPES SCHEDULE DEFINES ASSEMBLY TYPES AND VARIATIONS WITHIN EACH TYPE REFER TO FLOOR PLANS TO DETERMINE THE LOCATION FOR EACH TYPE.
2. ALL GYPSUM WALLBOARD (INCLUDING CEILINGS) TO BE INSTALLED IN WET OR DAMP AREAS SUCH AS TOILETS, KITCHENS, JANITOR CLOSETS, MECHANICAL ROOMS, UNCONDITIONED SPACES, BELOW GRADE AREAS, OR ANY OTHER AREAS SUSCEPTIBLE TO MOISTURE OR DAMPNESS SHALL BE WATER RESISTANT TYPE, U.N.O.
3. ALL WALLBOARD INSTALLED WHERE TILE FINISH IS SCHEDULED SHALL BE 5/8" CEMENT BACKER BOARD U.N.O.
4. USE DEEP LEG DEFLECTION TRACK @ THE TOP OF ALL PARTITIONS SECURED TO UNDERSIDE OF STRUCTURE.
5. AT FIRE RATED WALLS APPLY AN ADDITIONAL LAYER OF WALLBOARD ON ANY FACES RECEIVING REVEALS.
6. PROVIDE ADDITIONAL METAL FRAMING AS REQUIRED TO SUPPORT GYPSUM BOARD FINISHES. IF NO SUPPORT IS INDICATED PROVIDE FRAMING ASSEMBLY THAT COMPLIES WITH MIN. DESIGN LOAD OF L/420 & 10 PSF AND SPSF LOADING, TYPICAL FOR MECHANICAL PLENUMS AND ELEVATOR SHAFTS.
7. LIMITING HEIGHTS ARE CONTRACTOR'S RESPONISIBILITY. TO BE BASED ON STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) LIMITING WALL HEIGHT TABLES. ALL PARTITIONS SHALL BE BRACED AS REQUIRED TO MEET MINIMUM DEFLECTION CRITERIA.
8. ALL METAL STUDS EXTEND TO STRUCTURE U.N.O. BY TYPE DESIGNATION OR SPECIFIC DETAIL.
9. ALIGN EXTERIOR CORNERS AND JOINTS IN FINISHED AREAS, TYP.
10. PROVIDE CONTINUOUS CAULKING AT ALL DUCT AND PIPE PENETRATIONS THROUGH WALLS IN ACCORDANCE WITH SPECIFICATIONS.
11. AT CHASE WALLS PROVIDE HORIZONTAL BRACING FOR SEPARATIONS LESS THAN 9" WITH MIN. 4 1/4" METAL BRACE. AT SEPARATIONS GREATER THAN 9" PROVIDE 12" WIDE GYPSUM WALL BOARD BRACE. ALL BRACES AT 32" O.C. MIN.
12. DIMENSION PLANS SHALL INDICATE PARTITION CLEAR DIMENSIONS FROM FACE OF WALLBOARD TO FACE OF WALLBOARD UNLESS NOTED OTHERWISE.
13. RE: 4/G-121 FOR MINIMUM PLUMBING CHASE CLEARANCES

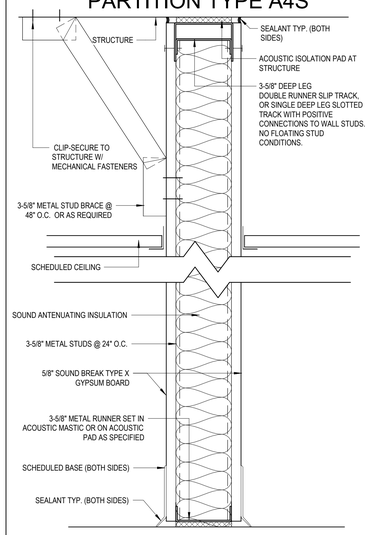
FIRE RATING GRAPHIC SYMBOL



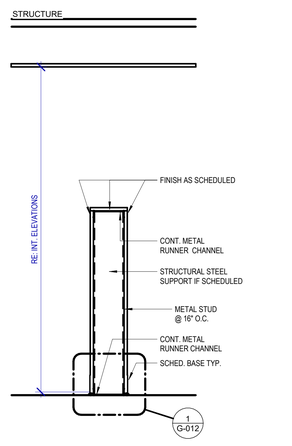
PARTITION TYPE KEY CODE



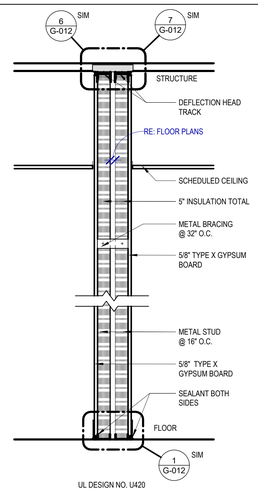
GRAPHIC EXAMPLE: PARTITION TYPE A4S



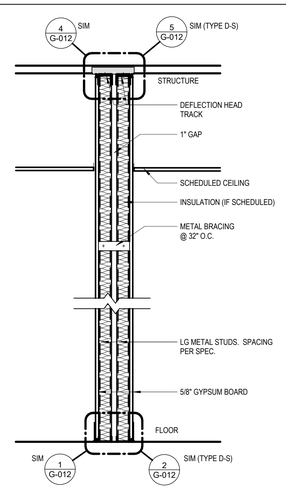
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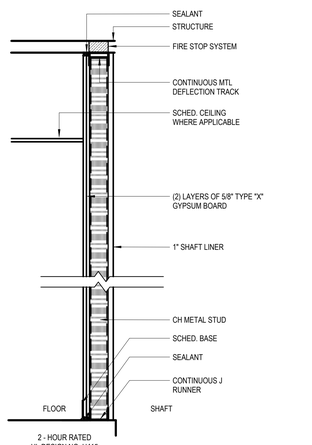
P PARTITION TYPE P
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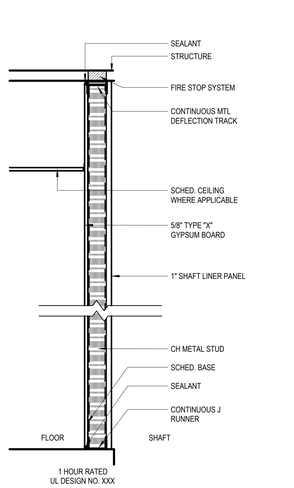
D-X PARTITION TYPE D-X
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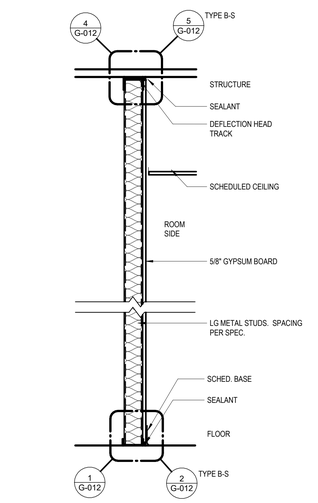
D PARTITION TYPE D
SCALE: 1" = 1'-0"



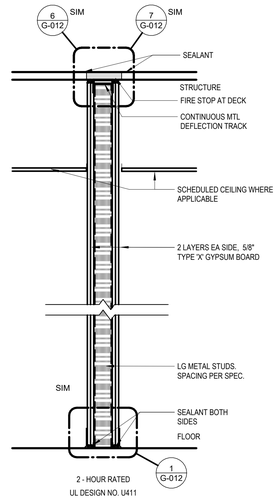
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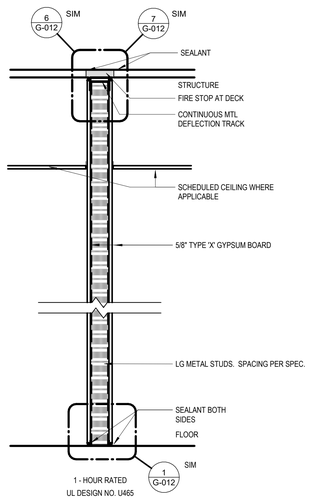
C-X PARTITION TYPE CX
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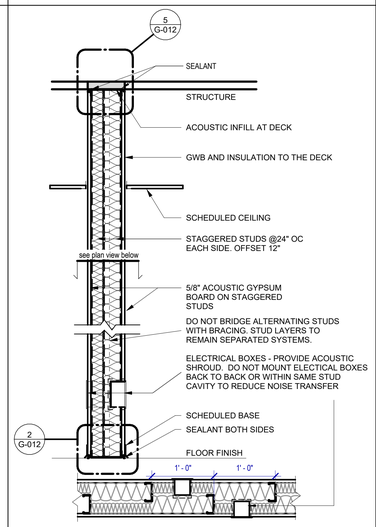
B PARTITION TYPE B - SINGLE SIDED
SCALE: 1" = 1'-0"



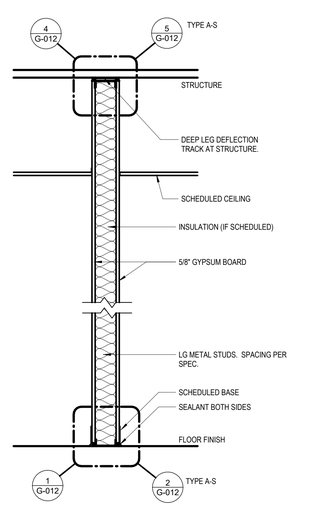
A-X2 PARTITION TYPE A-X2
SCALE: 1" = 1'-0"



A-X PARTITION TYPE A-X
SCALE: 1" = 1'-0"



A-S ACOUSTIC OFFSET STUD TYPE A-S
SCALE: 1" = 1'-0"



A PARTITION TYPE A
SCALE: 1" = 1'-0"

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NORTH HARRIS

SCHOOL OF COSMETOLOGY
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LEIGHANN BAILIE
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JONES ENGINEERS
9820 WHITHOM DRIVE
713.222.7766

STRUCTURAL
MATRIX STRUCTURAL
5177 RICHMOND AVENUE, SUITE 70
713.664.0130

LANDSCAPE
ASAKURA ROBINSON
2500 SUMMER STREET, SUITE 3228
713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
ISSUE FOR BID

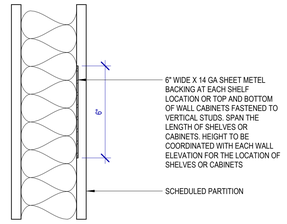
No.	DATE	DESCRIPTION

Sheet Title
INTERIOR PARTITION SCHEDULE

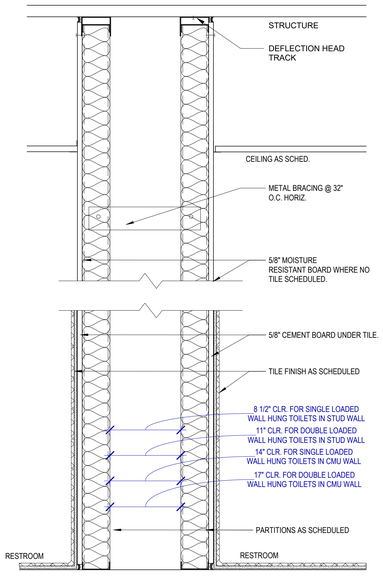
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,FF
Checked By:	DO
Date:	07/22/25
Job No.:	1503

G-011

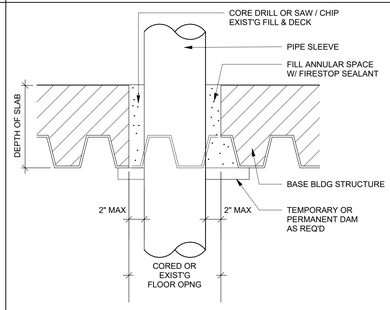
THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



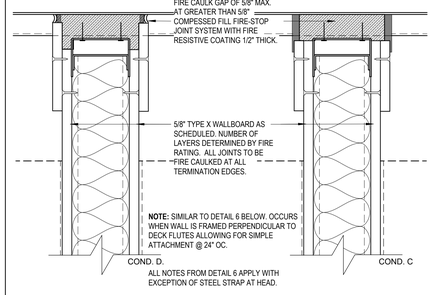
8 PLAN, SECTION - TYP. PARTITION BACKING



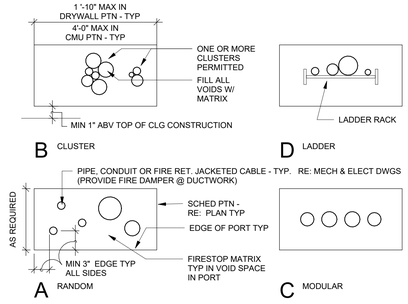
3 TYPICAL PLUMBING CHASE DETAIL
SCALE: 1 1/2" = 1'-0"



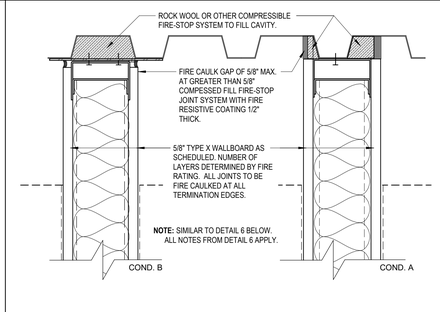
12 FIRESAFING FLOOR CORE



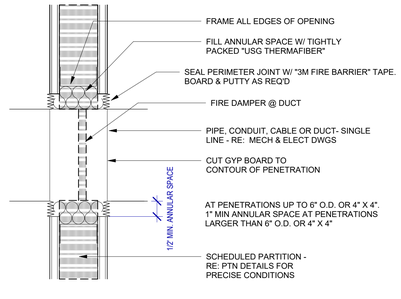
7 FIRE RATED HEAD DETAIL - PERP TO DECK
SCALE: 3" = 1'-0"



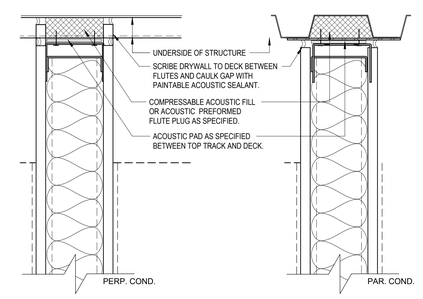
11 FIRESAFING DETAIL CONDUIT



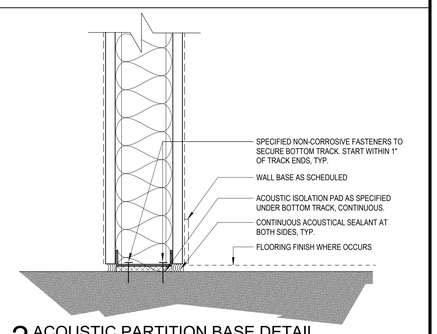
6 FIRE RATED HEAD DETAIL - PARALLEL TO DECK
SCALE: 3" = 1'-0"



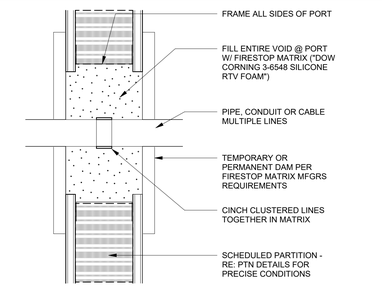
10 FIRESAFING DETAIL DAMPER



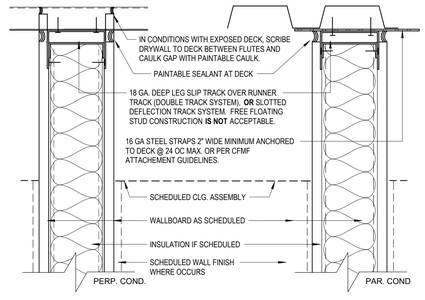
5 ACOUSTIC HEAD DETAILS
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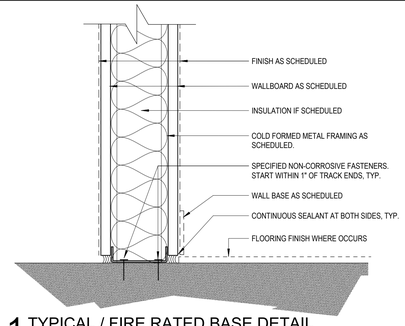
2 ACOUSTIC PARTITION BASE DETAIL
SCALE: 3" = 1'-0"



9 FIRESAFING DETAIL- PIPE THUR PARTITION



4 TYPICAL HEAD DETAILS
SCALE: 3" = 1'-0"



1 TYPICAL / FIRE RATED BASE DETAIL
SCALE: 3" = 1'-0"

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MATRIX STRUCTURAL
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713.664.0130

LANDSCAPE
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713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION

Sheet Title
INTERIOR PARTITION DETAILS - TYPICAL

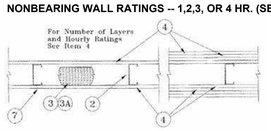
Project Mgr:	JMD
Designer:	JMD
Drawn By:	FF,SP
Checked By:	DO
Date:	07/22/25
Job No.:	1503

G-012

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DESIGN NO. U419

NONBEARING WALL RATINGS -- 1,2,3, OR 4 HR. (SEE ITEMS 3 & 4)



1. Floor and Ceiling Runners -- (Not shown) -- Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min width to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.
2. Steel Studs -- Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min width as indicated under Item 4, min 1-1/4 in. flanges and 1/4 in. return, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.
3. Batts and Blankets* -- (Required as indicated under Item 4) -- Mineral wool batts, friction fitted between studs and runners. Min nom thickness as indicated under Item 4. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.
   a. Batts and Blankets* -- (Optional) -- Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.
4. Gypsum Board* -- Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 1 hr, 2 hr, 3 hr and 4 hr ratings are as follows:

Wallboard Protection on Each Side of Wall

Rating	Min Stud Depth of Panel	No. of Layers & Thkns (Item 3)	Min Thkns of Insulation
1	3-1/2	1 layer, 5/8 in. thick	Optional
1	2-1/2	1 layer, 1/2 in. thick	1-1/2 in.
1	1-5/8	1 layer, 3/4 in. thick	Optional
2	1-5/8	2 layers, 1/2 in. thick	Optional
2	1-5/8	2 layers, 5/8 in. thick	Optional
2	3-1/2	1 layer, 3/4 in. thick	3 in.
3	1-5/8	3 layers, 1/2 in. thick	Optional
3	1-5/8	2 layers, 3/4 in. thick	Optional
3	1-5/8	3 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 1/2 in. thick	Optional
4	2-1/2	2 layers, 3/4 in. thick	2 in.

CANADIAN GYPSUM COMPANY -- 1/2 in. thick Type C, IP-X2 or IPC-AR; WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX or WRC; 3/4 in. thick Types IP-X3 or ULTRACODE UNITED STATES GYPSUM CO -- 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type SCX, SHX, WRX, IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-AR; 3/4 in. thick Types IP-X3 or ULTRACODE USG MEXICO S A DE C V -- 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX, WRC or; 3/4 in. thick Types IP-X3 or ULTRACODE When Item 6B, Steel Framing Members*, is used, Nonbearing Wall Rating is limited to 1 Hr. Min. stud depth is 3-1/2 in., min. thickness of insulation (Item 3) is 3 in., and two layers of gypsum board panels (1/2 in. or 5/8 in. thick) shall be attached to furring channels as described in Item 5. One layer of gypsum board panels (1/2 in. or 5/8 in. thick) attached to opposite side of stud without furring channels as described in Item 5.

Gypsum Board* -- (As an alternate to Item 4) -- 5/8 in. thick, 2 ft. wide, tongue and groove edge, applied horizontally as the outer layer to one side of the assembly. Secured as described in Item 5. Joint covering (Item 7) not required.
CANADIAN GYPSUM COMPANY -- Type SHX.
UNITED STATES GYPSUM CO -- Type SHX.
USG MEXICO S A DE C V -- Type SHX.

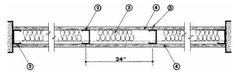
5. Fasteners -- (Not shown) -- Type S or S-12 steel screws used to attach panels to studs (Item 2) or furring channels (Item 6). Single layer systems: 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically.
Two layer systems: First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2- 1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer.
Three-layer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. Four-layer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below.

6. Furring Channels -- (Optional, not shown, for single or double layer systems) -- Resilient furring channels fabricated from min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. OC. Flange portion attached to each intersecting stud with 1/2 in. long Type S-12 steel screws. Not for use with Item 4A.
   a. Steel Framing Members (Not Shown)* -- (Optional on one or both sides, not shown, for single or double layer systems) -- As an alternate to Item 6, furring channels and Steel Framing Members as described below: Furring Channels -- Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 5. Not for use with Item 4A. Steel Framing Members* -- Used to attach furring channels (Item 6Aa) to studs (Item 2). Clips spaced max. 48 in. OC., and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips. PAC INTERNATIONAL INC -- Type RSIC-1.
   b. Steel Framing Members (Optional, Not Shown)* -- As an alternate to Item 6, furring channels and Steel Framing Members on only one side of studs as described below:
      - Furring Channels -- Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Batts and Blankets placed in stud cavity as described in Item 4. Two layers of gypsum board attached to furring channels as described in Item 4. Not for use with Item 4A.
      - Steel Framing Members* -- Used to attach furring channels (Item 6Ba) to one side of studs (Item 2) only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips.
      KINETICS NOISE CONTROL INC -- Type Isomax

7. Joint Tape and Compound -- Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads of outer layers. Paper tape, nom 2 in. wide, embedded in first layer of compound over all joints of outer layer panels. Paper tape and joint compound may be omitted when gypsum panels are supplied with a square edge.
8. Siding, Brick or Stucco -- (Optional, not shown) -- Aluminum, vinyl or steel siding, brick veneer or stucco, meeting the requirements of local code agencies, installed over gypsum panels. Brick veneer attached to studs with corrugated metal wall ties attached to each stud with steel screws, not more than each sixth course of brick.
9. Caulking and Sealants* -- (Optional, not shown) -- A bead of acoustical sealant applied around the partition perimeter for sound control.
   UNITED STATES GYPSUM CO -- Type AS
   *Bearing the UL Classification Mark

DESIGN NO. U448

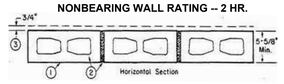
DESIGN NO. U448



1. Floor and Ceiling Channel — 2-1/2 in. wide by 1-3/8 in. deep channel, 0.021 (25 MSG) galvanized steel, attached with screws spaced 24 in. OC.
2. Steel Studs — 2-1/2 in. wide by 1-3/8 in. deep channel sections with 1/4 in. lip on each flange tip, 0.021 in. (25 MSG) galvanized steel studs spaced 24 in. OC.
3. Batts and Blankets* — 1-1/2 in. thick mineral wool batts supplied in 2 by 4 ft batts; attached to wallboard with staples 16 in. OC.
   ROCK WOOL MANUFACTURING CO — Delta Board.
   ROXUL INC — (Staples optional).
5. wide, attached to steel studs and floor and ceiling track with 0.127 in. diam self-drilling, self-tapping screws, 1 in. long spaced 8 in. OC along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly.
   AMERICAN GYPSUM CO — Types AG-C.
   BPB AMERICA INC — ProRoc Type C.
   BPB CANADA INC — ProRoc Type C.
   CANADIAN GYPSUM COMPANY — Types C, IP-X2, IPC-AR.
   G-P GYPSUM CORP, SUB OF
   GEORGIA-PACIFIC CORP — Type 5.
   LAFARGE NORTH AMERICA INC — Type LGFC-C, LGFC-C/A.
   NATIONAL GYPSUM CO — Types FSK-C, FSW-C, FSMR-C.
   PABCO BUILDING PRODUCTS L L C, DBA
   PABCO GYPSUM — Type PG-C.
   TEMPLE-INLAND FOREST PRODUCTS CORP — Type TG-C.
   UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR.
   USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR
6. Joint Tape and Compound — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nominal 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced.
   *Bearing the UL Classification Mark

DESIGN NO. U906

BEARING WALL RATING -- 2 HR.
NONBEARING WALL RATING -- 2 HR.

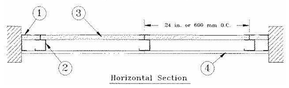


1. Concrete Blocks* -- Nominal 6 by 8 by 16 in, hollow or solid.
   Classification D-2 (2 hr).
   ANCHOR CONCRETE PRODUCTS INC
   GAGNE & SON CONCRETE BLOCK INC
   Allowable compressive stress of 57% of max allowable compressive stress in accordance with the empirical design method.
   BETCO BLOCK & PRODUCTS INC
   ARTHUR WHITCOMB
   WESTBROOK CONCRETE BLOCK CO INC
   Allowable compressive stress of 75.6% of max allowable compressive stress in accordance with the empirical design method.
2. Mortar -- Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.
3. Portland Cement Stucco or Gypsum Plaster -- Add 1/2 hr to Classification if used. Attached to concrete blocks (Item 1).
4. Foamed Plastic* -- (Optional-Not Shown) -- 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).
   THE DOW CHEMICAL CO -- Type Thermax
   *Bearing the UL Classification Mark

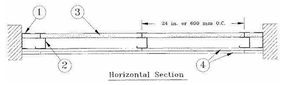
DESIGN NO. U415 NONBEARING

WALL RATINGS - 1, 2, 3, OR 4 HR

System A – 1 Hr.



System B – 2 Hr.



1. Floor, Side and Ceiling Runners- "J" - shaped runner, min 2-1/2 in. deep (min 4 in. deep when System C is used), with unequal legs of 1 in. and 2 in., fabricated from min 24 MSG (min 20 MSG when Item 4A or 7 are used) galv steel. Runners positioned with short leg toward finished side of wall. Runners attached to structural supports with steel fasteners located not greater than 2 in. from ends and not greater than 24 in. OC. "E" - shaped studs (Item 2A) may be used as side runners in place of "J" - shaped runners.
2. Steel Studs - "C-H" - shaped studs, min 2-1/2 in. deep (min 4 in. deep when System C is used), fabricated from min 25 MSG (min 20 MSG when Items 2D, 5C, or 7 is used) galv steel. Cut to lengths 3/8 to 1/2 in. less than floor-to-ceiling height and spaced 24 in. or 600 mm OC.
   a. Steel Studs - (Not Shown) - "E" - shaped studs installed back to back in place of "C-H" - shaped studs (Item 2) "E" - shaped studs secured together with steel screws spaced a maximum 12 in. OC. Fabricated from min 25 MSG (min 20 MSG when Item 2D or Item 7 is used) galv steel, min 2-1/2 in. deep (min 4 in. deep when System C is used), with one leg 1 in. long and two legs 3/4 in. long. Shorter legs 1 in. apart to engage gypsum liner panels. Cut to lengths 3/8 to 1/2 in. less than floor to ceiling heights.
   b. Furring Channels - (Optional, not shown) — For use with single or double layer systems. Resilient furring channels fabricated from min 25MSG corrosion protected steel, installed horizontally, and spaced vertically a max 24 in. OC. Flange portion of channel attached to each intersecting "C-H" or "E" stud on side of stud opposite the 1 in. liner panels with 1/2 in. long Type S or S-12 pan-head steel screws. When furring channels are used, wallboard to be installed vertically only. Not to be used with Type FRX or FRX-G gypsum wallboard (Item 4A) or cementitious backer units (Item 7).
   c. Furring Channels - For use with System I - "Hat" - shaped, 25 MSG galv steel furring channels attached directly over the inner layers of wallboard to each stud with 2 in. long Type S pan head steel screws. Screws alternate from top flange to bottom flange at each stud intersection. Furring channels spaced vertically max 24 in. OC.
   d. Steel Framing Members* - (Optional, not shown) — For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with Type FRX or FRX-G gypsum wallboard (Item 4A) or cementitious backer units (Item 7):
      - Furring Channels - Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board installed vertically only and attached to furring channels as described in Item 3.
      - Steel Framing Members* - Used to attach furring channels (Item 2Da) to studs (Item 2 or 2A). Clips spaced max. 24 in. OC., and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips.
      PAC INTERNATIONAL INC - Type RSIC-1.
3. Gypsum Board* - Gypsum liner panels, nom 1 in. thick, 24 in. or 600 mm (for metric spacing) wide. Panels cut 1 in. less in length than floor to ceiling height. Vertical edges inserted in "H" portion of "C-H" studs or the gap between the two 3/4 in. legs of the "E" studs. Free edge of end panels attached to long leg of vertical "J" - runners with 1-5/8 in. long Type S steel screws spaced not greater than 12 in. OC. When wall height exceeds liner panel length, liner panel may be butted to extend to the full height of the wall. Horizontal joints need not be backed by steel framing. In System I, butt joints in liner panels are staggered min 36 in. Butt joints backed with 6 in. by 22 in. strips of 3/4 in. thick gypsum wallboard (Item 4). Wallboard strips centered over butt joints and secured to liner panels with six 1-1/2 in. long Type G steel screws, three screws along the 22 in. dimension at the top and bottom of the strips.
   CANADIAN GYPSUM COMPANY - Type SLX
   UNITED STATES GYPSUM CO - Type SLX
   USG MEXICO S A DE C V - Type SLX
4. Gypsum Board* - System A - 1 Hr
   Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type S steel screws spaced 12 in. when installed vertically or 8 in OC when installed horizontally. Horizontal joints need not be backed by steel framing.
   - CANADIAN GYPSUM COMPANY - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX
   - UNITED STATES GYPSUM CO - Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX
   - USG MEXICO S A DE C V - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX

   System B - 2 Hr. Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in two layers. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to studs with 1-5/8 in. long Type S steel screws spaced 12 in. OC when installed vertically and staggered 12 in. from base layer screws or 8 in. OC when installed horizontally and staggered 8 in. from base layer screws. Horizontal joints between inner and outer layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in.
   - CANADIAN GYPSUM COMPANY - 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX
   - UNITED STATES GYPSUM CO - 1/2 in. Types C, IP-X2, IPC-AR, or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX
   - USG MEXICO S A DE C V - 1/2 in. Types C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX

   USG MEXICO S A DE C V - Type SLX
4. Gypsum Board* - System A - 1 Hr
   Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type S steel screws spaced 12 in. when installed vertically or 8 in OC when installed horizontally. Horizontal joints need not be backed by steel framing.
   - CANADIAN GYPSUM COMPANY - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX
   - UNITED STATES GYPSUM CO - Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX
   - USG MEXICO S A DE C V - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX

   System B - 2 Hr. Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in two layers. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to studs with 1-5/8 in. long Type S steel screws spaced 12 in. OC when installed vertically and staggered 12 in. from base layer screws or 8 in. OC when installed horizontally and staggered 8 in. from base layer screws. Horizontal joints between inner and outer layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in.
   - CANADIAN GYPSUM COMPANY - 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX
   - UNITED STATES GYPSUM CO - 1/2 in. Types C, IP-X2, IPC-AR, or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX
   - USG MEXICO S A DE C V - 1/2 in. Types C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC, WRX

5. Joint Tape and Compound - (Not Shown). Systems A, B, C, E, F, G, H, I Joints on outer layers of gypsum boards (Item 4 and 4A) covered with paper tape and joint compound. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges. Exposed screw heads covered with joint compound.
6. Batts and Blankets* - Systems A, B, E, F, G, H, I. (Optional) - Mineral wool or glass fiber batts partially or completely filling stud cavity. Any mineral wool or glass fiber batt mineral bearing the UL Classification Marking as to Fire Resistance.
   Systems C & D Min 3 in. (System C) and min 1-1/2 in. (System D) thick mineral wool batts, friction fitted between the studs and floor and ceiling runners.
   THERMAFIBER INC - Type SAFB
   *Bearing the UL Classification Mark

LONE STAR COLLEGE
NORTH HARRIS

SCHOOL OF COSMETOLOGY
2700 W W THORNE BLVD, 77073

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2700 W W THORNE DRIVE
LEIGHANN BAILIE
281.290.3755

MEP
JONES ENGINEERS
9820 WHITHOM DRIVE
713.222.7766

STRUCTURAL
MATRIX STRUCTURAL
5177 RICHMOND AVENUE, SUITE 70
713.664.0130

LANDSCAPE
ASAKURA ROBINSON
2500 SUMMER STREET, SUITE 3228
713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:

ISSUE FOR BID

No.	DATE	DESCRIPTION

Sheet Title

UL DESIGNS

Project Mgr:	JMD
Designer:	JMD
Drawn By:	FF,KF,SF
Checked By:	DO
Date:	07/22/25
Job No.:	1503

G-013

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

GENERAL CONSTRUCTION NOTES FOR SITE WORK:

1. EXISTING UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR TO FIELD VERIFY LOCATION OF ANY EXISTING UTILITIES AND OTHER FACILITIES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO LOCATE AND PRESERVE AND AND ALL EXISTING FACILITIES.
2. CONTRACTOR SHALL NOTIFY UTILITY COORDINATION COMMITTEE BY TELEPHONE AT 713-223-4567 OR 1-800-669-8344, AT LEAST TWO FULL WORKING DAYS BEFORE STARTING WORK IN ANY STREET RIGHT-OF-WAY OR PUBLIC EASEMENTS.
3. CONTRACTOR SHALL VERIFY THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION AND SHALL REPORT DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
4. CONTRACTOR SHALL PROTECT ALL EXISTING FACILITIES, PROPERTY, AND UNDERGROUND UTILITIES, AND SHALL REPAIR ANY DAMAGE TO THE SATISFACTION OF THE INJURED PARTY AT NO ADDITIONAL COST TO THE OWNER.
5. ANY DAMAGE TO THE SURROUNDING IMPROVEMENTS PUBLIC OR PRIVATE BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY BUILDING PERMITS AND FOR NOTIFICATION OF ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS OR PERSONS IN CHARGE OF PRIVATE OR PUBLIC UTILITIES AFFECTED BY HIS OPERATIONS
   PRIOR TO COMMENCEMENT OF WORK.
7. WATER METERS, UTILITY LINES AND APPURTENANCES, DRIVEWAYS, AND ALL OTHER ITEMS TO BE LOCATED WITHIN THE STREET RIGHT-OF-WAY OR A PUBLIC EASEMENT, ARE TO BE CONSTRUCTED IN STRICT ACCORDANCE WITH CURRENT GOVERNING CITY, COUNTY AND STATE STANDARDS.
8. CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE FACILITIES TO DIRECT SURFACE DRAINAGE AWAY FROM TRENCHES AND TOWARDS OFF SITE DRAINAGE FACILITIES. PREVENT WATER FROM PONDING ON SITE AND DO NOT BLOCK DRAINAGE FROM OR DIRECT EXCESS DRAINAGE ON TO ADJACENT PROPERTY.
9. CONTRACTOR TO BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS AND TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", (TEXAS M.U.T.C.D. MOST RECENT EDITION AS REVISED) DURING CONSTRUCTION.
10. OFF DUTY UNIFORMED POLICE OFFICER(S) IS (ARE) REQUIRED TO DIRECT TRAFFIC WHERE TRAFFIC LANES ARE BLOCKED.
11. ALL OPEN EXCAVATIONS IN VEHICULAR TRAFFIC AREAS SHALL BE COVERED WITH ANCHORED STEEL PLATES CAPABLE OF SUPPORTING HS 20 LOADING AT END OF EACH DAYS WORK OR WHEN NOT IN USE.
12. CONTRACTOR SHALL COMPLY WITH O.S.H.A. REGULATIONS AND STATE OF TEXAS LAW CONCERNING EXCAVATION, TRENCHING AND SHORING. EXCAVATIONS OVER 5 FEET DEEP TO BE SHEETED AND PROTECTED AS REQUIRED BY STATE LAW AND O.S.H.A. FAILURE TO COMPLY WITH THE REQUIREMENTS HEREIN WILL CONSTITUTE AGREEMENT BY THE CONTRACTOR TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO COMPLY. ASSUME TYPE "C" SOIL.
13. CONTRACTOR TO TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS AND TREES ALONG THE AREA OF EXCAVATION.
14. THE DEVELOPMENT HAS BEEN DESIGNED TO NOT IMPEDE, IMPOUND, OR BLOCK THE NATURAL FLOW OF WATER ACROSS ADJACENT AND CONTIGUOUS PROPERTIES.
15. CONTRACTOR TO SCHEDULE CONSTRUCTION INSPECTION AT HTTPS://EPERMITS.HARRISCOUNTYTX.GOV/INSPECTIONREQUEST.ASPX
    A MINIMUM OF 48 HOURS PRIOR TO ANY CONSTRUCTION.
16. PUBLIC WORKS IS NOT PART OF 811. PUBLIC WORKS WILL MARK EXISTING UTILITIES BUT THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND FIELD VERIFYING ALL UTILITIES AND BE RESPONSIBLE TO REPAIR OR REPLACE ANY DAMAGES TO COB ASSETS OR UTILITIES CONFLICT. CONTRACTOR SHALL CONTACT PUBLIC WORKS AT 281-420-5300, 48 HOURS BEFORE ANY CONSTRUCTION, BORING, OR UTILITY CONNECTION.
17. DEAD-END OF PROPOSED WATERLINE SHALL BE PLUGGED WITH RESTRAINED MECHANICAL JOINTS.
18. DEAD-END OF PROPOSED SANITARY SEWER SHALL BE PLUGGED WITH CLAMP.
19. ALL WATERLINE TEES, BENDS, REDUCERS, VALVES, AND ENDS SHALL BE MECHANICALLY RESTRAINED AND BLOCKED. MECHANICAL RESTRAINT SHALL BE BY EBAA MEGALUG FOR PVC PIPE OR APPROVED EQUAL.
20. WHERE MANHOLES ARE LOCATED WITHIN PAVED AREA, CONTRACTOR SHALL SET RIM ELEVATION TO MATCH FINISHED GRADE ELEVATIONS. OUTSIDE OF THE PAVED AREA, SET MANHOLE RIM 3 INCHES (MINIMUM) TO 6 INCHES (MAXIMUM) ABOVE FINISHED GRADE. ADD SLOPE FILL AROUND THE MANHOLE AND SLOPED AWAY AND DOWN FROM MANHOLE RING. PROVIDE MANHOLE INSERTS/INFLOW DISHES TO PREVENT RUNOFF DRAIN TO THE SEWER COLLECTION SYSTEM.

UTILITY CONSTRUCTION NOTES FOR SITE WORK:

1. REFER TO CIVIL, PLUMBING, AND ELECTRICAL DRAWING FOR ALL UTILITY SERVICES TO AND ON THE SITE.
2. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL & PLUMBING DRAWINGS TO VERIFY LOCATION AND SIZE OF ALL ROOF DRAINS, DOWN SPOUTS AND UTILITY CONNECTIONS. LIMITS OF PROPOSED SITE PLUMBING FACILITIES SHALL BE 5-FEET FROM EDGE OF BUILDING, UNLESS OTHERWISE NOTED.
3. MAINTAIN 12-INCH MINIMUM (6" ABSOLUTE MINIMUM) VERTICAL CLEARANCE AT PIPE CROSSINGS UNLESS OTHERWISE NOTED ON THE DRAWING SHEETS.
4. WHERE A SANITARY SEWER CROSSES A WATERLINE, CENTER ONE JOINT (MINIMUM 18-FT LENGTH) OF SANITARY SEWER PIPE AND WATER LINE AT THE CROSSING. WATER LINE SHOULD CROSS OVER SANITARY LINE WITH 2' MINIMUM CLEARANCE.
5. THE LENGTHS OF PROPOSED UNDERGROUND UTILITY LINES SHOWN ARE APPROXIMATE ONLY. LENGTHS OF LINES MAY VARY DUE TO FIELD CONDITIONS ENCOUNTERED AT THE TIME OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS NECESSARY FOR UTILITY LINES TO SERVE THEIR INTENDED PURPOSE AND SHALL BE RESPONSIBLE FOR THE REROUTING OF LINES OCCASIONED BY CONFLICTS WITH OTHER UTILITIES AND SITE FEATURES.
6. CONTRACTOR SHALL CONSTRUCT ALL GRAVITY SEWER LINES COMMENCING AT THE LOWEST GRADE ELEVATION AND PROCEED IN THE UPSTREAM DIRECTION. CONTRACTOR SHALL VERIFY CLEARANCES WITH ALL UNDERGROUND CONSTRUCTIONS BEFORE LAYING PIPE.
7. TOP OF PROPOSED MANHOLES, INLETS, VALVE BOXES, ETC. SHALL BE SET TO MATCH FINISHED GRADE OR PROPOSED TOP OF PAVEMENT. TOP OF EXISTING MANHOLES, VALVE BOXES, ETC., SHALL BE ADJUSTED AS REQUIRED TO MATCH FINISHED GRADE OR PROPOSED TOP OF PAVEMENT. OUTSIDE OF PAVED AREAS SET MANHOLE RIMS AND TOP OF GRATE AT ELEVATIONS SHOWN ON THE PLANS.
8. ALL TRENCHES, INLETS, MANHOLES, CLEANOUTS, ETC., UNDER, OR WITHIN FIVE FEET OF PAVEMENT SHALL BE BACKFILLED WITH SELECT MATERIAL PLACED ON LOOSE LIFTS NOT EXCEEDING 8-INCHES IN DEPTH AND COMPACTED TO 95% STANDARD PROCTOR BACKFILL SEWER TRENCHES WITH COMPACTED CEMENT STABILIZED SAND TO A POINT ONE FOOT BELOW BOTTOM OF PAVEMENT IN LIEU OF SELECTED MATERIAL.
9. ALL TRENCHES NOT UNDER, OR WITHIN FIVE FEET OF PAVEMENT SHALL BE BACKFILLED WITH SELECT MATERIAL PLACED IN LOOSE LIFTS NOT EXCEEDING 12-INCHES IN DEPTH AND COMPACTED TO THE DENSITY OF NATURAL SURROUNDING SOIL, BUT NOT LESS THAN 90% STANDARD PROCTOR DENSITY (ASTM D698).

SANITARY SEWER NOTES

1. SANITARY SEWER LINES SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS AND REGULATIONS.
2. SANITARY SEWER TO BE CONSTRUCTED TO WITHIN FIVE (5) FEET OF THE BUILDING BY THE SITE CONTRACTOR. REFERENCE PLUMBING DRAWINGS FOR CONTINUATION OF SERVICE CONNECTIONS INTO THE BUILDING. GENERAL CONTRACTOR SHALL COORDINATE BETWEEN THE SITE CONTRACTOR AND THE PLUMBING CONTRACTOR. REFER TO MEP DRAWINGS.
3. SANITARY SEWER CONSTRUCTION SHALL COMMENCE AT THE POINT OF CONNECTION TO THE PUBLIC SANITARY SEWER SYSTEM AND PROCEED UPSTREAM.
4. WHEN MAKING A CONNECTION TO AN EXISTING SANITARY SEWER MANHOLE CONTRACTOR SHALL PLUG DOWNSTREAM END OF PROPOSED SANITARY SEWER. THE SEWER SHALL REMAIN PLUGGED UNTIL FINAL ACCEPTANCE BY THE CITY.
5. SANITARY SEWER PIPE SHALL BE PVC SDR 26 CONFORMING TO ASTM D-3034. ALL JOINTS SHALL CONFORM TO ASTM D-3139. JOINTS SHALL BE BELL AND SPIGOT TYPE WITH RUBBER GASKETS CONFORMING TO ASTM F-477. CHEMICALLY WELDED PVC JOINTS ARE NOT ACCEPTABLE.
6. ALL SANITARY SEWERS SHALL RECEIVE BEDDING AND BACKFILL ACCORDING TO SPECIFICATIONS AND DETAILS.
7. SANITARY MANHOLE AND SANITARY SEWER LINES MUST BE INSTALLED SO AS TO PROVIDE A MINIMUM OF NINE (9) FEET OF CLEARANCE IN ANY DIRECTION FROM ANY EXISTING OR PROPOSED WATER LINE. WHERE THE NINE (9) FOOT SEPARATION CANNOT BE ACHIEVED, FOLLOW THE SPECIAL PROCEDURES FROM THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS.
8. CONTRACTOR SHALL UNCOVER EXISTING UTILITIES AT ALL POINTS OF CROSSING TO DETERMINE IF CONFLICT EXISTS BEFORE COMMENCING ANY CONSTRUCTION AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICT.

WATER:

1. ALL WATER MAINS SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS AND REQUIREMENTS.
2. WATER LINE CONSTRUCTION SHALL COMPLY WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS.
3. DOMESTIC WATER SERVICE LINES SHALL HAVE A MINIMUM COVER OF 24 INCHES.
4. CONCRETE THRUST BLOCKS SHALL BE PROVIDED FOR ALL TEES, BENDS AND VALVES.
5. PIPE MATERIAL SHALL BE PVC PIPE CONFORMING TO AWWA C-900, DR-18 CLASS 150 FOR 4-INCH AND LARGER PIPE.
6. ALL WATER LINES, AFTER INSTALLATION, SHALL BE THOROUGHLY DISINFECTED ACCORDING TO AWWA SPECIFICATIONS C-651 AND THEN FLUSHED BEFORE BEING PLACED INTO SERVICE. TEST WATER TO MEET THE REQUIREMENTS OF THE TEXAS DEPT. OF HEALTH.
7. CONTRACTOR SHALL UNCOVER EXISTING UTILITIES AT ALL POINTS OF CROSSING TO DETERMINE IF CONFLICT EXISTS BEFORE COMMENCING ANY CONSTRUCTION AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICT.

SWPPP CONSTRUCTION NOTES

1. CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPP) PLANS TO KEEP SILT AND OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.
2. DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENTS OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.
3. CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FORM THE EXCAVATED AREA.
4. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
5. CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE EVERY FOURTEEN(14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.

- DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
- AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
- STRUCTURAL CONTROL MEASURES.
- LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.

6. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK SODDING.

CENTERPOINT ENERGY

CAUTION: UNDERGROUND GAS FACILITIES

LOCATION OF CENTERPOINT ENERGY MAIN LINES (TO INCLUDE CENTERPOINT ENERGY, INTRASTATE PIPELINE, LLC. WHERE APPLICABLE) ARE SHOWN IN AN APPROXIMATE LOCATION ONLY. SERVICE LINES ARE USUALLY NOT SHOWN. OUR SIGNATURE ON THESE PLANS ONLY INDICATE THAT OUR FACILITIES ARE SHOWN IN APPROXIMATE LOCATION. IT DOES NOT IMPLY THAT A CONFLICT ANALYSIS HAS BEEN MADE. THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

WHEN CENTERPOINT ENERGY PIPELINE MARKINGS ARE NOT VISIBLE, CALL (713)945-8036 OR (713) 945-8037 (7:00 A.M. TO 4:30 P.M.) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.

WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON MECHANIZED EXCAVATION PROCEDURES.

WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.

FOR EMERGENCIES REGARDING GAS LINE CALL (713)659-3552 OR (713)207-4200

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

WARNING: OVERHEAD ELECTRICAL FACILITIES

OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:

- ANY ACTIVITY WHERE PERSON OR THINGS MAY COME WITHIN SIX(6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND
- OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN 10 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES.

PARTIES RESPONSIBLE FOR THE WORK, INCLUDING CONTRACTORS, ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINE TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT (713) 207-2222.

ACTIVITIES ON OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY
NO APPROVAL TO USE, CROSS OR OCCUPY CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT OUR SURVEYING & RIGHT OF WAY DIVISION AT (713)207-6348 OR (713)207-5769

AT&T TEXAS/SWBT FACILITIES

1. THE LOCATIONS OF AT&T TEXAS/SWBT FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.

2. THE CONTRACTOR SHALL CALL 1-800-344-8377 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.

3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.

4. WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.

5. THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN CONDUIT IN THE AREA.

6. PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER MR. ROOSEVELT LEE JR. AT (713)567-4552 OR E-MAIL HIM AT rl7259@ATT.COM, IF THERE ARE QUESTIONS ABOUT BORING OR EXCAVATING NEAR OUR AT&T TEXAS/SWBT FACILITIES.

HARRIS COUNTY MAY HAVE EXISTING UNDERGROUND / OVERHEAD UTILITIES WITHIN THE PROPOSED PROJECT LIMITS. PLEASE CONTACT THE CALL CENTER AT 713-881-3210, OR SUBMIT A WORK ORDER REQUEST FOR FIELD LOCATE THROUGH http://www.eng.hctx.net/SignalOut

48 HOUR NOTICE: CONTRACTOR SHALL NOTIFY HARRIS COUNTY PRIOR TO COMMENCING CONSTRUCTION AND/OR BACKFILLING UTILITIES. CONTRACTOR (S) TO CONTACT PUBLIC REVIEW DEPARTMENT @ (713-274-3931) OR PUBLIC.REVIEW@HCPID.ORG

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LONE STAR COLLEGE
NORTH HARRIS

SCHOOL OF COSMETOLOGY
2700 W W THORNE BLVD, 77073

RDLR Architects
ARCHITECTURE PLANNING INTERIORS

800 Sampson St. #104
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713.868.3121
www.rdlr.com

CLIENT:
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LEIGHANN BAILIE
281.290.3755

MEP
JONES ENGINEERS
9820 WHITHOM DRIVE
713.222.7766

STRUCTURAL
MATRIX STRUCTURAL
5177 RICHMOND AVENUE, SUITE 70
713.664.0130

LANDSCAPE
ASAKURA ROBINSON
2500 SUMMER STREET, SUITE 3228
713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CSF CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110



TBPE Firm No. F-4395

Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title

GENERAL NOTES

Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C1.00

NOTES:

BENCHMARK: TSARP RM NO. 110325 – ELEV. 95.62 (NAVD 1988, 2001 ADJUSTMENT)
BRASS DISK IN TOP OF CURB INLET ON THE SOUTH SIDE OF W. W. THORNE BLVD.
OPPOSITE THE ENTRANCE DRIVE TO NIMITZ HIGH SCHOOL.

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SQUARE BOX CUT IN TOP OF INLET LOCATED ON THE SOUTH SIDE OF W. W. THORNE BLVD. JUST NORTHWEST OF THE NORTHWESTERLY BUILDING CORNER OF THE CHILD DEVELOPMENT CENTER

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VICINITY MAP
N.T.S.

TOPOGRAPHIC SURVEY
LONE STAR COLLEGE SYSTEM
NORTH CAMPUS
W. W. THORNE BOULEVARD
HARRIS COUNTY, TEXAS

McKIM&CREED
ENGINEERS, SURVEYORS, PLANNERS
12718 Century Drive
Stafford, TX 77477
713.659.0021
www.mckimcreed.com
TBPELS Firm Registration No. 10177600

SCALE:	1" = 10'	JOB NO.	06921-0007
DATE:	10/06/2023	F.B. NO.	HOU 1341
DRN: GOS	CHK: BT	PROJECT:	LSCS N. CAMPUS

FOR REFERENCE ONLY

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832-678-2110

STATE OF TEXAS
CARLOS A. GUTIERREZ
68320
LICENSED PROFESSIONAL ENGINEER
07/22/25
TBPE Firm No. F-4395

Project Status:
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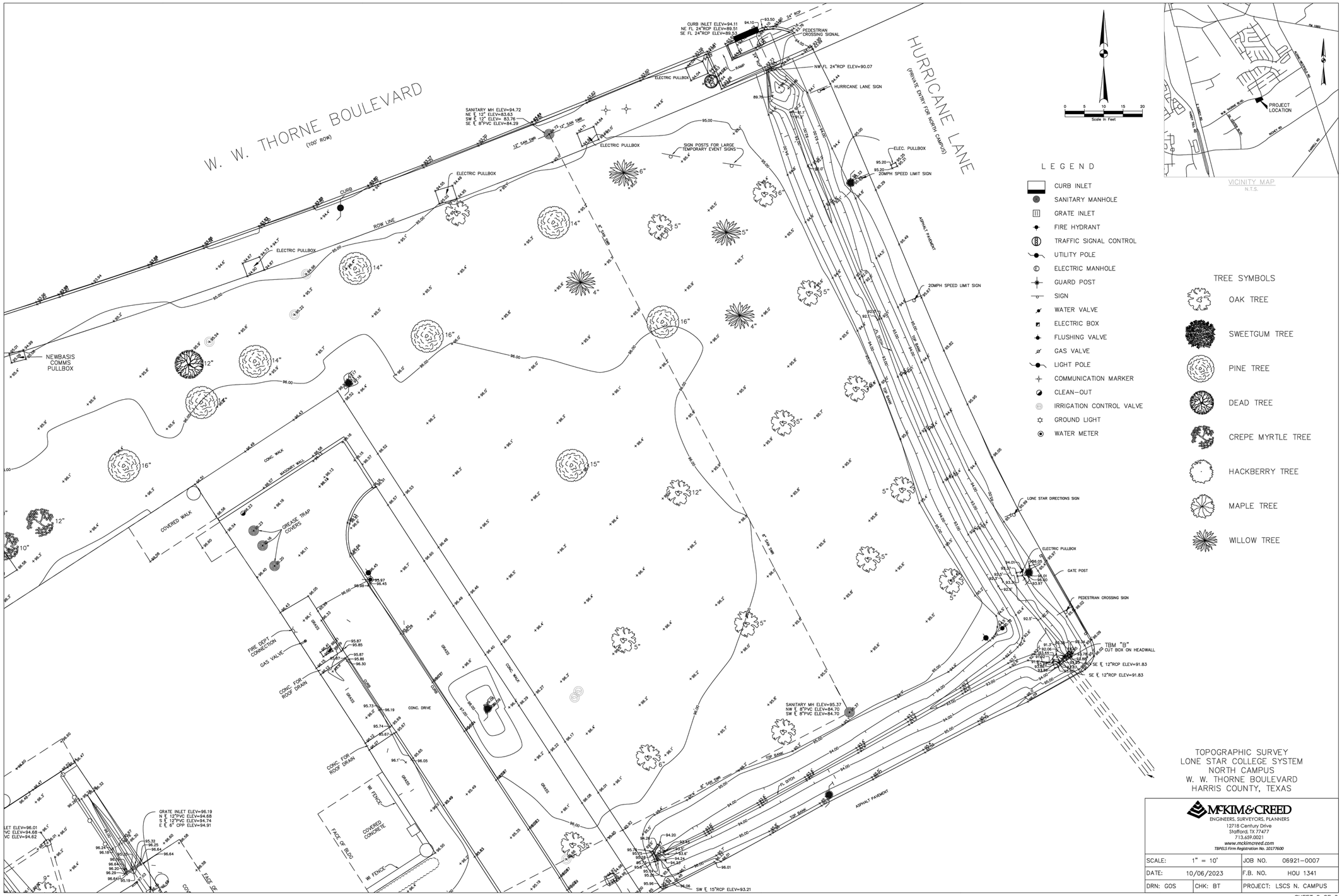
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C2.00



VICINITY MAP
N.T.S.

LEGEND

- CURB INLET
- SANITARY MANHOLE
- GRATE INLET
- FIRE HYDRANT
- TRAFFIC SIGNAL CONTROL
- UTILITY POLE
- ELECTRIC MANHOLE
- GUARD POST
- SIGN
- WATER VALVE
- ELECTRIC BOX
- FLUSHING VALVE
- GAS VALVE
- LIGHT POLE
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- CLEAN–OUT
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- GROUND LIGHT
- WATER METER

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- OAK TREE
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68320
LICENSED
PROFESSIONAL ENGINEER
07/22/2025

TBPE Firm No. F-4395

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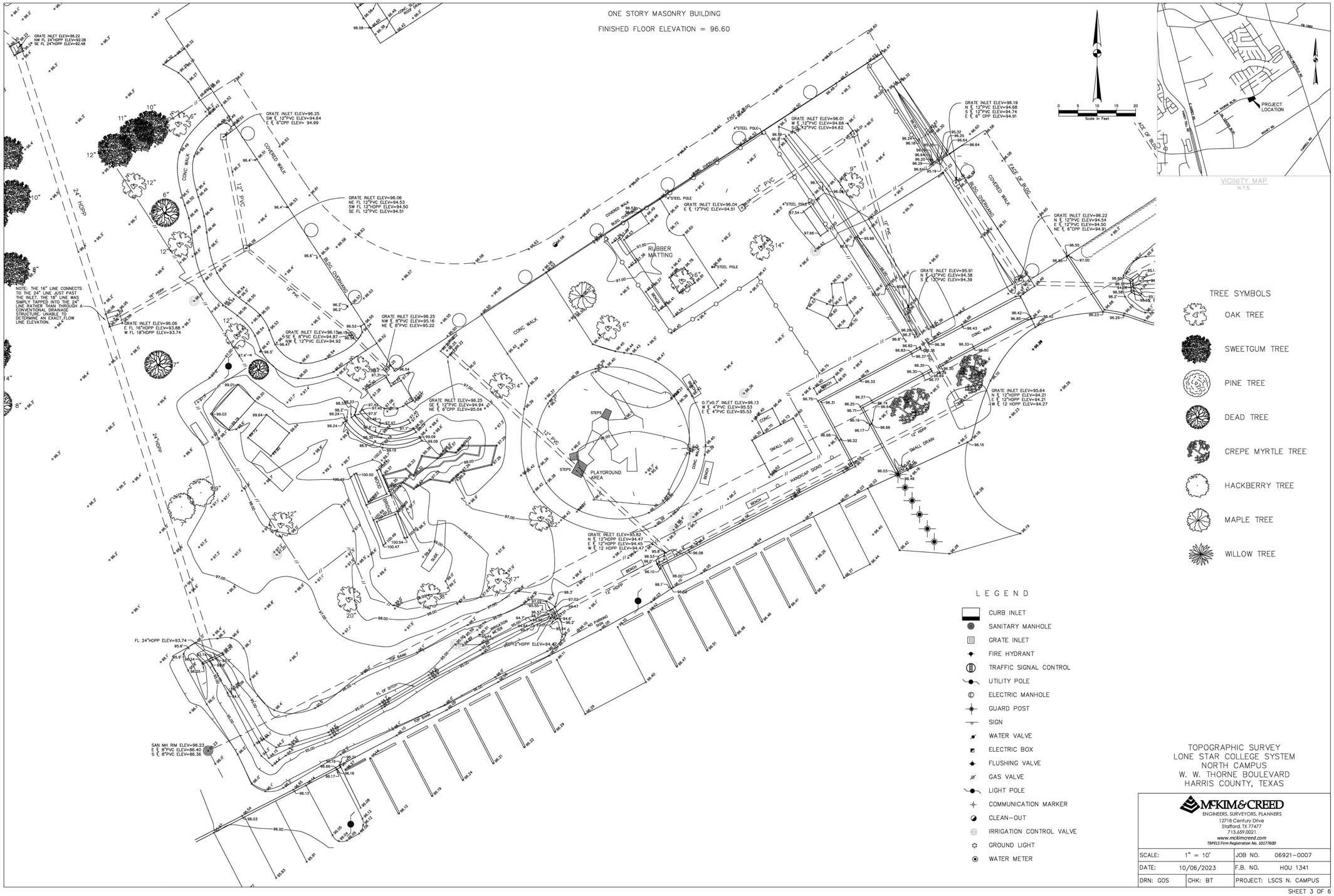
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TOPOGRAPHIC SURVEY

Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C2.01

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TREE SYMBOLS

- OAK TREE
- SWEETGUM TREE
- PINE TREE
- DEAD TREE
- CREPE MYRTLE TREE
- HACKBERRY TREE
- MAPLE TREE
- WILLOW TREE

LEGEND

- CURB INLET
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SHEET 3 OF 6

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STATE OF TEXAS
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68320
LICENSED PROFESSIONAL ENGINEER
12/7/2025
TBPE Firm No. F-4395

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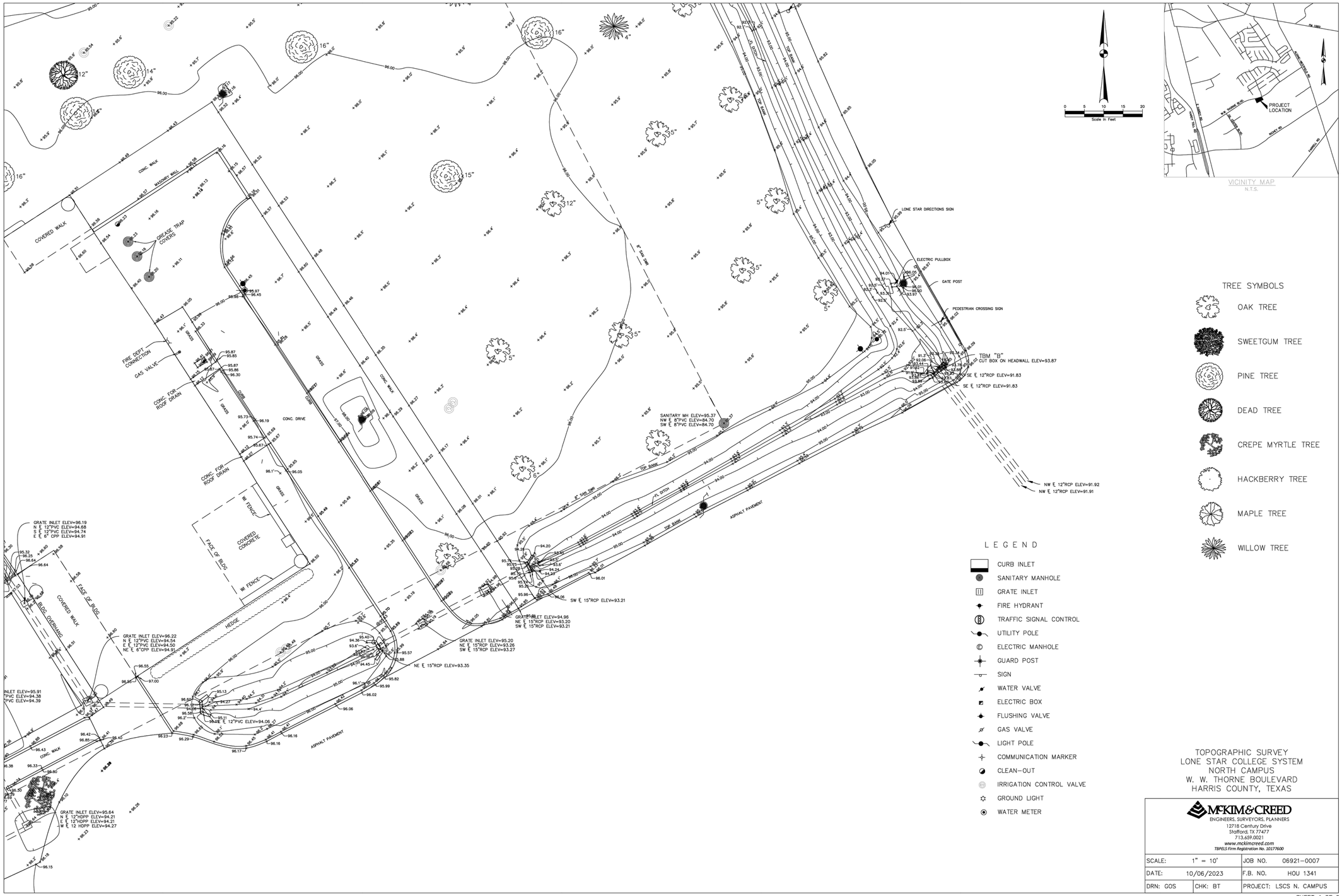
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TOPOGRAPHIC SURVEY

Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C2.02



VICINITY MAP
N.T.S.

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LEGEND

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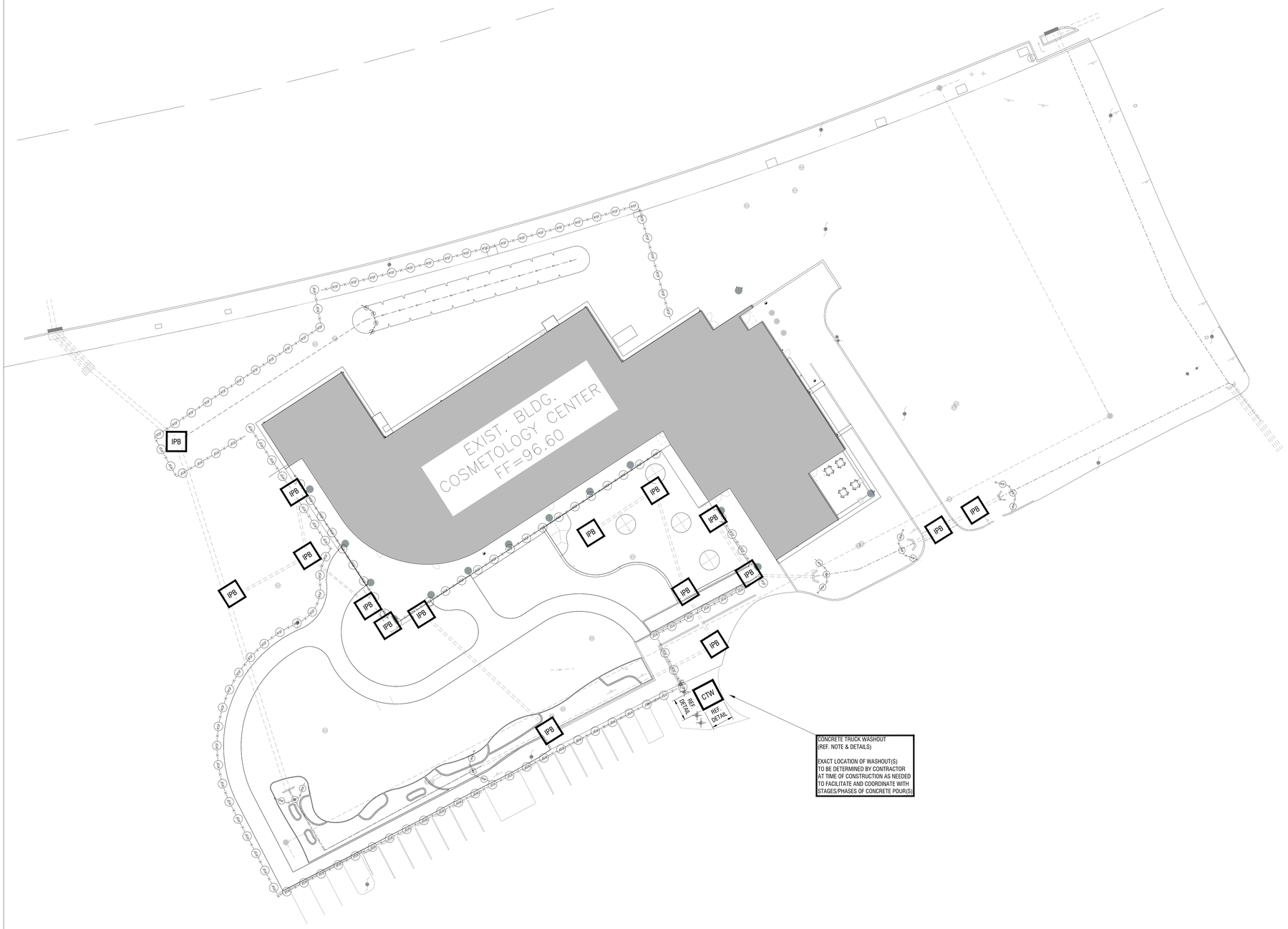
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TOPOGRAPHIC SURVEY

Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C2.03



N

SWPPP
SCALE: 1"=20'

FLOODPLAIN INFORMATION

THIS PROPERTY IS NOT LOCATED IN A FEDERAL INSURANCE ADMINISTRATION DESIGNATED FLOOD HAZARD AREA AND WITHIN ZONE "X" AS PER FEMA FIRM MAP PANEL # 48201C0270M, DATED 10/16/2013. INFORMATION PROVIDED BY VISUAL OR GRAPHIC PLOTTING ONLY. WE ARE NOT RESPONSIBLE FOR EXACT DETERMINATION.

THE FEMA WEBSITE (WWW.MSC.FEMA.GOV) WAS CHECKED ON MAY 31, 2024.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE ENGINEER.

BENCHMARK INFORMATION

AS PER TOPOGRAPHIC SURVEY BY OTHERS:
BENCHMARK: TSARP RM NO. 110325 - ELEV. 95.62 (NAVD 1988, 2001 ADJUSTMENT) BRASS DISK IN TOP OF CURB INLET ON THE SOUTH SIDE OF W.W. THORNE BLVD. OPPOSITE THE ENTRANCE DRIVE TO NIMITZ HIGH SCHOOL

TBM "A" - ELEV. 94.44
SQUARE BOX CUT IN TOP OF INLET LOCATED ON THE SOUTH SIDE OF W.W. THORNE BLVD. JUST NORTHWEST OF THE NORTHWESTERLY BUILDING CORNER OF THE CHILD DEVELOPMENT CENTER

TBM "B" - ELEV. 93.87
SQUARE BOX CUT IN TOP OF THE CONCRETE HEADWALL LOCATED ON THE NORTH SIDE OF THE PARKING LOT BEHIND THE CHILD DEVELOPMENT CENTER AT ITS INTSERCTION WITH HURRICAN LANE

SWP3 NOTES

1. REFERENCE SHEET "C3.10" FOR STORM WATER POLLUTION PREVENTION STANDARD DETAILS.
2. EXECUTION AND CONSTRUCTION METHODS FOR STORM WATER POLLUTION PREVENTION PLAN SHALL BE IN CONFORMANCE WITH "THE STORM WATER MANAGEMENT HANDBOOK FOR CONSTRUCTION ACTIVITIES BY HARRIS COUNTY/HARRIS COUNTY FLOOD CONTROL DISTRICT AND CITY OF HOUSTON.
3. CONTRACTOR SHALL PROVIDE STABILIZED CONSTRUCTION EXIT AT A LOCATION APPROVED BY OWNER. THE MINIMUM SIZE REQUIRED TO KEEP STREET CLEAN AND FREE OF MUD CARRIED BY CONSTRUCTION VEHICLES SHALL BE UTILIZED.
4. SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO DISTURBING UPSTREAM AREAS AND SHALL REMAIN UNTIL PERMANENT SOIL STABILIZATION/COVER IS IN PLACE.
5. CONTRACTOR SHALL PROTECT ALL STORM SEWER INLETS WITH INLET PROTECTION BARRIER (IPB), OR SAND BAGS.
6. ALL NEW DEVELOPMENT AND SIGNIFICANT REDEVELOPMENT MUST SUBMIT FOR A STORM WATER QUALITY (SWQ) PERMIT FROM HARRIS COUNTY, IF ANY PORTION OR A PROJECT DRAINS DIRECTLY INTO A MUNICIPAL SEPARATE STORM SEWER SYSTEM OWNED BY HARRIS COUNTY (I.E. ROADSIDE DITCHES) AND/OR THE HARRIS COUNTY FLOOD CONTROL DISTRICT (HCFCD CHANNELS AND PONDS). COPIES OF THE SWQ PERMITS, SWP3, CONSTRUCTION SITE NOTICE, AND NOTICE OF INTENT (NOI), IF REQUIRED, MUST BE SUBMITTED TO THE CITY OF HOUSTON AS PART OF THE PERMIT PROCESS.

NOTE

1. ALL DISTURBED AREAS SHALL BE RE-VEGETATED AND SHALL ALSO MEET ANY HARRIS COUNTY REQUIREMENTS WHERE APPLICABLE
2. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY INSPECTOR AT TIME OF CONSTRUCTION.
3. STORM WATER QUALITY BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AND ADHERED TO DURING ALL PHASES OF CONSTRUCTION. REFERENCE SW3P NOTES THIS SHEET. REFERENCE SHT. "C3.10" FOR STORM WATER POLLUTION PREVENTION STANDARDS AND DETAILS.

CONSTRUCTION ACCESS

EXIST. DRIVES TO SERVE AS CONSTRUCTION ACCESS IN LIEU OF STABILIZED CONSTRUCTION ENTRY/EXIT.

LEGEND

RSF	REINFORCED SILT FENCE
IPB	INLET PROTECTION BARRIER (IPB)
CTW	CONCRETE TRUCK WASHOUT (CTW) (REF. DETAILS)

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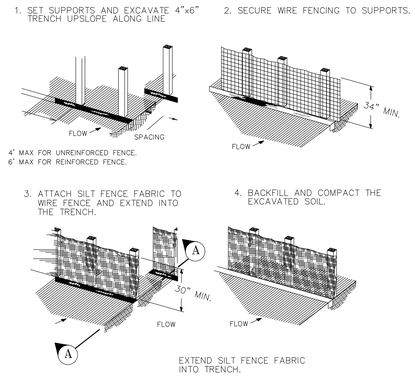
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SWPPP

Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
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C3.00

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CONSTRUCTION NOTES:
SEE SPECIFICATION SECTION NO. 02361–SILT FENCES.

1.

SYMBOL — REINFORCED SILT FENCE

SYMBOL — SILT FENCE

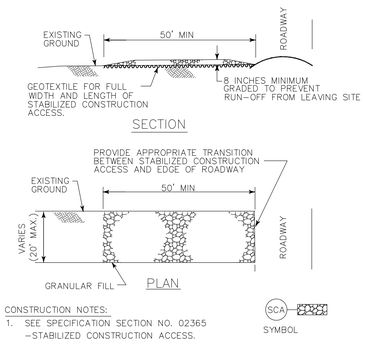
SILT FENCE

N.T.S

FD–TYPE
SYMBOL

GEOTEXTILE NOTES:

MIN. AOS	SIEVE NO.	120 MIN
MAX. AOS	SIEVE NO.	50 MAX
WEIGHT	OZ/SY	4 OZ. MIN

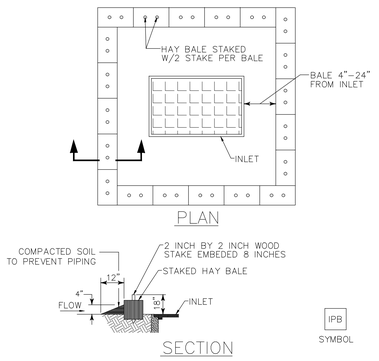


CONSTRUCTION NOTES:
1. SEE SPECIFICATION SECTION NO. 02365 –STABILIZED CONSTRUCTION ACCESS.

SCA
SYMBOL

STABILIZED CONSTRUCTION ACCESS

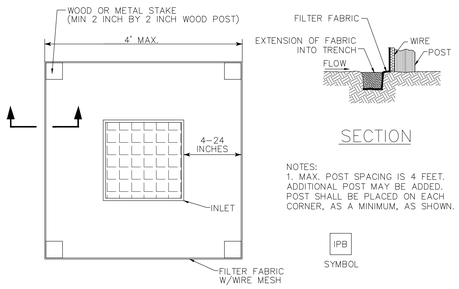
N.T.S



IPB
SYMBOL

HAY BALE INLET SEDIMENT FILTER

N.T.S



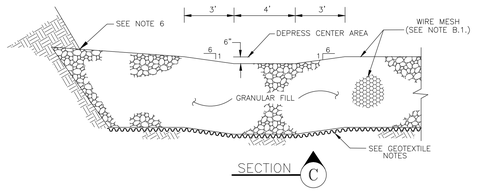
SILT FENCE INLET SEDIMENT FILTER

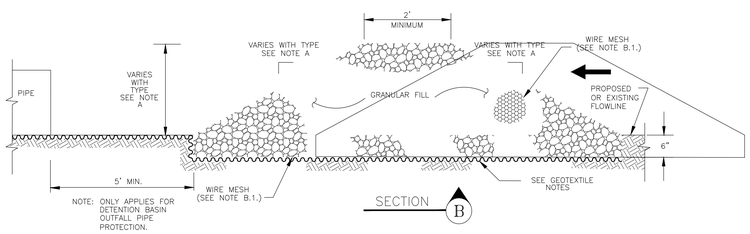
N.T.S

FILTER DAM NOTES:

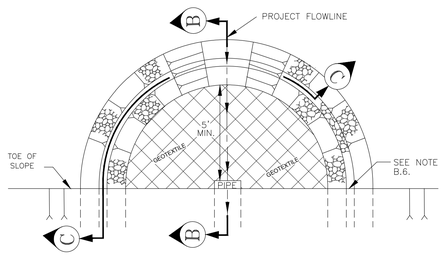
A. TYPES OF FILTER DAMS
1. TYPE 1 (NON–REINFORCED)
   a. HEIGHT – 18–24 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH – 2 FEET (MINIMUM)
   c. SLOPES – 2:1 (MAXIMUM).
2. TYPE 2 (REINFORCED).
   a. HEIGHT – 18–36 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH – 2 FEET (MINIMUM).
   c. SLOPES – 2:1 (MAXIMUM).
3. TYPE 3 (REINFORCED)
   a. HEIGHT – 36–48 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH – 2 FEET (MINIMUM).
   c. SLOPES – 3:1 (MAXIMUM).
4. TYPE 4 (GABION)
   a. HEIGHT – 30 INCHES (MINIMUM). MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH – 2 FEET (MINIMUM).
5. TYPE 5. AS SHOWN ON THE PLANS.

B. CONSTRUCT FILTER DAMS ACCORDING TO THE FOLLOWING CRITERIA UNLESS SHOWN OTHERWISE ON THE PLANS.
1. TYPE 2 AND 3 FILTER DAMS: SECURE WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1 INCH DIAMETER HEXAGONAL OPENINGS.
2. GRANULAR FILL:
   a. PLACE ON MESH TO HEIGHT AND SLOPES SHOWN ON PLANS OR AS SPECIFIED BY THE ENGINEER.
   b. 3–5 INCHES FOR ROCK FILTER DAM TYPES 1,2, AND 4 AND 4–8 INCHES FOR ROCK FILTER DAM TYPE 3. REFER TO GRANULAR FILL IN SPECIFICATION SECTION NO. 02378–RIPRAP AND GRANULAR FILL.
3. WIRE MESH: FOLD AT UPSTREAM SIDE OVER GRANULAR FILL AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOG RINGS.
4. IN STREAMS: SECURE OR STAKE MESH TO STREAM BED PRIOR TO AGGREGATE PLACEMENT.
5. SEE SPECIFICATION SECTION NO. 02364–FILTER DAMS.
6. EMBED ONE FOOT MINIMUM INTO SLOPE AND RAISE ONE FOOT HIGHER THAN CENTER OF DEPRESSED AREA AT SLOPE.

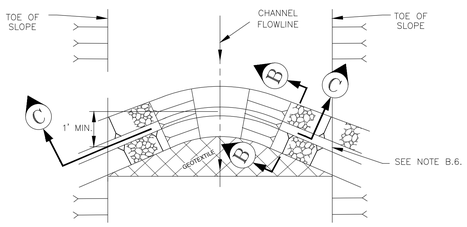




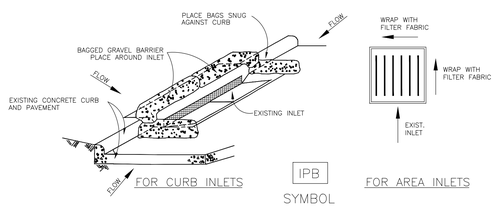
FILTER DAM



FILTER DAM AT DETENTION BASIN OUTFALL PIPE PLAN



IN-CHANNEL FILTER DAM PLAN



IPB
SYMBOL

GENERAL NOTES:
1. BAGS OR WATTLES CAN BE USED FOR THIS APPLICATION.
2. PROVIDE WOVEN OR UNWOVEN GEOTEXTILE FILTER FABRIC FOR BAGS.
3. PROVIDE COARSE GRAVEL AND AGGREGATE MIX FOR FILL MATERIAL FOR BAGS. USE ONLY PARTICLES CONSISTING OF CLEAN, HARD, DURABLE MATERIALS FREE FROM ADHERENT COATINGS, SALT, ALKALI, DIRT, CLAY, LOAM, SHALE, SOFT OR FLAKY MATERIALS, OR ORGANIC AND INJURIOUS MATTER.
4. REMOVE SEDIMENT DEPOSIT WHEN THE SEDIMENT HAS ACCUMULATED TO ONE–THIRD THE HEIGHT OF THE BARRIER.

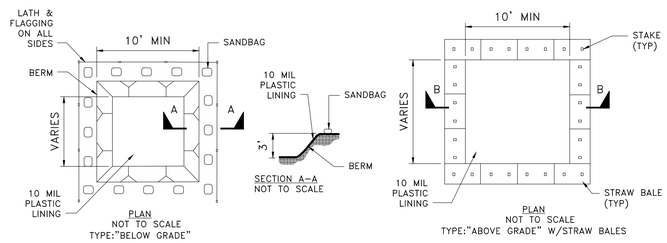
INLET PROTECTION BARRIERS FOR STAGE II INLETS BAGGED GRAVEL BARRIER

CONCRETE WASHOUT

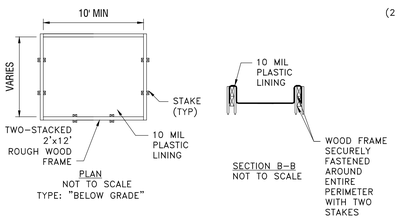
1. COLLECT AND RETAIN ALL CONCRETE WASHOUT WATER AND SOLIDS IN LEAK PROOF CONTAINER SO AS TO PREVENT CAUSTIC MATERIAL FROM REACHING SOIL SURFACE AND MIGRATING TO SURFACE WATERS, GROUND WATER AND STORM DRAINS.
2. COLLECTED CONCRETE WASHOUT WATER AND SOLIDS SHOULD BE RECYCLED PER STORM WATER BEST MANAGEMENT PRACTICES.
3. ACCEPTABLE WASHOUT CONTAINERS FOR COLLECTING, RETAINING & RECYCLING THE WASHWATER AND SOLIDS:

   A. CHUTE WASHOUT BOX–MOUNTED ON BACK OF READY MIX TRUCK.
   B. CHUTE WASHOUT BUCKET & PUMP
   C. HAYBALE / SANDBAG / WOODFRAME & PLASTIC LINING WASHOUT PIT
   D. VINYL WASHOUT CONTAINER
   E. METAL WASHOUT CONTAINER

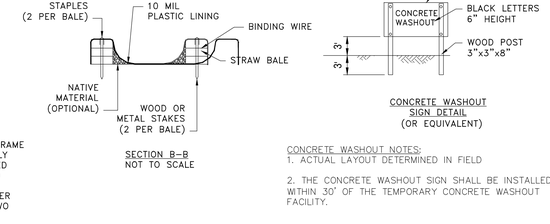
4. CONCRETE WASHOUT FACILITIES, SUCH AS WASHOUT PITS AND VINYL OR METAL WASHOUT CONTAINERS, SHOULD BE PLACED IN LOCATIONS THAT PROVIDE CONVENIENT ACCESS TO CONCRETE TRUCKS, PREFERABLY NEAR THE AREA WHERE THE CONCRETE IS BEING POURED.
5. CONCRETE WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES, OR WATERBODIES.
6. APPROPRIATE GRAVEL OR ROCK BASE SHOULD COVER APPROACHES TO CONCRETE WASHOUT FACILITIES WHEN LOCATED ON UNDEVELOPED PROPERTY. LARGE SITES WITH EXTENSIVE CONCRETE WORK SHOULD PROVIDE MULTIPLE LOCATIONS FOR EASE OF USE BY READY MIXED TRUCK DRIVERS.
7. IF THE WASHOUT AREA IS NOT WITHIN VIEW FROM THE POUR LOCATION, SIGNAGE SHOULD BE INSTALLED TO DIRECT TRUCK DRIVERS TO (CTW) LOCATION.
8. CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY AND AFTER HEAVY RAINFALL TO CHECK FOR LEAKS, IDENTIFY ALL PLASTIC LININGS AND SIDEWALLS THAT MAY HAVE BEEN DAMAGED BY CONSTRUCTION ACTIVITIES, AND DETERMINE WHETHER THEY HAVE BEEN FILLED TO 75 PERCENT CAPACITY.
9. BEFORE HEAVY RAINFALL, THE WASHOUT CONTAINER'S LIQUID LEVEL SHOULD BE LOWERED BY APPROVED METHOD OR CONTAINER SHOULD BE COVERED TO AVOID OVERFLOW DURING RAINFALL.
10. WHEN WASHOUT CONTAINER IS FILLED TO OVER 75 PERCENT OF ITS CAPACITY, THE WASHWATER SHOULD BE VACUUMED OFF OR ALLOWED TO EVAPORATE TO AVOID OVERFLOWS. WHEN REMAINING CEMENTIOUS SOLIDS HAVE HARDENED, THEY SHOULD BE REMOVED AND RECYCLED.
11. DAMAGE TO THE CONTAINER SHOULD BE REPAIRED/REPLACED PROMPTLY.



SANDBAG & PLASTIC LINING PIT



WOODFRAME & PLASTIC LINING PIT



HAYBALE & PLASTIC LINING PIT

CONCRETE WASHOUT NOTES:
1. ACTUAL LAYOUT DETERMINED IN FIELD
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

CONCRETE TRUCK WASHOUT DETAIL(S)

SCALE: N.T.S.



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346-570-2418

CIVIL ENGINEER
CSF CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110



TBPE Firm No. F-4395

Project Status:
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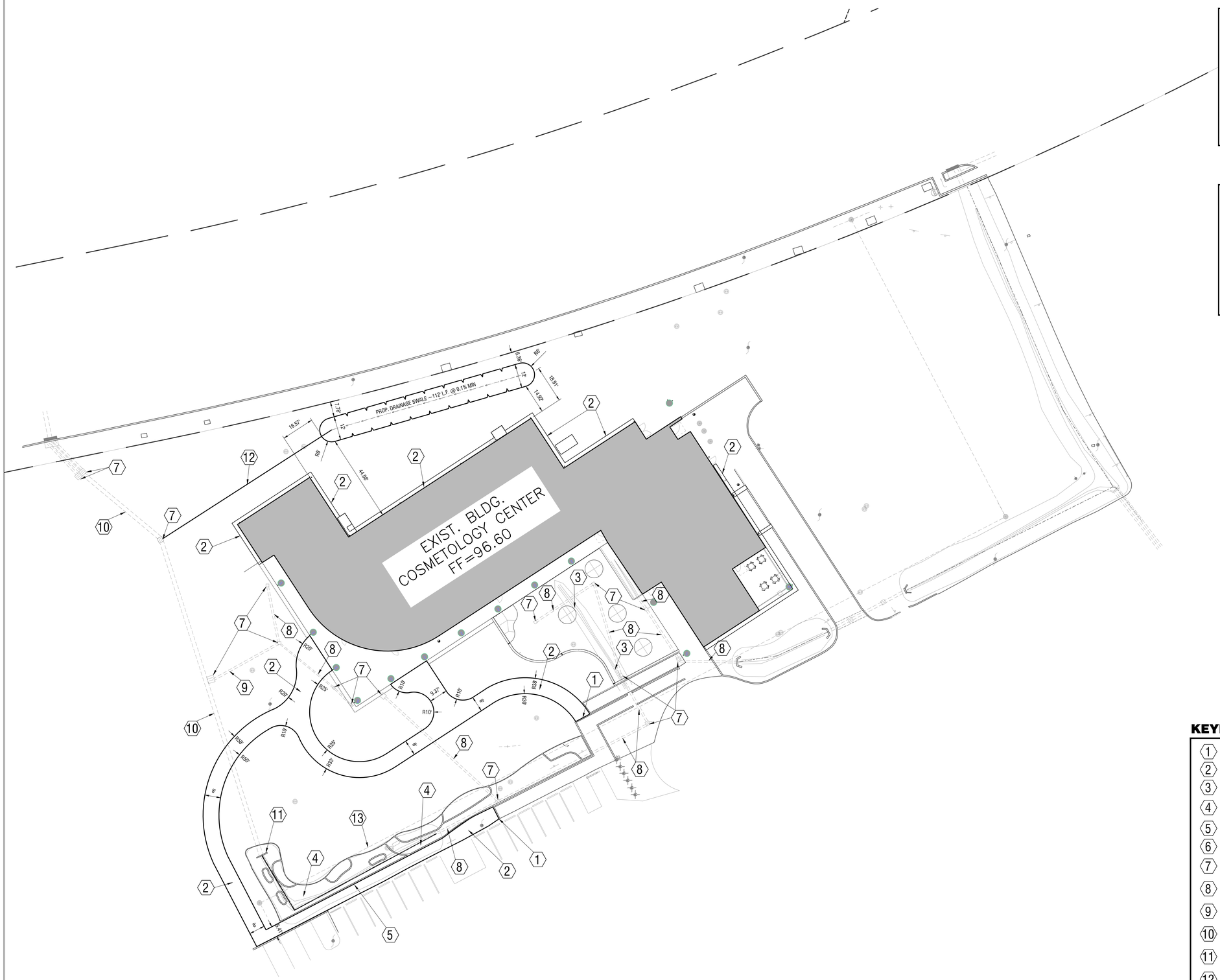
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2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title

SWPPP DETAILS

Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C3.10



KEYED SCHEDULE

1	EXIST/NEW JOINT (REF. SHT. "C8.10")
2	4" CONC. WALK PAVEMENT (REF. SHT. "C8.00" & "C8.10")
3	IN-FILL EXISTING DRAINAGE SWALE
4	REGRADE/RE-CUT EXISTING DRAINAGE SWALE
5	6" CONCRETE CURB (REF. SHT. "C8.10")
6	PROP. 24" WIDE CONC. MOW STRIP (REF. ARCH.)
7	EXISTING STORM SEWER DRAINAGE CATCH BASIN/GRATE INLET (REF. TOPOGRAPHIC SURVEY)
8	EXISTING 12" STORM SEWER DRAINAGE PIPE (PVC) (REF. TOPOGRAPHIC SURVEY)
9	EXISTING 16" STORM SEWER DRAINAGE PIPE (HDPE) (REF. TOPOGRAPHIC SURVEY)
10	EXISTING 24" STORM SEWER DRAINAGE PIPE (HDPE) (REF. TOPOGRAPHIC SURVEY)
11	EXISTING STORM SEWER DRAINAGE HEADWALL (REF. TOPOGRAPHIC SURVEY)
12	PROP. 12" STORM SEWER DRAINAGE PIPE (HDPE)
13	EXISTING 8" SANITARY SEWER DRAINAGE PIPE (PVC) (REF. TOPOGRAPHIC SURVEY)
14	EXISTING SANITARY SEWER MANHOLE (REF. TOPOGRAPHIC SURVEY)

N

DIMENSION CONTROL PLAN
SCALE: 1"=20'

FLOODPLAIN INFORMATION

THIS PROPERTY IS NOT LOCATED IN A FEDERAL INSURANCE ADMINISTRATION DESIGNATED FLOOD HAZARD AREA AND WITHIN ZONE "X" AS PER FEMA FIRM MAP PANEL # 48201C0270M, DATED 10/16/2013. INFORMATION PROVIDED BY VISUAL OR GRAPHIC PLOTTING ONLY. WE ARE NOT RESPONSIBLE FOR EXACT DETERMINATION.

THE FEMA WEBSITE (WWW.MSC.FEMA.GOV) WAS CHECKED ON MAY 31, 2024.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE ENGINEER.

BENCHMARK INFORMATION

AS PER TOPOGRAPHIC SURVEY BY OTHERS:
BENCHMARK: TSARP RM NO. 110325 - ELEV. 95.62 (NAVD 1988, 2001 ADJUSTMENT) BRASS DISK IN TOP OF CURB INLET ON THE SOUTH SIDE OF W.W. THORNE BLVD. OPPOSITE THE ENTRANCE DRIVE TO NIMITZ HIGH SCHOOL

TBM "A" - ELEV. 94.44
SQUARE BOX CUT IN TOP OF INLET LOCATED ON THE SOUTH SIDE OF W.W. THORNE BLVD. JUST NORTHWEST OF THE NORTHWESTERLY BUILDING CORNER OF THE CHILD DEVELOPMENT CENTER

TBM "B" - ELEV. 93.87
SQUARE BOX CUT IN TOP OF THE CONCRETE HEADWALL LOCATED ON THE NORTH SIDE OF THE PARKING LOT BEHIND THE CHILD DEVELOPMENT CENTER AT ITS INTSERCTION WITH HURRICAN LANE

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7/22/2025

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1	07/01/25	Addendum-1- Issued by LSC Procurement
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Sheet Title

DIMENSION CONTROL PLAN

Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C4.00

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DRAINAGE AREA MAP PLAN
SCALE: 1"=20'

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SQUARE BOX CUT IN TOP OF THE CONCRETE HEADWALL LOCATED ON THE NORTH SIDE OF THE PARKING LOT BEHIND THE CHILD DEVELOPMENT CENTER AT ITS INTSERCTION WITH HURRICAN LANE

NOTE

NO NEW DRAINAGE INFRASTRUCTURE IS BEING PROPOSED. REFERENCE SHEET C4.00 DIMENSION CONTROL PLAN FOR EXISTING DRAINAGE SYSTEM.

STORM SEWER CALCULATIONS (2-YR)

Project: LONESTAR COSMETOLOGY
Job No: 5309
By: SJM
Date: 7/10/2025
Rainfall Frequency (years): 2

b = 48.35
d = 9.070
e = 0.7244

$$I = \frac{b}{(d + TC)^e}$$

* or Inlet elevation, top of rim elevation, top of bank

								LINE				DESIGN											
From MH	To MH	Sub Area (ac)	Sub Runoff Coeff. C	Total Area A (ac)	Sum of C A	Intensity I (in / hr)	Sum of Flows Q (cfs)	Time of Conc. TC (min)	Reach Length (ft)	Diameter (in) or span x rise (ft)		Slope (%)	Manning's "n"	Capacity Q (cfs)	Velocity V (fps)	drop at down stream manhole	Actual Velocity (fps)	Hydraulic Gradient (%)	Change in Head (ft)	Elev. Up Stream (ft)	Elev. Down Stream (ft)	Top of Grate * (ft)	Flowline Upstream (ft)	Flowline Downstream (ft)	Upstream Top of Pipe (ft)	Downstream Top of Pipe) (ft)
STORM SEWER SYSTEM																										
SWALE	EXIST	0.17	0.80	0.17	0.14	3.98	0.54	22.32	101	12		0.45	0.013	2.39	3.04		2.45	0.450	0.455	93.75	93.30	94.75	92.75	92.30	93.75	93.30

STORM SEWER CALCULATIONS (100-YR)

Project: LONESTAR COSMETOLOGY
Job No: 5309
By: SJM
Date: 7/10/2025
Rainfall Frequency (years): 100

b = 60.66
d = 4.440
e = 0.5797

$$I = \frac{b}{(d + TC)^e}$$

* or Inlet elevation, top of rim elevation, top of bank

								LINE				DESIGN											
From MH	To MH	Sub Area (ac)	Sub Runoff Coeff. C	Total Area A (ac)	Sum of C A	Intensity I (in / hr)	Sum of Flows Q (cfs)	Time of Conc. TC (min)	Reach Length (ft)	Diameter (in) or span x rise (ft)		Slope (%)	Manning's "n"	Capacity Q (cfs)	Velocity V (fps)	drop at down stream manhole	Actual Velocity (fps)	Hydraulic Gradient (%)	Change in Head (ft)	Elev. Up Stream (ft)	Elev. Down Stream (ft)	Top of Grate * (ft)	Flowline Upstream (ft)	Flowline Downstream (ft)	Upstream Top of Pipe (ft)	Downstream Top of Pipe) (ft)
STORM SEWER SYSTEM																										
SWALE	EXIST	0.17	0.80	0.17	0.14	9.02	1.23	22.32	101	12		0.45	0.013	2.39	3.04		3.04	0.450	0.455	93.75	93.30	94.75	92.75	92.30	93.75	93.30

LEGEND

- PROP. GRATE INLET
- PROP. CATCH BASIN
- DRAINAGE AREA BOUNDARY
- PROPOSED STORM SEWER LINE
- X-X / X.XX — DRAINAGE AREA SYSTEM AND ACREAGE
- X.XX / X.XX — CUMM. DRAINAGE AREA (AC) CUMM. FLOW (CFS)
- FLOW DIRECTION
- EXISTING SHEET FLOW DIRECTION

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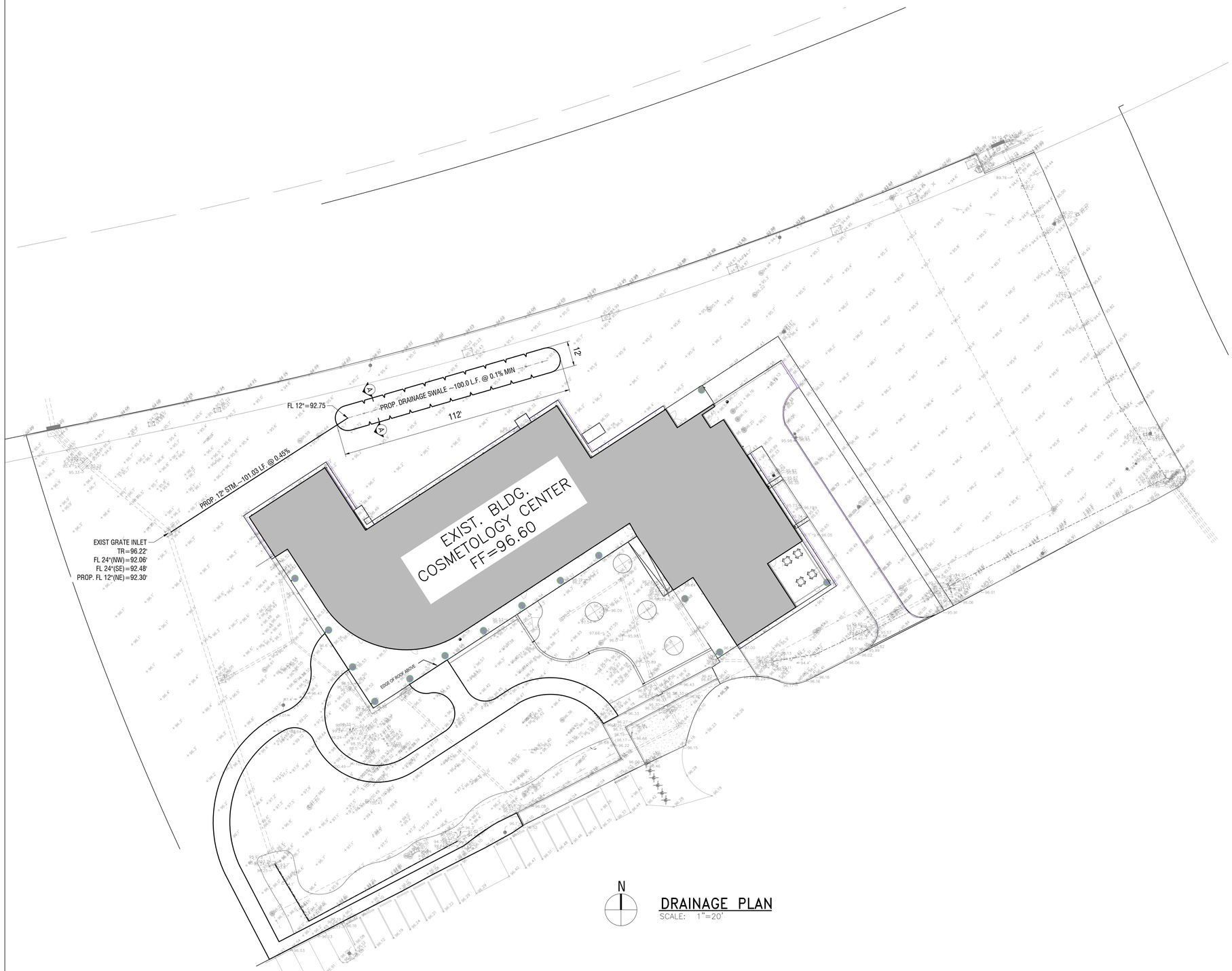
Sheet Title

DRAINAGE AREA MAP PLAN

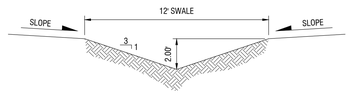
Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C5.00

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DRAINAGE PLAN
SCALE: 1"=20'



SECTION A–A
SCALE: N.T.S.

FLOODPLAIN INFORMATION

AS PER FEMA FIRM MAP PANEL # 48167C0265G, DATED 08/15/2019. THIS PROPERTY IS SITUATED IN WITHIN SHADED ZONE "X", DEFINED AS AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

INFORMATION PROVIDED BY VISUAL OR GRAPHIC PLOTTING ONLY. WE ARE NOT RESPONSIBLE FOR EXACT DETERMINATION. THE FEMA WEBSITE (www.msc.fema.gov) WAS CHECKED ON FEBRUARY 22, 2023.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE ENGINEER.

BENCHMARK INFORMATION

AS PER TOPOGRAPHIC SURVEY BY OTHERS:
HORIZONTAL CONTROL - ALL COORDINATES ARE GRID COORDINATES U.S. SURVEY FEET BASED ON TEXAS COORDINATE SYSTEM OF 1983 (NAD83, CORS) SOUTH CENTRAL ZONE. NO GROUND SCALE FACTOR HAS BEEN APPLIED TO THIS DRAWING.

VERTICAL CONTROL - PROJECT ELEVATIONS ARE BASED ON ELEVATION OF 7.81 AT NGS BENCHMARK "HGCSD-58 RESET, PID AJ6399" NAVD88-GEOID 18.

PRIMARY BENCHMARK: DESIGNATION: HGCSD-58 RESET
PID: AJ6399
HORIZONTAL: NAD83 (2011)
VERTICAL: NAVD88 (GEOID 18)
ELEVATION: 7.81 FEET

STORM SEWER

1. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 12" VERTICAL CLEARANCE BETWEEN STORM SEWER AND OTHER EXISTING OR NEW UTILITIES PIPING.
2. 6-INCH TO 12-INCH STORM SEWER SHALL BE PVC SDR-35 PER ASTM 3034. PVC JOINTS SHALL BE PUSH ON, FLEXIBLE ELASTOMERIC GASKET CONFORMING TO ASTM D-3212.
3. STORM SEWER PIPES 18-INCH AND LARGER SHALL BE HDPE POLYETHYLENE PIPE WITH A SMOOTH INTERIOR WALL. PIPE(S) SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS UNLESS NOTED OTHERWISE.
4. PIPE CROSSINGS OR PIPES INSTALLED IN STREET R.O.W. SHALL BE REINFORCED CONCRETE PIPE PER ASTM C-76, CLASS III. ALL SIZES OF CONCRETE PIPE SHALL BE INSTALLED WITH APPROVED RUBBER GASKET JOINTS PER ASTM.
5. BACKFILL OF SEWER TRENCH TO BE COMPACTED TO 95% STANDARD PROCTER DENSITY AT OPTIMUM MOISTURE IN 6" LIFTS. INSTALL PIPE FROM LOW END IN AN UPSTREAM DIRECTION.
6. ALL GRATE INLETS SHALL HAVE TRAFFIC DUTY CAST-IRON GRATES TO MEET HS-20 LOADING.
7. STORM SEWER BEDDING AND BACKFILL, ADJOINING INLETS AND MANHOLES SHALL BE CEMENT STABILIZED SAND IN ACCORDANCE WITH THE DETAILS.
8. INLETS IN THE PAVED AREAS ARE TO BE PLACED ALIGNED WITH THE CENTERLINE OF DRIVING AISLES OR AS SHOWN ON CONSTRUCTION DOCUMENTS.
9. CONTRACTOR TO FIELD VERIFY LOCATION & ELEVATION OF EXISTING UTILITY LINES PRIOR TO CONSTRUCTION.
10. FIELD ADJUST ROOF DRAIN LINE CONNECTIONS AS NEEDED TO ENSURE POSITIVE DRAINAGE. MAINTAIN 18" COVER IN ALL YARD AREAS WITH ROOF DRAIN LINE CONNECTIONS.

LEGEND

- TG = TOP OF GRATE
- TR = TOP OF RIM
- C.B.=CATCH BASIN
- C.O.=CLEANOUT
- D.S. = DOWNSPOUT
- FL = FLOW LINE
- G.I. = AREA GRATE INLET
- RDC=ROOF DOWNSPOUT CONNECTION
- PROP. GRATE INLET
- PROP. CATCH BASIN
- PROPOSED STORM SEWER LINE

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LANDSCAPE
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713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
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11301 FALLBROOK DR STE 320
832-678-2110

STATE OF TEXAS
CARLOS A. GUTIERREZ
68320
LICENSED
PROFESSIONAL ENGINEER
07/22/2025

TBPE Firm No. F-4395

Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

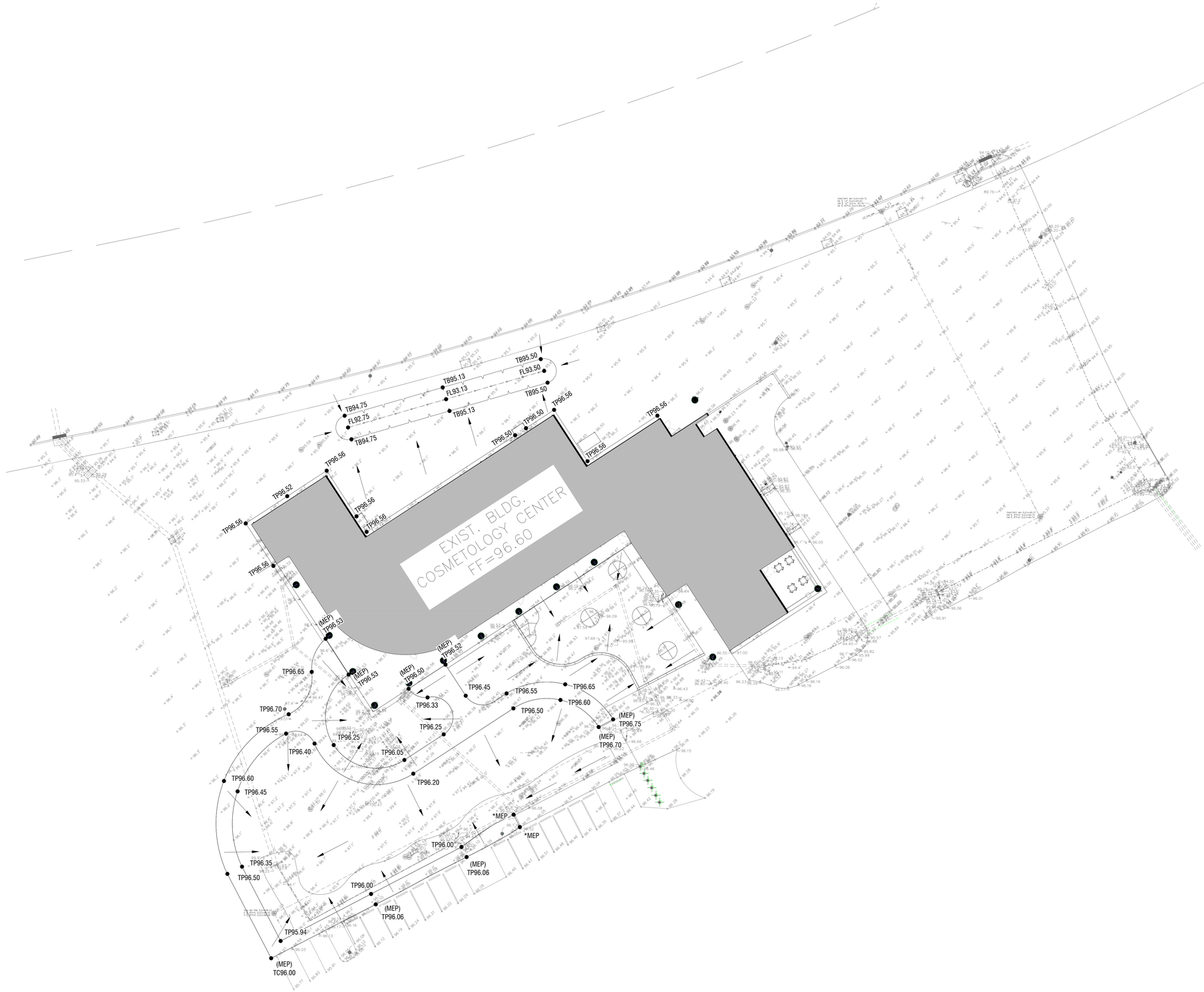
Sheet Title

DRAINAGE PLAN

Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C6.00

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N

GRADING PLAN
SCALE: 1"=20'

FLOODPLAIN INFORMATION

THIS PROPERTY IS NOT LOCATED IN A FEDERAL INSURANCE ADMINISTRATION DESIGNATED FLOOD HAZARD AREA AND WITHIN ZONE "X" AS PER FEMA FIRM MAP PANEL # 48201C0270M, DATED 10/16/2013. INFORMATION PROVIDED BY VISUAL OR GRAPHIC PLOTTING ONLY. WE ARE NOT RESPONSIBLE FOR EXACT DETERMINATION.

THE FEMA WEBSITE (WWW.MSC.FEMA.GOV) WAS CHECKED ON MAY 31, 2024.

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BENCHMARK INFORMATION

AS PER TOPOGRAPHIC SURVEY BY OTHERS:
BENCHMARK: TSARP RM NO. 110325 - ELEV. 95.62 (NAVD 1988, 2001 ADJUSTMENT) BRASS DISK IN TOP OF CURB INLET ON THE SOUTH SIDE OF W.W. THORNE BLVD. OPPOSITE THE ENTRANCE DRIVE TO NIMITZ HIGH SCHOOL

TBM "A" - ELEV. 94.44
SQUARE BOX CUT IN TOP OF INLET LOCATED ON THE SOUTH SIDE OF W.W. THORNE BLVD. JUST NORTHWEST OF THE NORTHWESTERLY BUILDING CORNER OF THE CHILD DEVELOPMENT CENTER

TBM "B" - ELEV. 93.87
SQUARE BOX CUT IN TOP OF THE CONCRETE HEADWALL LOCATED ON THE NORTH SIDE OF THE PARKING LOT BEHIND THE CHILD DEVELOPMENT CENTER AT ITS INTSERCTION WITH HURRICAN LANE

GRADING

1. CONTRACTOR SHALL CUT AND FILL SITE AS REQUIRED TO OBTAIN FINISHED ELEVATIONS SHOWN ON PLANS. COMPACT SELECTED BACKFILL TO 95% STANDARD PROCTOR DENSITY AS PER ASTM D-698.
2. YARD AREAS, SIDEWALKS AND PAVEMENT SHALL BE GRADED TO DRAIN AWAY FROM THE BUILDING(S). FINISHED SURFACES IN ACCESSIBLE AREAS SHALL CONFORM TO THE REQUIREMENTS AMERICAN WITH DISABILITIES ACT AND TEXAS ACCESSIBILITY STANDARDS. ACCESSIBLE ROUTES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ARCHITECTURAL DRAWINGS. ALL PAVING, SIDEWALKS AND RAMPS IN ACCESSIBLE AREAS SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, TEXAS ACCESSIBILITY STANDARDS AND THE THE FOLLOWING:

   A. PARKING AND LOADING AREAS - MAXIMUM SLOPE OF 1:50 IN ALL DIRECTIONS IN ACCESSIBLE PARKING SPACES AND AISLES.
   B. ACCESSIBLE ROUTES - MAXIMUM SLOPE OF 1:20 IN THE DIRECTION OF TRAVEL AND MAXIMUM CROSS SLOPE OF 1:50
   C. BUILDING ENTRANCES AND EXITS - AT ALL LOCATIONS 5'X5' (MINIMUM) ACCESSIBLE, CONCRETE WALK WITH THE MAXIMUM SLOPE OF 1:50 IN ALL DIRECTIONS.

3. CONTRACTOR SHALL GRADE THE SITE TO MATCH EXISTING GROUND AT THE LIMITS OF THE PROJECT SITE. ALL DRAINAGE ENTERING THE PROJECT AREA SHALL BE INTERCEPTED IN THE FINAL GRADE. TRANSITIONS TO EXISTING GROUND THAT ARE DIFFERENT FROM THE PLANS SHALL BE COORDINATED PRIOR TO FINAL GRADING.
4. ALL AREAS WITHIN THE PROJECT SITE SHALL BE GRADED TO DRAIN TO ON-SITE STORM SEWERS.
5. CONTRACTOR SHALL VERIFY ALL ELEVATIONS, DIMENSIONS AND CONDITIONS IN THE FIELD BEFORE COMMENCING ANY WORK. CONTRACTOR SHALL REPORT ANY CONFLICTS OR VARIATIONS AND RESOLVE ALL CHANGES WITH THE OWNER AND/OR ENGINEER PRIOR TO COMMENCING WORK.
6. EXCAVATIONS MATERIAL SHALL BE DISPOSED OF PROPERLY.
7. TOP OF WALK ELEVATIONS AT ALL DOORS (REF. PLAN)

LEGEND

- FL = FLOW LINE
- TC = TOP OF CURB
- TG = TOP OF GRATE
- TJ = TOP OF JUNCTION BOX
- TP = TOP OF PAVEMENT
- TW = TOP OF WALK
- * =MATCH EXIST
- DIRECTION OF FLOW (SLOPE)

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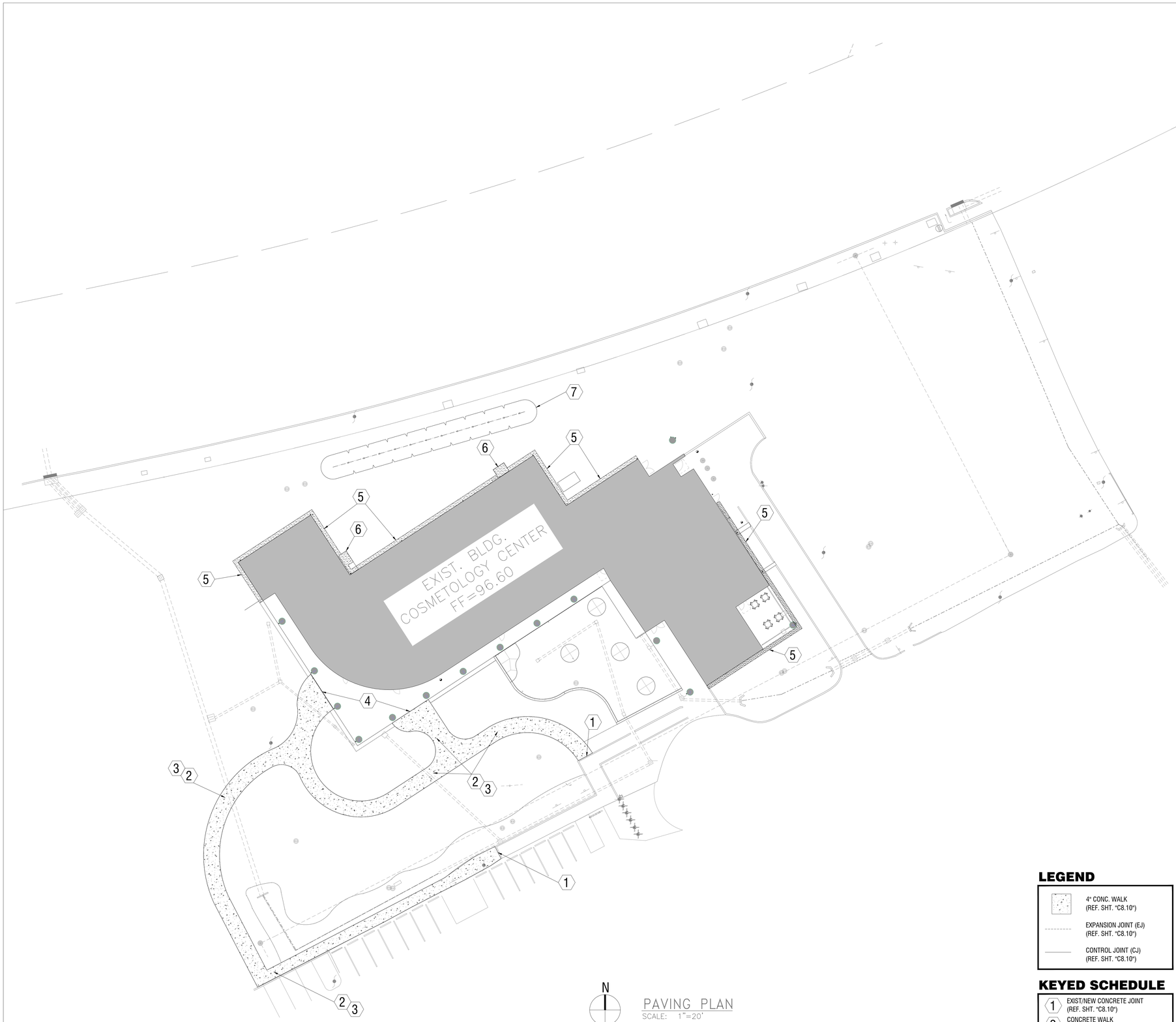
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3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title

GRADING PLAN

Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C7.00



N

PAVING PLAN
SCALE: 1"=20'

LEGEND

- 4" CONC. WALK (REF. SHT. "C8.10")
- EXPANSION JOINT (EJ) (REF. SHT. "C8.10")
- CONTROL JOINT (CJ) (REF. SHT. "C8.10")

KEYED SCHEDULE

1. EXIST/NEW CONCRETE JOINT (REF. SHT. "C8.10")
2. CONCRETE WALK (REF. SHT. "8.10")
3. REF. ARCH FOR JOINT LAYOUT
4. TIE-INTO EXISTING. CONC. SLAB
5. 24" WIDE CONC. MOW-STRIP (REF. ARCH)
6. CONC. SLAB (REF. ARCH)
7. PROP. DRAINAGE SWALE (REF. C6.00)

GEOTECHNICAL

RECOMMENDATIONS FOR:

A. CONSTRUCTION GUIDELINES
B. PAVING & SUBGRADE MATERIALS
C. PROCEDURES & SITE PREPARATION
D: MAINTENANCE

TO BE IN CONFORMANCE WITH GEOTECHNICAL ENGINEERING STUDY
PREPARED BY:

PROJECT NO.:
DATED:

PREPARED FOR:

PROJECT:

PAVING

1. PAVING AND SUBGRADE MATERIALS AND PROCEDURES TO BE IN CONFORMANCE WITH PROJECT DRAWINGS, SOILS REPORT (GEOTECHNICAL), DETAILS ON PLANS AND PROJECT SPECIFICATIONS.
2. CONTRACTOR SHALL CUT AND FILL SITE AS REQUIRED TO OBTAIN FINISHED ELEVATIONS SHOWN ON PLANS. COMPACT SELECTED BACKFILL TO 95% STANDARD PROCTOR DENSITY AS PER ASTM D-698.
3. CONTRACTOR TO PROVIDE TEMPORARY MEASURES TO CONTROL STORM WATER RUN OFF DURING CONSTRUCTION AS REQUIRED TO MINIMIZE EROSION AND POLLUTION. (REF. SHT. "C3.00" , "C3.01")
4. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS FROM CONTROLLING GOVERNMENTAL AGENCIES
5. SITE PREPARATION OF THE SUBGRADE SHALL BE 6" BELOW PAVEMENT AND BE STABILIZED AND COMPACTED IN ACCORDANCE WITH TXDOT SPECIFICATION ITEM 260/264. SUB-GRADE SHALL BE STABILIZED WITH LIME USING METHOD (A):
   A. ITEM 223 FROM THE CURRENT REVISION OF THE HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT - ENGINEERING DIVISION (HCPID-ED) SPECIFICATIONS ENTITLED "SPECIFICATIONS FOR THE CONSTRUCTION OF ROADS AND BRIDGES WITHIN HARRIS COUNTY, TEXAS.
   THE MIXTURE SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY (AS PER ASTM D-698) WITH MOISTURE CONTENT WITHIN ±2% OF OPTIMUM MOISTURE CONTENT. LIME TREATMENT OF SUBGRADE SHALL BE APPLIED AS RECOMMENDED WITHIN GEO-TECHNICAL STUDY AS OUTLINED UNDER SECTION XXX "PAVEMENT SUBGRADE". REFERENCE GEO-TECHNICAL STUDY.
6. MINIMUM CONCRETE PAVEMENT STRENGTH @ AT 28 DAYS (3,000 PSI), FLEXURAL STRENGTH/MODULUS OF RUPTURE SHALL MEET MINIMUM REQUIREMENTS PER ACI. COARSE AGGREGATE SHALL HAVE A MINIMUM DIAMETER OF ONE AND ONE-HALF (1-1/2) INCHES OR AS RECOMMENDED IN A GEO-TECHNICAL REPORT. SAW CUT PAVEMENT JOINTS SHALL BE COMPLETED WITHIN 12 TO 24 HOURS AFTER CONCRETE IS PLACED.
7. USE OF NEWLY CONSTRUCTED PAVEMENT FOR PURPOSES OF STAGING, STORAGE OF MATERIALS OR OTHER MEANS SHALL BE PROHIBITED WITHOUT THE OWNERS APPROVAL. TRAFFIC SHALL BE PROHIBITED ON NEWLY CONSTRUCTED PAVEMENT DURING THE CURING PROCESS AS LISTED IN NOTE NO. 8 BELOW OR WHERE GEO-TECHNICAL RECOMMENDATIONS ARE PROVIDED, THE MORE STRINGENT OF THE TWO. CONTRACTOR SHALL LIMIT THE USE OF NEWLY PAVED AREAS (WHERE APPROVED BY OWNER) TO THE EXTENT THAT POST-USE CLEANING RESTORES PAVEMENT TO THEIR INITIAL FRESH LOOK AND CONDITION.
8. CONCRETE SHALL BE CURED BY PROTECTING IT AGAINST LOSS OF MOISTURE, RAPID TEMPERATURE CHANGE, FOR AT LEAST 7 DAYS AFTER CONCRETE PLACEMENT.
9. REINFORCING STEEL SHALL BE NEW BILLET STEEL AS FOLLOWS: REBAR SHALL CONFORM TO ASTM A615, GRADE 60 FOR ALL BARS, WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
10. ALL PAVING SHALL BE CONSTRUCTED ON A STRAIGHT LINE GRADE BETWEEN ELEVATIONS SHOWN ON THE PLANS. CONTRACTOR SHALL CONFIRM IN THE FIELD THAT ALL PAVED AREAS ARE CONSTRUCTED TO DRAIN WITHOUT HOLDING WATER.
11. ISOLATION JOINTS SHALL BE PLACED AT ALL LOCATIONS THAT SITE PAVING & SIDEWALKS ABUT TO THE BUILDING AND OTHER SITE STRUCTURES. ISOLATION JOINTS SHALL HAVE A REMOVABLE TOP STRIP AND SHALL BE SEALED WITH PAVING JOINT SEALANT. (REF. SHT. "C8.10")
12. PAVEMENT JOINT LOCATION SHALL BE SET AS SHOWN ON PLAN. ANY DEVIATION OF PAVEMENT JOINT LOCATION SHOWN SHALL BY SUBMITTED TO ENGINEER & ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. WHERE APPLICABLE, JOINTS FOR CONCRETE PAVEMENTS MAY BE DESIGNED PER ACI 325.12R-02 "GUIDE FOR DESIGN OF JOINTED CONCRETE PAVEMENTS FOR STREETS AND LOCAL ROADS (LATEST REVISION), ACI 330R-01 "GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS". PERIODIC MAINTENANCE WILL BE REQUIRED.
13. CONTRACTOR SHALL CONFIRM EXISTING ELEVATIONS ADJOINING PROPOSED PAVING TO ASSURE THAT COMPLETE PAVING WILL PROPERLY DRAIN AND WILL NOT OBSTRUCT EXISTING DRAINAGE.
14. ALL RECOMMENDATIONS AND PAVEMENT DESIGN CRITERIA SHALL MEET AT LEAST THE MINIMUM COUNTY/GOVERNING AGENCY STANDARDS FOR PAVEMENT DESIGN AND SUBGRADE STABILIZATION WHERE NOT SPECIFICALLY CITED IN A GEO-TECHNICAL REPORT. DESIGN CRITERIA SHALL BE REFERENCED AND VERIFIED WITH GEO-TECHNICAL REPORT.

PAVING CONSTRUCTION JOINTS

1. CONTRACTOR TO PLAN EXACT LOCATION INCLUDING TIMING OF CONSTRUCTION JOINT(S) PRIOR TO START OF CONSTRUCTION.
2. CONSTRUCTION JOINTS (NOT SHOWN IN PLAN) SHALL BE REQUIRED AND PLACED IN A STRATEGIC LOCATION AT THE END OF THE DAYS WORK AND
3. WHERE CONCRETE PLACEMENT IS STOPPED OR INTERRUPTED FOR A PERIOD SUCH THAT THE PREVIOUSLY PLACED CONCRETE HAS SET AND HARDENED.
4. PLACEMENT OF REINFORCEMENT THROUGH A CONSTRUCTION JOINT MAY BE NECESSARY TO ACHIEVE BOND AND PROPER LOAD TRANSFER AND RECOMMENDED WHERE PAVEMENT WILL CARRY HIGHER TRAFFIC LEVELS AND WHERE HEAVY TRUCK TRAFFIC IS EXPECTED. IF THE DESIGN THICKNESS IS LESS THAN 8-INCHES, DOWELS ARE NOT NEEDED. IF THE DESIGN THICKNESS IS 8-INCHES OR GREATER, LARGELY DICTATED BY TRUCK TRAFFIC, THEN DOWELS ARE OFTEN REQUIRED TO REDUCE SLAB PUMPING AND FAULTING. (ACI 325.12R-01, SEC. 4.1.1.2 DOWELED JOINTS). SIZE OF DOWELS SHOULD FOLLOW RECOMMENDATIONS ACCORDING TO PAVEMENT THICKNESS AS OUTLINED IN SECTION. 4.1.1.2.
5. CONSTRUCTION JOINTS SHALL BE KEYED ON THE TWO EDGES OF THE SLAB TO PROVIDE TRANSFER OF LOADS OR TO HELP PREVENT CURLING OR WARPING OF THE TWO ADJACENT EDGES. GALVANIZED METAL KEYS ARE SOMETIMES USED, HOWEVER, A BEVELED 1 INCH BY 2 INCH STRIP, NAILED TO BULKHEADS OR FORM BOARDS, CAN BE USED IN SLABS THAT ARE AT LEAST 5 INCHES THICK TO FORM A KEY WHICH WILL RESIST VERTICAL LOADS AND MOVEMENTS. METAL DOWELS SHOULD BE USED IN SLABS OR PAVEMENTS THAT WILL CARRY HEAVY LOADS AND/OR HIGH/HEAVY TRAFFIC. DOWELS MUST BE CAREFULLY LINED UP AND PARALLEL OR THEY MAY INDUCE RESTRAINT AND CAUSE RANDOM CRACKING AT THE END OF THE DOWEL.
6. REFERENCE ACI 325.12R-02 SEC. 4.2.2 TRANSVERSE CONSTRUCTION JOINTS (GUIDE FOR DESIGN OF JOINTED CONCRETE PAVEMENTS FOR STREETS AND LOCAL ROADS)
7. REFERENCE ACI 330R-7 SEC. 2.7.2 CONSTRUCTION JOINTS
8. (GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS).
9. PROVIDE EXPANSION JOINTS / ISOLATION JOINTS WHERE APPLICABLE BETWEEN SLABS, COLUMNS, WALLS, FOOTINGS AND AROUND FIXED OBJECTS/STRUCTURES SUCH AS BUILDING(S), INLETS, LIGHT POLES AND AT JUNCTIONS OF DRIVEWAYS WITH WALKS, CURBS OR OTHER OBSTRUCTIONS.
10. DETAILS AROUND INLET STRUCTURES WILL AS REMAIN AS SHOWN.
11. (REFERENCE ACI 325.12R-02, APPENDIX C - JOINTING DETAILS FOR PAVEMENTS AND APPURTENANCES).
12. PROVIDE CONTRACTION JOINTS AND JOINT FILLING MATERIALS AS SHOWN ON PLANS AND/OR OUTLINED IN SPECIFICATIONS.
13. ALL JOINT RECOMMENDATIONS, SPECIFICATIONS AND METHODS FOR PROPER JOINTING SHALL COMPLY WITH LATEST REVISION OF "GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS" ACI 330R-01, AND "GUIDE FOR DESIGN OF JOINTED CONCRETE PAVEMENTS FOR STREETS AND LOCAL ROADS" ACI 325.12R-02.

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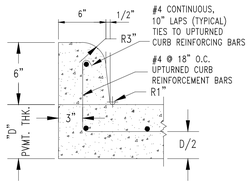
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PAVING PLAN

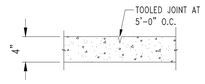
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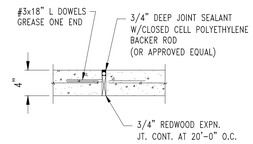


1 CONC. CURB & PAVING DETAIL
SCALE: N.T.S.

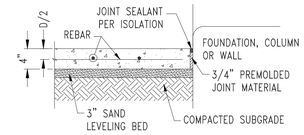


2 WALK JOINT
SCALE: N.T.S.

NOTE:
SEALANT DEPTH-TO-WIDTH RATIO AT CENTER OF JOINT TO BE 1:2
SEALANT SHALL BE A MOISTURE-CURED, SINGLE OR MULTI-COMPONENT, POLYURETHANE-BASE, NON-SAG, ELASTOMERIC SEALANT. APPLICATION AND EXPANSION/CONTRACTION CAPABILITIES SHALL DETERMINE COMPONENT SPECIFIED.

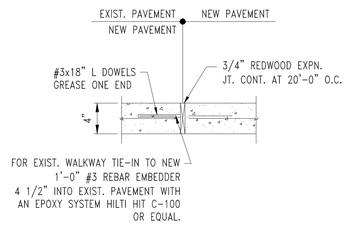


3 WALK EXPANSION JOINT
SCALE: N.T.S.



4 WALK ISOLATION JOINT
SCALE: N.T.S.

5 4" CONCRETE SIDEWALK
SCALE: N.T.S.



6 WALK EXPANSION JOINT/NEW TO EXIST WALKWAY
SCALE: N.T.S.

LONE STAR COLLEGE
NORTH HARRIS

SCHOOL OF COSMETOLOGY
2700 W W THORNE BLVD, 77073

RDLR Architects
ARCHITECTURE PLANNING INTERIORS

800 Sampson St. #104
Houston, TX 77003

713.868.3121
www.rdlr.com

CLIENT:
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2700 W W THORNE DRIVE
LEIGHANN BAILIE
281.290.3755

MEP
JONES ENGINEERS
9820 WHITHOM DRIVE
713.222.7766

STRUCTURAL
MATRIX STRUCTURAL
5177 RICHMOND AVENUE, SUITE 70
713.664.0130

LANDSCAPE
ASAKURA ROBINSON
2500 SUMMER STREET, SUITE 3228
713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CSF CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110



TBPE Firm No. F-4395

Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

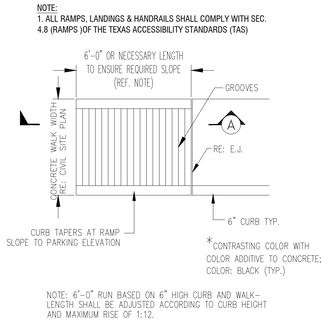
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PAVING DETAILS

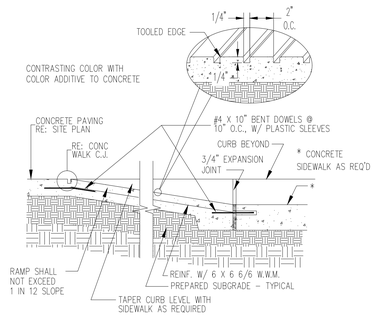
Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C8.10

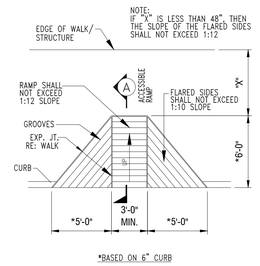
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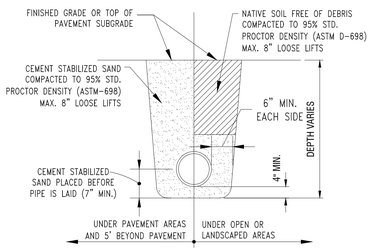
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SCALE: N.T.S.



2 SECTION A-A (ACCESSIBLE RAMP)
SCALE: N.T.S.



3 ADA - FLARED RAMP
SCALE: N.T.S.



4 STORM SEWER BEDDING & BACKFILL
SCALE: N.T.S.

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11301 FALLBROOK DR STE 320
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TBPE Firm No. F-4395

Project Status:
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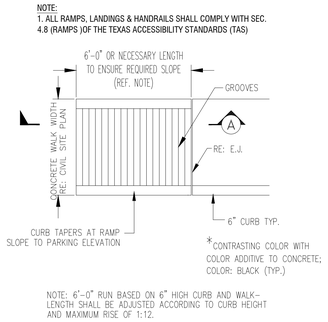
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CIVIL DETAILS

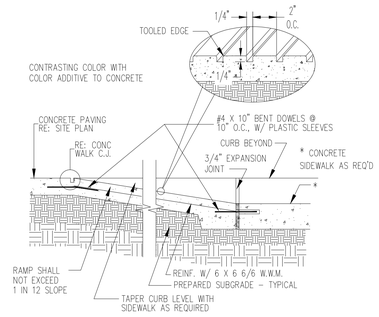
Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	07/22/2025
Job No.:	1503

C9.00

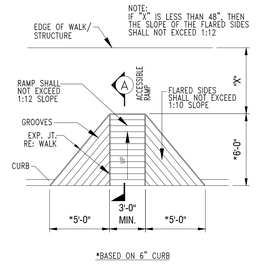
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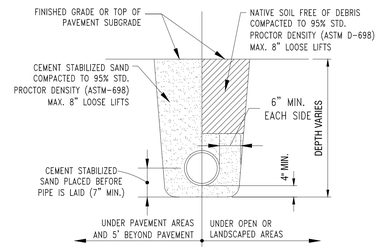
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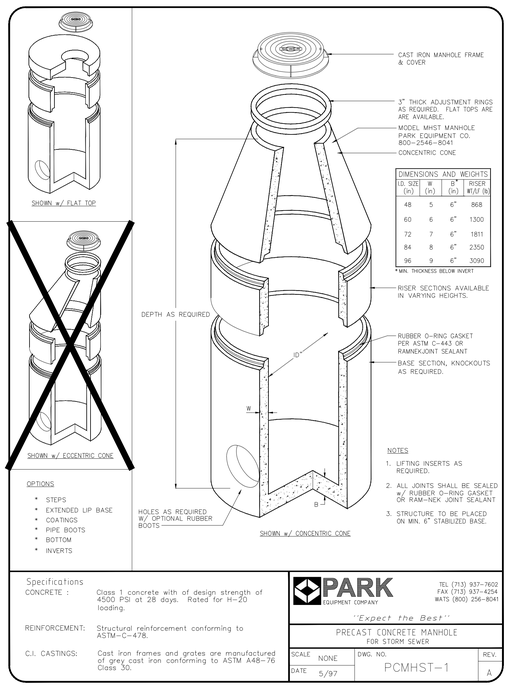
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SCALE: N.T.S.



3 ADA - FLARED RAMP
SCALE: N.T.S.



4 STORM SEWER BEDDING & BACKFILL
SCALE: N.T.S.



DIMENSIONS AND WEIGHTS			
I.D. SIZE (in)	H (in)	B* (in)	RISER #/LF (lb)
48	5	6"	868
60	6	6"	1300
72	7	6"	1811
84	8	6"	2350
96	9	6"	3090

* MIN. THICKNESS BELOW INVERT

Specifications
CONCRETE : Class 1 concrete with of design strength of 4500 PSI at 28 days. Rated for H-20 loading.
REINFORCEMENT: Structural reinforcement conforming to ASTM-C-478.
C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

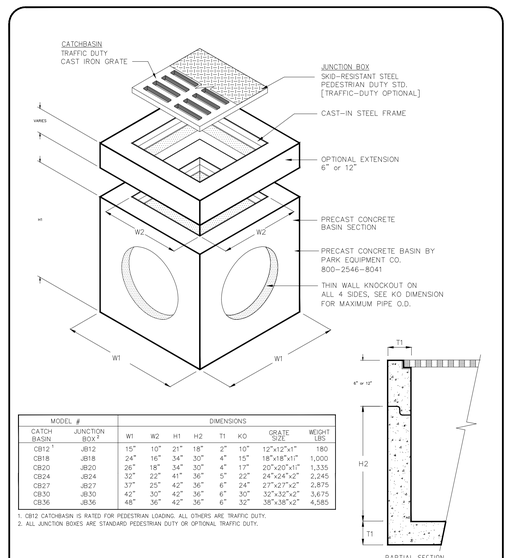
PARK EQUIPMENT COMPANY
TEL (713) 937-7602
FAX (713) 937-4254
WATS (800) 256-8041
"Expect the Best"

PRECAST CONCRETE MANHOLE FOR STORM SEWER

SCALE	DWG. NO.	REV.
NONE	PCMHST-1	A
DATE 5/97		

NOTE: PARK EQUIPMENT COMPANY OR APPROVED EQUAL

5 STORM SEWER MANHOLE
SCALE: N.T.S.



MODEL #		DIMENSIONS							
CATCH BASIN	JUNCTION BOX[2]	W1	W2	H1	H2	T1	KO	GRATE SIZE	WEIGHT LBS
CB12[1]	JB12	15"	10"	21"	18"	2"	10"	12"x12"x1"	180
CB18	JB18	24"	16"	34"	30"	4"	15"	18"x18"x1"	1,000
CB20	JB20	26"	18"	34"	30"	4"	17"	20"x20"x1"	1,335
CB24	JB24	32"	22"	41"	36"	5"	22"	24"x24"x2"	2,245
CB27	JB27	37"	25"	42"	36"	6"	24"	27"x27"x2"	2,875
CB30	JB30	42"	30"	42"	36"	6"	30"	32"x32"x2"	3,675
CB36	JB36	48"	36"	42"	36"	6"	32"	38"x38"x2"	4,585

1. CB12 CATCHBASIN IS RATED FOR PEDESTRIAN LOADING. ALL OTHERS ARE TRAFFIC DUTY.
2. ALL JUNCTION BOXES ARE STANDARD PEDESTRIAN DUTY OR OPTIONAL TRAFFIC DUTY.

PARTIAL SECTION

SPECIFICATIONS
CONCRETE : Class 1 concrete with of design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.
REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.
C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

PARK EQUIPMENT COMPANY
TEL (713) 937-7602
FAX (713) 937-4254
WATS (800) 256-8041
"Expect the Best"

PRECAST CONCRETE CATCHBASIN / JUNCTION BOX 18" THRU 36"

SCALE	DWG. NO.	REV.
NONE	CBJB36	A
DATE 1/96		

NOTE: PARK EQUIPMENT COMPANY OR APPROVED EQUAL

6 CATCH BASIN/JUNCTION BOX
SCALE: N.T.S.

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SCHOOL OF COSMETOLOGY
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MEP
JONES ENGINEERS
9820 WHITHOM DRIVE
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STRUCTURAL
MATRIX STRUCTURAL
5177 RICHMOND AVENUE, SUITE 70
713.664.0130

LANDSCAPE
ASAKURA ROBINSON
2500 SUMMER STREET, SUITE 3228
713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CSF CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

STATE OF TEXAS
CARLOS A. GUTIERREZ
68320
LICENSED PROFESSIONAL ENGINEER
10/14/2024
TBPE Firm No. F-4395

Project Status:
100% ISSUE FOR CONSTRUCTION

No.	DATE	DESCRIPTION

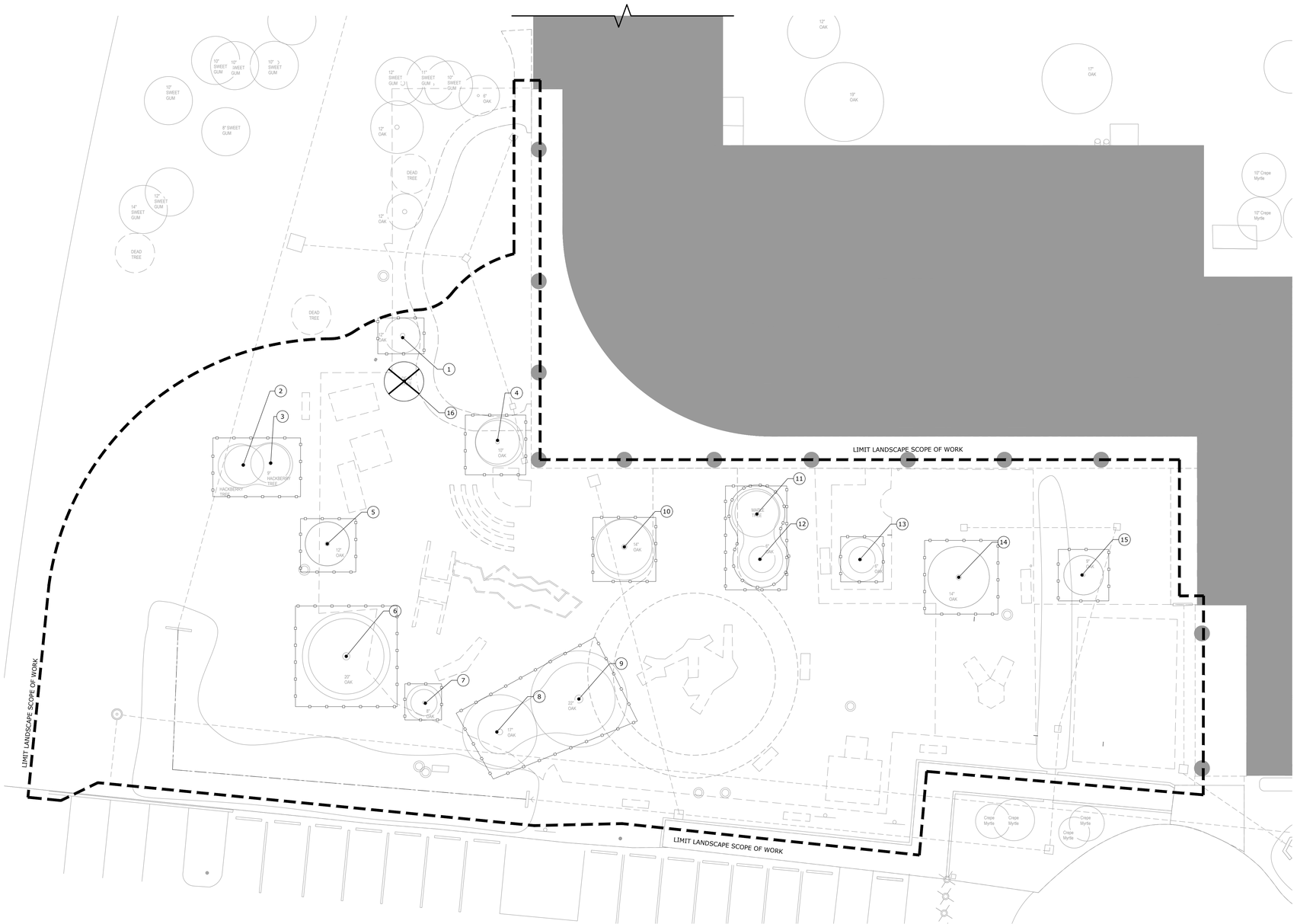
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CIVIL DETAILS

Project Mgr:	SJM
Designer:	SJM/AGM
Drawn By:	AGM
Checked By:	CAG/SJM
Date:	10/14/2024
Job No.:	1503

C10.00

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



1 **TREE PROTECTION PLAN**
SCALE: 3/32" = 1'-0"

N

LEGEND

- LIMIT LANDSCAPE SCOPE OF WORK
- TREE NUMBER
- EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED
- TREE PROTECTION FENCING RE: DETAIL 2/L1.01

LONE STAR COLLEGE NORTH HARRIS

SCHOOL OF COSMETOLOGY
2700 W W THORNE BLVD, 77073

RDLR Architects
ARCHITECTURE PLANNING INTERIORS

800 Sampson St. #104
Houston, TX 77003

713.868.3121
www.rdlr.com

KEVIN ADAMSON 11170 LICENSED LANDSCAPE ARCHITECT
10.14.2024

CLIENT:
LONE STAR COLLEGE - NORTH HARRIS
2700 W W THORNE DRIVE
LEIGHANN BAILIE
281.290.3755

MEP
JONES ENGINEERS
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STRUCTURAL
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346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
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3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
TREE PROTECTION PLAN

Project Mgr:	JK
Designer:	GH
Drawn By:	GH
Checked By:	JK
Date:	07/22/2025
Job No.:	1503

L1.00

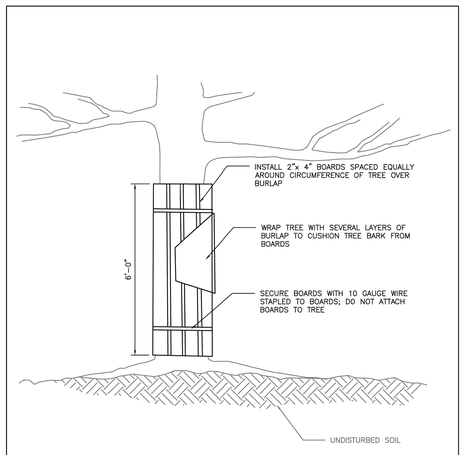
ASAKURA ROBINSON

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TREE #	CALIPER (IN.)	SPECIES	STATUS	TREATMENT
1	12	OAK	PRESERVE	TREE PROTECTION FENCING
2	-	HACKBERRY	PRESERVE	TREE PROTECTION FENCING
3	9	HACKBERRY	PRESERVE	TREE PROTECTION FENCING
4	10	OAK	PRESERVE	TREE PROTECTION FENCING
5	12	OAK	PRESERVE	TREE PROTECTION FENCING
6	20	OAK	PRESERVE	TREE PROTECTION FENCING
7	8	OAK	PRESERVE	TREE PROTECTION FENCING
8	17	OAK	PRESERVE	TREE PROTECTION FENCING
9	22	OAK	PRESERVE	TREE PROTECTION FENCING
10	14	OAK	PRESERVE	TREE PROTECTION FENCING
11	-	MAPLE	PRESERVE	TREE PROTECTION FENCING
12	6	OAK	PRESERVE	TREE PROTECTION FENCING
13	6	OAK	PRESERVE	TREE PROTECTION FENCING
14	14	OAK	PRESERVE	TREE PROTECTION FENCING
15	9	OAK	PRESERVE	TREE PROTECTION FENCING
16	9	DEAD TREE	REMOVE	-

TREE PROTECTION NOTES :

1. IT IS CRITICAL THAT TREE PROTECTION FENCES ARE ERECTED PRIOR TO THE BEGINNING OF ANY SITE DEMOLITION.
2. THE TREE PROTECTION FENCE SHALL BE A 4' HT. BRIGHT ORANGE, LIGHT WEIGHT, REUSABLE MESH SAFETY FENCING, with T-POSTS AT 8'-0" O.C.
3. TREE PROTECTION FENCE SHALL BE PLACED AROUND CRITICAL ROOT ZONE OF ALL TREES TO REMAIN.
4. *UPON APPROVAL BY OWNER OR LANDSCAPE ARCHITECT,* OTHER FENCING MATERIAL MAY BE USED IN LIEU OF CHAIN LINK FENCE. SUCH AS:
   A. T-POSTS AT 8'-0" O.C. W/ 4' HT. BRIGHT ORANGE, LIGHT WEIGHT, REUSABLE MESH SAFETY FENCING MADE OF HIGH DENSITY POLYETHYLENE WITH 1 1/2" X 3" SIZE MESH OR SIMILAR MATERIAL.
5. UNDER NO CIRCUMSTANCES SHOULD A CONTRACTOR DRIVE OR PARK MACHINERY ON TREE ROOTS OR UNDER THE DRIPLINE.
6. AVOID DISTURBING ROOTS IN CRITICAL ROOT ZONE. IF ROOT CUTTING IS NECESSARY OR ANY ROOTS ARE DAMAGED, THEY SHALL BE CUT CLEANLY WITH THE APPROPRIATE PRUNING SHEARS OR PRUNING SAWS A FEW INCHES ON THE SIDE CLOSER TO THE TRUNK. ANY EXPOSED OR PRUNED TREE ROOTS MUST BE COVERED IMMEDIATELY WITH DIRT AND MULCH TO PREVENT ROOTS FROM DRYING OUT.
7. NO STORAGE OR CONCRETE DUMPING IS PERMITTED ON TREE ROOTS AND/OR UNDER DRIPLINE.
8. NO BUILDING MATERIALS ARE TO BE STACKED OR STOCKPILED WITHIN THE DRIPLINE OR WITHIN 6 FEET OF ANY TREE TO BE PRESERVED, WHICHEVER DISTANCE IS GREATER.
9. NO TOPSOILS, COMPOST, OR MULCH ARE TO BE STOCKPILED WITHIN THE DRIP LINE OR WITHIN 6 FEET OF ANY TREE TO BE PRESERVED, WHICHEVER DISTANCE IS GREATER.
10. TREE BOARDING SHALL BE USED IF WORK IS REQUIRED WITHIN FENCING.
11. ANY UNDERSTORY CLEARING WITHIN SIX FEET OF EXISTING TREE TRUNKS SHALL BE DONE BY HAND.
12. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT IF ROOT PRUNING IS DEEMED NECESSARY. CONTRACTOR SHALL NOT CUT ROOT LARGER THAN 2" PRIOR CONSULTING LANDSCAPE ARCHITECT.
13. CONTRACTOR IS REQUIRED TO HIRE A CERTIFIED ARBORIST TO MONITOR AND ASSIST WITH FIELD LAYOUT (EXACT LOCATIONS OF FENCING, ROOT PRUNING, AND ZERO CURB CUTBACK) OF THE TREE PRESERVATION PROGRAM DURING DEMOLITION AND CONSTRUCTION TO ENSURE TREE PROTECTION PROCEDURES AND TECHNIQUES ARE PRACTICED AS SPECIFIED TO ADDRESS CONCERNS AND CONDITIONS WHICH OCCUR IN THE FIELD. AT A MINIMUM, THE INDIVIDUAL RESPONSIBLE FOR MONITORING AND FIELD LAYOUT OF THE TREE PROTECTION SHALL HAVE A MINIMUM OF 5 YEARS OF EXPERIENCE AS A CONSULTANT, AND SHALL NOT BE AFFILIATED WITH A TREE CARE CONTRACTOR IN THE HARRIS COUNTY AREA. QUALIFICATIONS OF THE SELECTED CERTIFIED ARBORIST SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT.



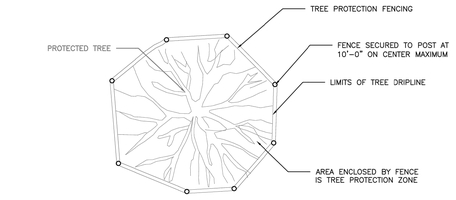
ELEVATION

DISCLAIMER: THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

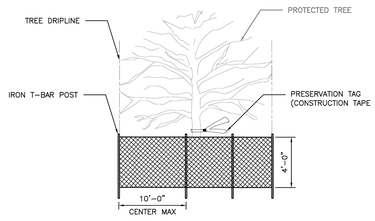
APPROVED BY:

CITY OF HOUSTON HOUSTON PUBLIC WORKS STANDARD	
TREE BOARDING (SCALE: NOT TO SCALE)	
Developed by: Sukut Iruvvar — CITY ENGINEER	Developed by: Carl Hallbrook — DIRECTOR OF HPW
EFF DATE: NOV-27-2023	DWG NO: 01562-07

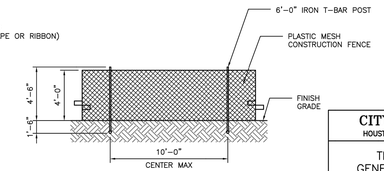
1 COH TREE BOARDING
SCALE: NTS



PLAN VIEW
TREE PROTECTION FENCING DETAIL



FRONT VIEW
TREE PROTECTION FENCING DETAIL



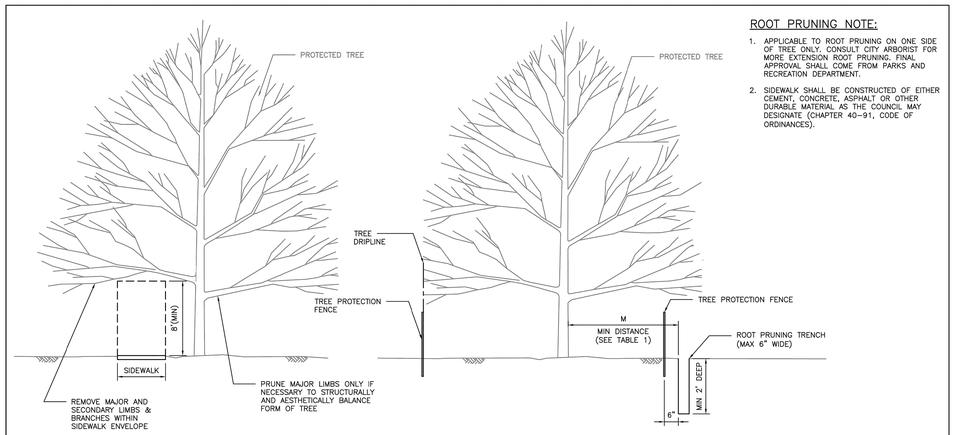
DETAIL B-4
PROTECTIVE PLASTIC MESH FENCE

NOTES:

FENCE LOCATION MAY BE ADJUSTED TO ACTUAL SITE CONDITIONS.

CITY OF HOUSTON HOUSTON PUBLIC WORKS STANDARD	
TREE PROTECTION GENERAL REQUIREMENTS (SCALE: NOT TO SCALE)	
APPROVED BY:	
Developed by: Sukut Iruvvar — CITY ENGINEER	Developed by: Carl Hallbrook — DIRECTOR OF HPW
EFF DATE: NOV-27-2023	DWG NO: 01562-01

2 COH TREE PROTECTION GENERAL REQUIREMENTS
SCALE: NTS



TREE PRUNING

ROOT PRUNING DETAIL

ROOT PRUNING NOTE:

1. APPLICABLE TO ROOT PRUNING ON ONE SIDE OF TREE ONLY. CONSULT CITY ARBORIST FOR MORE EXTENSION ROOT PRUNING. FINAL APPROVAL SHALL COME FROM PARKS AND RECREATION DEPARTMENT.
2. SIDEWALK SHALL BE CONSTRUCTED OF EITHER CEMENT, CONCRETE, ASPHALT OR OTHER DURABLE MATERIAL AS THE COUNCIL MAY DESIGNATE (CHAPTER 40-91, CODE OF ORDINANCES).

TABLE 1
"M" DISTANCE TABLE

TREE TRUNK DIA. (IN)	*MINIMUM DISTANCE 'M'
< 6"	3 FEET
6" ≤ DIA. ≤ 20"	0.75 FEET PER DIA.-INCH
> 20"	CONSULT CITY ARBORIST

*MINIMUM DISTANCE FROM TREE TRUNK TO EDGE OF TRENCH

CITY OF HOUSTON HOUSTON PUBLIC WORKS STANDARD	
TREE PROTECTION TREE AND ROOT PRUNING (SCALE: NOT TO SCALE)	
APPROVED BY:	
Developed by: Sukut Iruvvar — CITY ENGINEER	Developed by: Carl Hallbrook — DIRECTOR OF HPW
EFF DATE: NOV-27-2023	DWG NO: 01562-02

3 COH TREE AND ROOT PRUNING
SCALE: NTS

ASAKURA ROBINSON

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LONE STAR COLLEGE NORTH HARRIS

SCHOOL OF COSMETOLOGY
2700 W W THORNE BLVD, 77073

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10.14.2024

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LANDSCAPE
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SPECIAL SYSTEMS (IT / SECURITY)
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3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

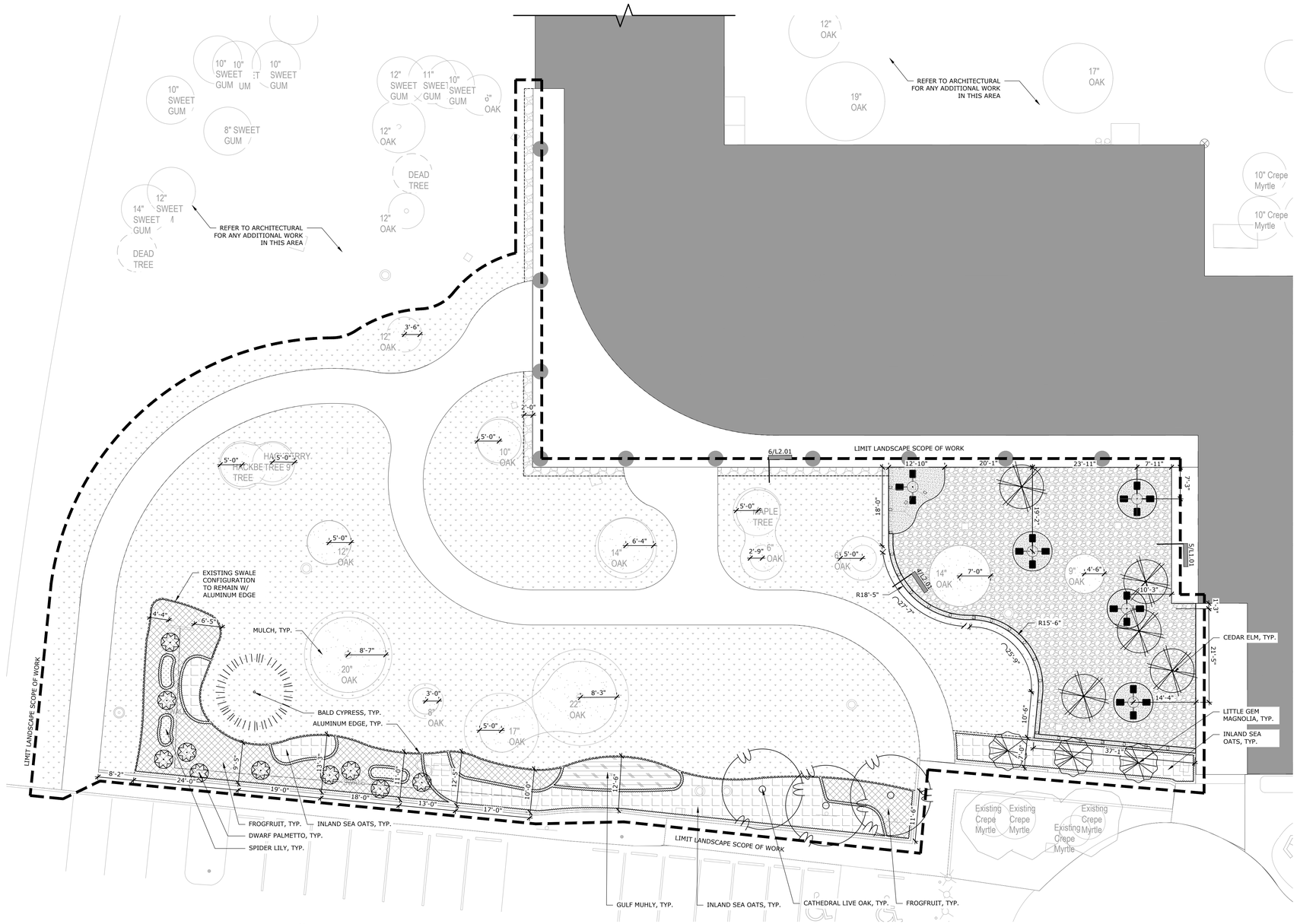
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3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
TREE PROTECTION DETAILS & NOTES

Project Mgr:	JK
Designer:	GH
Drawn By:	GH
Checked By:	JK
Date:	07/22/2025
Job No.:	1503

L1.01



1 **LANDSCAPE PLAN**

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

N

LEGEND

- LIMIT LANDSCAPE SCOPE OF WORK
- CATHEDRAL LIVE OAK, 4" TYP.
- BALD CYPRESS, 4" TYP.
- CEDAR ELM, 2"-3" TYP.
- LITTLE GEM MAGNOLIA, 2"-3" TYP.
- DWARF PALMETTO
- FROGFRUIT
  1 GAL @ 12" O.C.
- INLAND SEA OATS
  1 GAL @ 24" O.C.
- SPIDER LILY
  1 GAL @ 24" O.C.
- GULF MUHLY
  3 GAL @ 24" O.C.
- ZOYSIA SOD
- DECOMPOSED GRANITE
  RE: 5/L2.01
- 2"-3" MEXICAN BEACH PEBBLES
  RE: 6/L2.01
- HARDWOOD MULCH
- 12" CONCRETE BAND
  RE: 4/L2.01
- CONCRETE PAD
  RE: 7/L2.01
- PICNIC TABLE
- ADA PICNIC TABLE
- ALUMINUM EDGING
  RE: 3/L2.01

ASAKURA ROBINSON

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9/12/2024 9:00 AM

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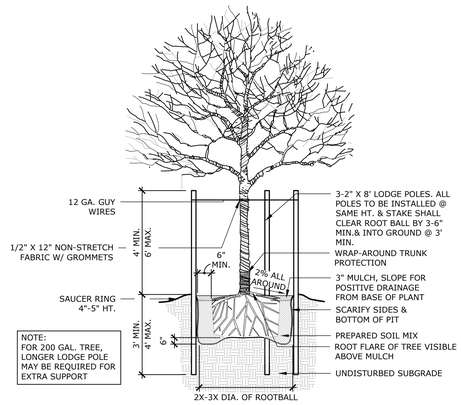
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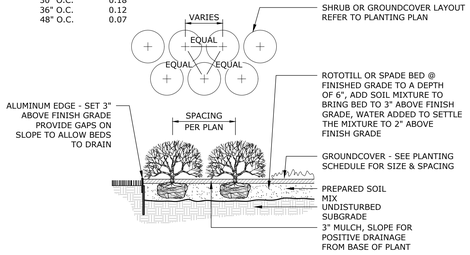
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1 TYPICAL TREE PLANTING DETAIL

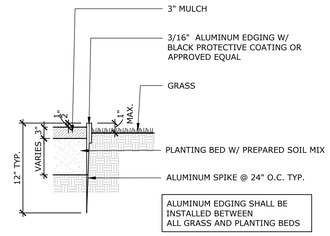
SCALE: 3/8" = 1'-0"

SPACING	PLANTS/SF
6" O.C.	4.61
8" O.C.	2.60
9" O.C.	1.78
10" O.C.	1.66
12" O.C.	1.15
18" O.C.	0.50
24" O.C.	0.28
30" O.C.	0.18
36" O.C.	0.12
48" O.C.	0.07



2 TYPICAL SHRUB / GROUND COVER PLANTING DETAIL & SPACING CHART

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



3 TYPICAL ALUMINUM EDGING DETAIL

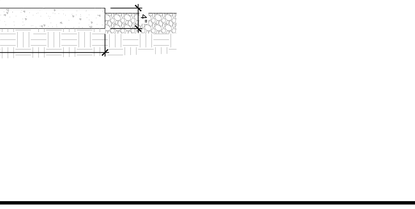
SCALE: 3/8" = 1'-0"

4 12" CONCRETE BAND SECTION

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

NOTE:

DECOMPOSED GRANITE SHALL BE COMPACTED AND CONTRACTOR SHALL USE A SOIL STABILIZER TO CREATE A FIRM WALKING SURFACE WITH NO LOOSE GRAVEL



5 TYPICAL DECOMPOSED GRANITE SECTION

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

6 TYPICAL GRAVEL EDGE SECTION

SCALE: 1" = 1'-0"

7 TYPICAL BENCH PAD DETAIL

SCALE: 1" = 1'-0"

GENERAL CONSTRUCTION NOTES :

1. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE PLANS AND SPECIFICATIONS TO DETERMINE THE TOTAL SCOPE OF WORK AND REQUIRED COORDINATION. THE CONTRACTOR SHALL CONSULT WITH SITE SUPERINTENDENT AND APPROPRIATE AGENCIES IN ORDER TO DETERMINE THE LOCATION OF ALL UNDERGROUND UTILITIES, PIPES, AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF SAID UTILITIES.
2. ALL SITE IMPROVEMENTS ARE BASED UPON SURVEY TITLED Topographic Survey Lone Star College System North Campus DATED 10/06/2023. THE LANDSCAPE ARCHITECT BEARS NO RESPONSIBILITY FOR THE ACCURACY OF THE SURVEY PROVIDED.CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE ACCURATE LOCATION OF PROPERTY LINES AND EASEMENTS, AND SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
3. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT CONSTRUCTION AREA DISCREPANCIES AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH ALL CONSTRUCTION OPERATIONS. ALL PIPING, CONDUIT, SLEEVES, ETC., SHALL BE SET IN PLACE PRIOR TO INSTALLATION OF CONSTRUCTION ITEMS.
5. ALL EXISTING TREES AND TREE PRESERVATION AREAS SHALL BE PROTECTED PRIOR AND DURING CONSTRUCTION WITH TEMPORARY FENCING AS FOLLOWS: FENCING PROTECTION SHALL BE PLACED AROUND THE DRIP LINE OF ALL CLUSTERS OF TREES TO BE RETAINED. PROTECTION FENCING SHALL BE 5' METAL CHAIN LINK FENCE WITH POSTS AT 8'-0" O.C. CONTRACTOR MAY USE 4' T-POST WITH 4' ORANGE FIBERGLASS FENCING OR SIMILAR MATERIAL *ONLY WITH PRIOR APPROVAL BY OWNER OR LANDSCAPE ARCHITECT.*
6. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING MATERIALS THAT ARE DAMAGED DURING CONSTRUCTION OPERATIONS, INSIDE OR OUTSIDE OF THE PROPERTY LINE. MATERIALS INCLUDE BOTH HARDSCAPE AND LANDSCAPE.
7. ALL DIMENSIONS ARE MEASURED FROM FACE OF VERTICAL ELEMENTS. DIMENSIONS TAKEN FROM ROAD EDGE ARE FROM BACK OF CURB (B.O.C.) UNLESS OTHERWISE NOTED ON PLANS.
8. ALL CONSTRUCTION ITEMS FORMED WITH A COMPACTED SUBGRADE AND/OR STEEL REINFORCEMENT SHALL BE OBSERVED AND APPROVED PRIOR TO INSTALLATION BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
9. CONTRACTOR SHALL STAKE THE LOCATIONS OF ALL SIDEWALKS, WALLS, AND ANY HARDSCAPE ELEMENT FOR APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO COMMENCING CONSTRUCTION.
10. WHEN REQUIRED BY OWNER, CONTRACTOR SHALL SUBMIT 4' x 4' SAMPLES (OR SIZE AS REQUESTED BY OWNER), OF ALL PAVING WITH JOINTS IN PLACE, PAVING ALTERNATES, FINISHES, AND COLORS. ALL SAMPLES SHALL BE APPROVED BY OWNER'S AUTHORIZED REPRESENTATIVE, PRIOR TO CONSTRUCTION.
11. EXPANSION JOINTS SHALL BE PLACED IN ALL CASES WHERE CONCRETE OR NEW PAVING ABUTS VERTICAL STRUCTURES OR CONCRETE CURBS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING THE LOCATIONS OF ANY EXISTING SITE ELEMENTS (REQUIRING REMOVAL FOR CONSTRUCTION)TO BE RE-SET IN THE PREVIOUS HORIZONTAL LOCATION.
13. AT ALL LOCATIONS WHERE EXISTING CURBING, ASPHALT, OR CONCRETE PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE.

PLANTING NOTES :

1. CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF THESE UTILITIES.
2. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING THE DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND THE OWNER'S AUTHORIZED REPRESENTATIVE.
3. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH PLANTING.
5. CONTRACTOR SHALL NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE 72 HOURS (WEEKENDS NOT INCLUDED) PRIOR TO COMMENCEMENT OF WORK TO COORDINATE PROJECT OBSERVATION SCHEDULE.
6. IF CONFLICTS ARISE BETWEEN SIZE OF AREAS ON PLANS OR LAYOUT OF PLANS, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FORRESOLUTION. FAILURE TO MAKE SUCH CONFLICTS KNOWN TO LANDSCAPE ARCHITECT WILL RESULT IN CONTRACTOR'S LIABILITY TO RELOCATE THE MATERIAL.
7. PROTECT ALL EXISTING TREES TO REMAIN. CONTRACTOR SHALL REPLACE ANY TREES DAMAGED DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE FENCING, IF NECESSARY, AT THE TREE DRIP LINE TO PROTECT TRUNK AND ROOTS AND TO PREVENT COMPACTION FROM VEHICLE TRAFFIC OR MATERIAL STORAGE BELOW TREES.
8. CONTRACTOR SHALL PROVIDE FOR THE FEEDING, WATERING, AND GENERAL MAINTENANCE OF TREES TO KEEP THEM IN A HEALTHY CONDITION DURING CONSTRUCTION DURATION.
9. CONTRACTOR SHALL SUBMIT PHOTOS/PDFS OF REPRESENTATIVE TREES, SHRUBS, GRASSES, GROUNDCOVERS, AND VINES SHOWN ON THE PLANTING PLAN AND SCHEDULE, WITH INDICATION OF SPECIES, HEIGHT, WIDTH, AND CALIPER/CONTAINER SIZE. IF A NURSERY VISIT IS REQUIRED, THE CONTRACTOR WILL ARRANGE TO HAVE THE PARTICULAR NURSERIES PREPARED TO SHOW PLANT MATERIAL. SHOULD CONTRACTOR INSTALL PLANT MATERIAL INFERIOR TO INDUSTRY STANDARD OR DRAWING SPECIFICATIONS, IT IS AT CONTRACTOR'S RISK. ALL SUBMITTALS ARE TO BE APPROVED PRIOR TO PLANTING. NO UNAPPROVED MATERIAL IS TO BE INSTALLED.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH PLANT MATERIALS FREE OF PESTS AND DISEASES. PRE-SELECTED OR "TAGGED" MATERIAL MUST BE INSPECTED BY CONTRACTOR AND CERTIFIED PEST AND DISEASE FREE. IT IS THE CONTRACTOR'S OBLIGATION TO GUARANTEE ALL PLANT MATERIALS PER THE SPECIFICATIONS. TAGS PLACED BY THE LANDSCAPE ARCHITECT MUST REMAIN ON MATERIAL THROUGHOUT THE DURATION OF CONSTRUCTION.
11. CONTRACTOR SHALL STAKE ALL FINAL TREE LOCATIONS AND PLANTING BED LIMITS IN THE FIELD FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
12. ALUMINUM EDGING SHALL BE PLACED BETWEEN ALL SHRUB BEDS AND TURF AREAS, AS WELL AS BETWEEN GRAVEL BED AND PLANTING BEDS.
13. UPON INSTALLATION, ALL TREE MATERIALS SHALL BE STAKED BY THE METHOD INDICATED IN THE SPECIFICATIONS AND PLANTING DETAILS.
14. IF REQUESTED BY OWNER, CONTRACTOR SHALL INSTALL DEEP ROOT BARRIERS AT ALL TREES WITHIN 5'-0" OF CONCRETE WALKWAYS, STRUCTURES, WALLS, CURBS, ETC.
15. ALL PLANTS SHALL BE TRIANGULARLY SPACED, UNLESS OTHERWISE INDICATED.
16. ALL PLANTING BEDS SHALL RECEIVE A MINIMUM OF 3" OF APPROVED SHREDDED MULCH.
17. CONTRACTOR SHALL FINE GRADE ALL DISTURBED AREAS TO PROVIDE FOR PROPER DRAINAGE.

PLANTING SCHEDULE

QTY	COMMON NAME/BOTANICAL NAME	CALIPER / CONT.SIZE	HEIGHT	SPREAD	COMMENTS
TREES					
3 EA	CATHEDRAL LIVE OAK *Quercus virginiana 'Cathedral Oak'*	4"	14'-16'	8' - 10'	SINGLE TRUNK W/ STRONG CENTRAL LEADER. FULL, WELL-BRANCHED
1 EA	BALD CYPRESS *Taxodium distichum*	4"	12'-14'	10'-12'	SINGLE TRUNK W/ STRONG CENTRAL LEADER. FULL, WELL-BRANCHED
ORNAMENTAL TREES					
5 EA	CEDAR ELM *Ulmus crassifolia*	2"	8'-10'	6'-8'	SINGLE TRUNK W/ STRONG CENTRAL LEADER. FULL, WELL-BRANCHED
3 EA	LITTLE GEM MAGNOLIA *Magnolia grandiflora 'Little Gem'*	2"	5' - 6'	3' - 4'	SINGLE TRUNK W/ STRONG CENTRAL LEADER. FULL, WELL-BRANCHED
SHRUBS					
10 EA	DWARF PALMETTO *Sabal minor*	1 GAL	8" - 12"	12" - 14"	CONTAINER GROWN, FULL & WELL ROOTED
ORNAMENTAL GRASSES					
1,160 SF	INLAND SEA OATS *Chasmanthium latifolium*	1 GAL	10" - 14"	10" - 14"	CONTAINER GROWN, FULL & WELL ROOTED, PLANTED 24" O.C., TRIANGULATED SPACING
170 SF	'REGAL MIST' MUHLY *Muhlenbergia capillaris 'Regal Mist'*	3 GAL	12" - 18"	12" - 18"	CONTAINER GROWN, FULL & WELL ROOTED, PLANTED 30" O.C., TRIANGULATED SPACING
PERENNIALS					
50 SF	SPIDER LILY *Lycoris radiata*	1 GAL	12" - 18"	10" - 12"	CONTAINER GROWN, FULL & WELL ROOTED, PLANTED 24" O.C., TRIANGULATED SPACING
GROUNDCOVERS AND ANNUALS					
1,130 SF	FROGFRUIT *Phyla nodiflora*	1 GAL	6" - 8"	8" - 12"	CONTAINER GROWN, FULL & WELL ROOTED, PLANTED 12" O.C., TRIANGULATED SPACING
TURF AND GRASSES					
12,110 SF	'EMERALD' ZOYSIA *Zoysia 'emerald'*	NA	NA	NA	SOLID SOD, AS SHOWN PER PLAN
MULCH					
4,280 SF	HARDWOOD MULCH	NA	NA	NA	3" DEPTH

HARDSCAPE MATERIALS SCHEDULE

QTY	DESCRIPTION	COLOR	FINISH	CONTACT	COMMENTS
CONCRETE					
120 SF	ITEM 12" CONCRETE BAND	___	LIGHT BROOM FINISH	___	12" WIDTH, 8" DEPTH, JOINTS @ 5'-0" O.C. BROOM FINISH PERPENDICULAR TO THE WIDTH OF THE BAND
380 SF	ITEM CONCRETE PAD	SANTA FE BUFF (U25) UNI-MIX INTEGRAL CONCRETE COLORANT	LIGHT BROOM FINISH	NAME / COMPANY: BUTTERFIELD COLOR EMAIL: MANNY@BUTTERFIELDCOLOR.COM PHONE: 254.654.0157	4" DEPTH; BUTTERFIELD COLOR CONCRETE UNI-MIX INTEGRAL CONCRETE COLORANT
STEEL/ALUMINUM					
190 LF	ITEM ALUMINUM EDGING, PERMALOC CLEANLINE XL	BLACK	DURAFLEX	___	5" DEPTH X 3/16" THICK ALUMINUM EDGING
STONE					
32 CY	ITEM DECOMPOSED GRANITE	———	———	———	4" INSTALLED DEPTH; 1/4" MINUS
4 CY	ITEM MEXICAN BEACH PEBBLE	———	———	———	5" INSTALLED DEPTH; 2" - 3" SIZE
FURNISHING					
4 EA	ITEM CAROUSEL PICNIC TABLE, LANDSCAPE FORMS	LOLL SUNSET ORANGE	POWDERCOATED METAL FRAME, THERMALLY MODIFIED ASH TABLE TOP	NAME / COMPANY: CATHY COMEAUX-WRIGHT EMAIL:CATHYC@LANDSCAPEFORMS.COM PHONE: 269-337-1316	TABLE, 4 SEAT CASUAL HEIGHT, BACKED GRID SEATS, STEELHEAD WOOD 30IN DIA TABLETOP
1 EA	ITEM CAROUSEL PICNIC TABLE - ADA, LANDSCAPE FORMS	LOLL SUNSET ORANGE	POWDERCOATED METAL FRAME, THERMALLY MODIFIED ASH TABLE TOP	NAME / COMPANY: CATHY COMEAUX-WRIGHT EMAIL:CATHYC@LANDSCAPEFORMS.COM PHONE: 269-337-1316	TABLE, 3 SEAT CASUAL HEIGHT, BACKED GRID SEATS, STEELHEAD WOOD 30IN DIA TABLETOP

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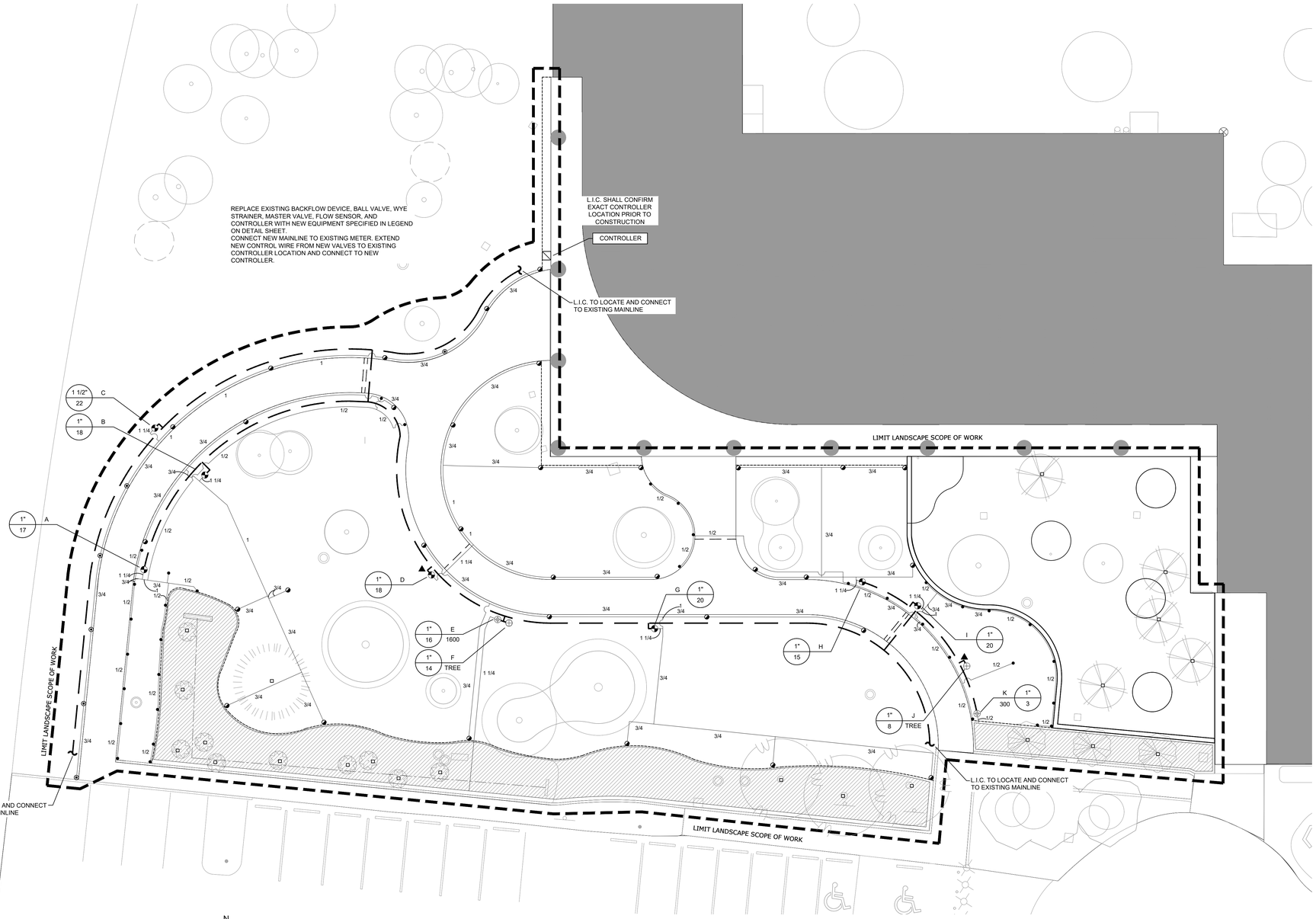
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1 IRRIGATION PLAN

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

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IRRIGATION LEGEND

- HUNTER PROS-06-PRS30 SERIES POP UP SPRAY HEADS WITH HUNTER MSBN-50H STREAM BUBBLER NOZZLES. (TWO PER TREE)
  SEE INSTALLATION NOTE #13 REGARDING TREE BUBBLER LATERAL PIPE
- HUNTER PROS-04-PRS40 SERIES POP UP SPRAY HEAD WITH MP 815-SERIES NOZZLE AS NOTED BELOW
- HUNTER PGP ULTRA, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, PART CIRCLE, #1.5 SR BLACK NOZZLE UNLESS NOTED OTHERWISE
- HUNTER PGP ULTRA, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, PART CIRCLE, #2.5 BLUE NOZZLE UNLESS NOTED OTHERWISE
- NETAFIM TECHLINE TLHCVXR5-12 SERIES DRIP TUBE IN SHRUB BED INSTALLED AT 2" DEPTH
  SEE INSTALLATION NOTE #16 REGARDING DRIP TUBE LAYOUT IN SHRUB BEDS.
- RAINBIRD PEB SERIES ELECTRIC REMOTE CONTROL VALVE
- RAINBIRD PEB SERIES ELECTRIC REMOTE CONTROL, "TREE BUBBLER ZONE" VALVE
  SEE INSTALLATION NOTE #12 REGARDING TREE BUBBLER LATERAL PIPE
- NETAFIM LVCZ SERIES DRIP VALVE ASSEMBLY WITH PSI REGULATOR AND 140 MESH FILTER
  USE MODEL LVCZS8010075-LF FOR DRIP ZONES WITH .25 TO 4.4 GPM FLOW RATE
  USE MODEL LVCZ10075-HFHP FOR DRIP ZONES WITH 4.5 TO 17.6 GPM FLOW RATE
  USE MODEL LVCZ-150HP FOR DRIP ZONES WITH 11 TO 35 GPM FLOW RATE
- HUNTER HQ-33DLRC-R QUICK COUPLING VALVE WITH LOCKING PURPLE COVER AND 3/4" PVC BALL VALVE
- LASCO "V101N" SERIES SCH. 80 PVC TRUE UNION BALL VALVE, MAINLINE SIZE
- M&E BRONZE MJ SERIES IRRIGATION WATER METER AND TAP, SIZE AS NOTED ON THE PLAN
- FEBCO BRASS PRESSURE VACUUM BREAKER MODEL 765, ZURN 850 FULL PORT SERIES BRONZE BALL VALVE, AND DRAIN VALVE INSTALLED PER CITY CODE
- WEATHERTRAK-ET-PROLITE SERIES CONTROLLER WITH WIRELESS RAIN / FREEZE SENSOR
  LOCATE SENSOR AS FIELD DIRECTED BY THE LANDSCAPE ARCHITECT
- WEATHERTRAK FLOW3 SERIES FLOW SENSOR / MASTER VALVE
- SCHEDULE 40 PVC MAINLINE PIPE
- CLASS 200 (EXCEPT 1/2 INCH #315) PVC LATERAL PIPE
- ONE 4" CLASS 200 SLEEVE PIPES
- ONE 6" AND ONE 4" CLASS 200 SLEEVE PIPES

L.I.C. SHALL SELECT MP ROTATOR NOZZLES FOR "HEAD-TO-HEAD" COVERAGE, ADJUSTED FOR NO OVERSPRAY ONTO WALLS AND WALKS. NO OVERSPRAY INTO STREETS IS PERMITTED.

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STATE OF TEXAS CHRISTOPHER DIGGS 11031 LICENSED IRRIGATOR

James Pole
IRRIGATION CONSULTANTS
IRRIGATION DESIGN, CONSULTING, AND LANDSCAPE WATER MANAGEMENT

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james@jamespoleirrigation.com

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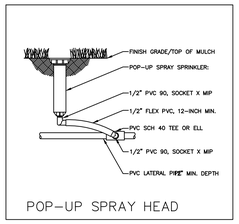
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ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

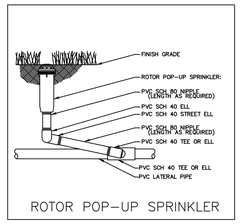
Sheet Title
IRRIGATION PLAN

Project Mgr:
Designer:
Drawn By:
Checked By:
Date: 07/22/2025
Job No.: 1503

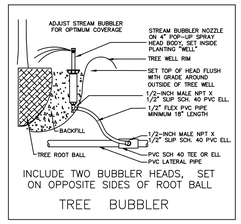
L3.00



POP-UP SPRAY HEAD

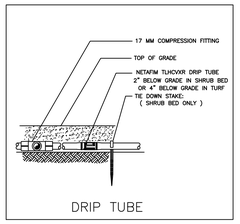


ROTOR POP-UP SPRINKLER

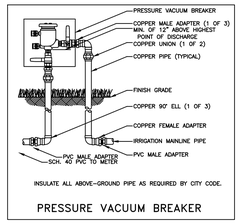


INCLUDE TWO BUBBLER HEADS, SET ON OPPOSITE SIDES OF ROOT BALL

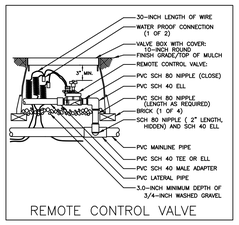
TREE BUBBLER



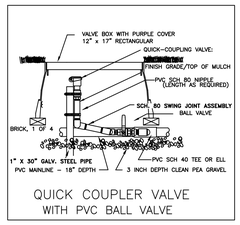
DRIP TUBE



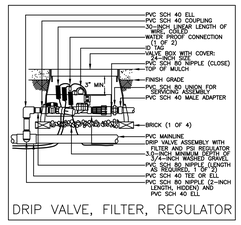
PRESSURE VACUUM BREAKER



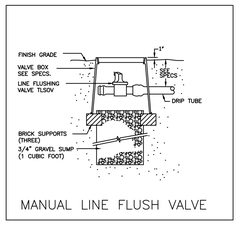
REMOTE CONTROL VALVE



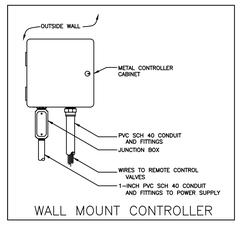
QUICK COUPLER VALVE WITH PVC BALL VALVE



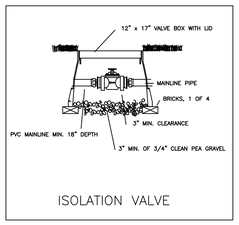
DRIP VALVE, FILTER, REGULATOR



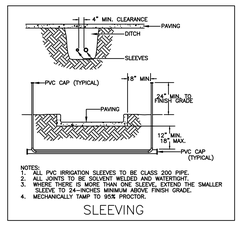
MANUAL LINE FLUSH VALVE



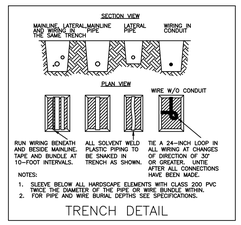
WALL MOUNT CONTROLLER



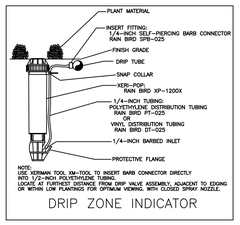
ISOLATION VALVE



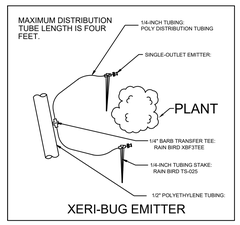
SLEEVING



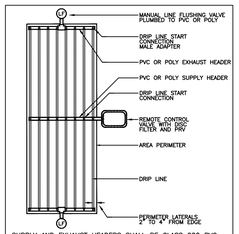
TRENCH DETAIL



DRIP ZONE INDICATOR



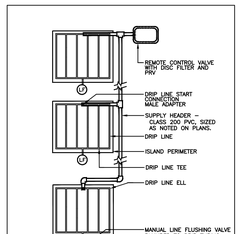
XERI-BUG EMITTER



SUPPLY AND EXHAUST HEADERS SHALL BE CLASS 200 PVC PIPE, OF THE SAME DIAMETER AS THE ZONE VALVE SIZE.

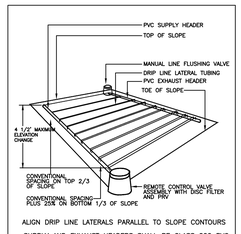
USE DRIP TUBE FOR SUPPLY AND EXHAUST HEADERS ON GRIDS WITH FLOW SMALLER THAN 5 GPM ONLY.

DRIP CENTER FEED LAYOUT



USE DRIP TUBE FOR SUPPLY AND EXHAUST HEADERS ON GRIDS WITH FLOW SMALLER THAN 5 GPM ONLY.

DRIP ISLAND LAYOUT

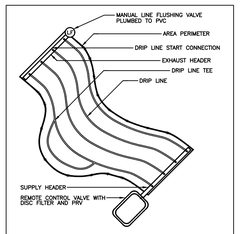


ALIGN DRIP LINE LATERALS PARALLEL TO SLOPE CONTOURS

SUPPLY AND EXHAUST HEADERS SHALL BE CLASS 200 PVC PIPE, OF THE SAME DIAMETER AS THE ZONE VALVE SIZE.

USE DRIP TUBE FOR SUPPLY AND EXHAUST HEADERS ON GRIDS WITH FLOW SMALLER THAN 5 GPM ONLY.

DRIP SLOPE FEED LAYOUT



SUPPLY AND EXHAUST HEADERS SHALL BE CLASS 200 PVC PIPE, OF THE SAME DIAMETER AS THE ZONE VALVE SIZE.

USE DRIP TUBE FOR SUPPLY AND EXHAUST HEADERS ON GRIDS WITH FLOW SMALLER THAN 5 GPM ONLY.

CURVED AREA DRIP LAYOUT

INSTALLATION NOTES

1. COORDINATE IRRIGATION INSTALLATION WITH PLANTING PLAN AND SITE CONDITIONS TO PROVIDE COMPLETE COVERAGE WITH MINIMUM OVERSPRAY. THE IRRIGATION CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO ENSURE PROPER COVERAGE AT NO ADDITIONAL COST TO THE OWNER. THE IRRIGATION CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND STATE MANDATED IRRIGATION ORDINANCES AND CODES, AND WILL SECURE ALL REQUIRED PERMITS. L.I.C. SHALL PAY ANY ASSOCIATED FEES UNLESS OTHERWISE NOTED. ALL LOCAL CODES SHALL PREVAIL OVER ANY DISCREPANCIES HEREIN AND SHALL BE ADDRESSED BEFORE ANY CONSTRUCTION BEGINS.
2. NO MACHINE TRENCHING SHALL BE PERMITTED WITHIN THE ROOT ZONE OF EXISTING TREES. HAND-DIG ONLY, WITHIN THE ROOT ZONES OF EXISTING TREES. NO ROOTS OVER 1" DIAMETER SHALL BE CUT. STAKE ALL PROPOSED TRENCH ROUTES NEAR EXISTING TREES FOR APPROVAL BY THE LANDSCAPE ARCHITECT BEFORE DIGGING BEGINS.
3. CONFIRM MINIMUM STATIC WATER PRESSURE OF 65 PSI AT THE HIGHEST ELEVATION OF THE SYSTEM LIMITS, AND MAXIMUM STATIC WATER PRESSURE OF 90 P.S.I. AT THE LOWEST ELEVATION OF THE SYSTEM LIMITS AT LEAST 7 DAYS BEFORE BEGINNING WORK. IF STATIC WATER PRESSURE IS OUTSIDE THE RANGE STATED ABOVE, DO NOT PROCEED UNTIL DIRECTED BY THE LANDSCAPE ARCHITECT.
4. LATERAL PIPE SHALL BE INSTALLED AT A MINIMUM DEPTH OF 12 INCHES. MAINLINE PIPE AND WIRES SHALL BE INSTALLED AT A MINIMUM DEPTH OF 18 INCHES. NO MACHINE TRENCHING SHALL BE PERMITTED WITHIN EXISTING TREE ROOT ZONES, WHEN HAND - TRENCHING WITHIN EXISTING TREE ROOT ZONES, NO ROOTS LARGER THAN 1" DIAMETER SHALL BE CUT.
5. UNSLEEVED PIPES MAY BE SHOWN UNDER PAVEMENT FOR GRAPHIC CLARITY ONLY. INSTALL THESE PIPES IN ADJACENT LANDSCAPED AREAS.
6. ELECTRIC POWER SHALL BE PROVIDED WITHIN FIVE FEET OF CONTROLLER LOCATION BY GENERAL CONTRACTOR. L.I.C. TO PROVIDE FINAL HARD-WIRE TO CONTROLLER.
7. 24 VOLT VALVE WIRE SHALL BE A MINIMUM OF #14 GAUGE, U.F. APPROVED FOR DIRECT BURIAL, SINGLE CONDUCTOR "IRRIGATION WIRE". WIRE SPLICES SHALL INCLUDE DBY CONNECTORS AS MANUFACTURED BY 3M COMPANY. ALL FIELD SPLICES SHALL BE LOCATED IN A ROUND VALVE BOX OF SUFFICIENT SIZE TO ALLOW INSPECTION.
8. VALVE BOXES SHALL BE INSTALLED FLUSH WITH GRADE, SUPPORTED BY BRICKS IF NEEDED, WITH 3 INCHES OF CLEAN PEA GRAVEL LOCATED BELOW THE VALVE. USE 12" x 17" RECTANGULAR VALVE BOXES WITH PURPLE LID FOR QUICK COUPLING VALVES, AND 10" ROUND BOXES FOR ELECTRIC VALVES UNLESS NOTED OTHERWISE. D.C.A., WITH UPSTREAM BALL VALVE AND WYE FILTER SHALL BE BOXED AND LOCATED ACCORDING TO LOCAL CODE.
9. USE RIGID SCH. 80 PVC SWING JOINT ASSEMBLIES TO CONNECT ALL ROTARY HEADS AND QUICK COUPLERS.
10. ALL SPRAY HEADS SHALL BE CONNECTED WITH A 12" MINIMUM LENGTH OF 1/2" FLEX PVC. THE FLEX PVC SHALL BE SOLVENT WELDED TO SCHEDULE 40 PVC FITTINGS WITH WELD-ON #795 SOLVENT AND #P-70 PRIMER.
11. PROVIDE ONE QUICK COUPLER KEY WITH SWIVEL HOSE ELL FOR EVERY SIX Q.C. VALVES. (MINIMUM ONE SET).
12. CONTRACTOR IS TO CONTACT APPROPRIATE AUTHORITIES AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
13. LATERAL PIPE TO TREE STREAM BUBBLER HEADS IS OMITTED FOR GRAPHIC CLARITY. CONNECT TREE BUBBLER HEADS TO VALVES AS SHOWN WITH CLASS 200 PVC PIPE SIZED TO ALLOW A MAXIMUM FLOW VELOCITY OF 5 FEET PER SECOND.
14. THE PROPOSED LOCATIONS OF ALL ABOVE- GROUND EQUIPMENT INCLUDING BACKFLOW PREVENTORS, CONTROLLERS AND WEATHER SENSORS SHALL BE STAKED BY THE CONTRACTOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE BEFORE THESE ITEMS ARE INSTALLED.
15. ALL HEADS SHALL BE INSTALLED A MINIMUM OF 4" FROM PAVEMENT EDGES. (6" OR GREATER WHERE REQUIRED BY LOCAL CODE) FINAL HEAD ADJUSTMENTS BY THE CONTRACTOR SHALL INCLUDE THE ADDITION OF CHECK VALVES WHERE NEEDED TO PREVENT EXCESSIVE LOW HEAD DRAINAGE. THE CONTRACTOR SHALL BUDGET FOR, AND INSTALL CHECK VALVES FOR UP 10 % OF THE TOTAL NUMBER OF HEADS WHEN NEEDED, WITH NO ADDITIONAL COST TO THE OWNER.
16. WHERE SHOWN ON THE PLANS, MASS SHRUB / GROUNDCOVER BEDS SHALL INCLUDE NETAFIM TECHLINE TLHCVXR SERIES DRIP TUBE WITH PRE-INSTALLED .55 GPH DRIP EMITTERS AT 12" INTERVALS (TLHCVXR5-12), INSTALLED IN CENTER-FED GRIDS WITH ROWS SPACED 18" APART. INDIVIDUAL DRIP TUBE RUNS SHALL NOT EXCEED 150 L.F. PVC LATERAL "TRUNK" LINES SHALL BE INSTALLED 10" DEEP. DRIP TUBE SHALL BE SET 2" BELOW FINISHED SOIL GRADE (NOT INCLUDING MULCH LAYER), SECURELY STAKED EVERY 4' . NETAFIM #TLOSOMF-1 FLUSH VALVES SHALL BE INSTALLED AT THE FARTHEST POINTS FROM THE ZONE VALVE. USE 17 MM BARBED FITTINGS FOR DRIP LINE CONNECTIONS, SET THE MAXIMUM OPERATING PRESSURE AT 30 PSI. TECHLINE CV SHALL BE INSTALLED PERPENDICULAR TO SLOPE FACE. INSTALL TLCV IN-LINE CHECK VALVES FOR EVERY 4.5 FEET OF DRIP LINE ELEVATION CHANGE WITHIN THE ZONE. USE NETAFIM STAPLES (#TLS6) TO SECURE TUBING EVERY 18" EACH DRIP ZONE SHALL INCLUDE ONE MAINTENANCE "FLAG" WHICH SHALL CONSIST OF A 12" POP-UP SPRAY HEAD AND COMPLETELY CLOSED SPRAY NOZZLE. THE POP-UP HEAD SHALL BE CONNECTED TO THE DRIP ZONE PIPE, SET FLUSH WITH GRADE, AND LOCATED AT THE FARTHEST DISTANCE FROM THE DRIP VALVE ASSEMBLY. INSTALL THE "FLAG" HEAD ADJACENT TO EDGING OR IN LOW PLANTINGS FOR EASE OF VIEWING.
17. WHERE SHOWN ON THE PLANS, SPECIFIC TURF AREAS SHALL INCLUDE NETAFIM TECHLINE TLHCVXR SERIES DRIP TUBE WITH PRE-INSTALLED .53 GPH DRIP EMITTERS AT 12" INTERVALS (TLHCVXR5-12), INSTALLED IN CENTER-FED GRIDS WITH ROWS SPACED 12" APART. INDIVIDUAL DRIP TUBE RUNS SHALL NOT EXCEED 150 L.F. PVC LATERAL "TRUNK" LINES SHALL BE INSTALLED 10" DEEP. DRIP TUBE SHALL BE SET 4" BELOW FINISHED SOIL GRADE. NETAFIM #TLOSOMF-1 FLUSH VALVES SHALL BE INSTALLED AT THE FARTHEST POINTS FROM THE ZONE VALVE. USE 17 MM BARBED FITTINGS FOR DRIP LINE CONNECTIONS, SET THE MAXIMUM OPERATING PRESSURE AT 50 PSI. TECHLINE CV SHALL BE INSTALLED PERPENDICULAR TO SLOPE FACE. INSTALL TLCV IN-LINE CHECK VALVES FOR EVERY 4.5 FEET OF DRIP LINE ELEVATION CHANGE WITHIN THE ZONE. EACH DRIP ZONE SHALL INCLUDE ONE MAINTENANCE "FLAG" WHICH SHALL CONSIST OF A 12" POP-UP SPRAY HEAD AND COMPLETELY CLOSED SPRAY NOZZLE. THE POP-UP HEAD SHALL BE CONNECTED TO THE DRIP ZONE PIPE, SET FLUSH WITH GRADE, AND LOCATED AT THE FARTHEST DISTANCE FROM THE DRIP VALVE ASSEMBLY. INSTALL THE "FLAG" HEAD ADJACENT TO EDGING OR IN LOW PLANTINGS FOR EASE OF VIEWING. TEMPORARY SUPPLEMENTAL OVERHEAD WATERING MAY BE REQUIRED FOR INITIAL ESTABLISHMENT OF NEW SOD, SEEDED TURF, OR SEEDED NATIVE MIX AREAS SERVED BY SUB-SURFACE DRIP EQUIPMENT.

IRRIGATION LEGEND

- HUNTER PROS-06-PRS30 SERIES POP UP SPRAY HEADS WITH HUNTER MSBN-50H STREAM BUBBLER NOZZLES. (TWO PER TREE) SEE INSTALLATION NOTE #13 REGARDING TREE BUBBLER LATERAL PIPE
- HUNTER PROS-04-PRS40 SERIES POP UP SPRAY HEAD WITH MP 815-SERIES NOZZLE AS NOTED BELOW
- HUNTER PGP ULTRA, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, PART CIRCLE, #1.5 SR BLACK NOZZLE UNLESS NOTED OTHERWISE
- HUNTER PGP ULTRA, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, PART CIRCLE, #2.5 BLUE NOZZLE UNLESS NOTED OTHERWISE
- NETAFIM TECHLINE TLHCVXR5-12 SERIES DRIP TUBE IN SHRUB BED INSTALLED AT 2" DEPTH SEE INSTALLATION NOTE #16 REGARDING DRIP TUBE LAYOUT IN SHRUB BEDS.
- RAINBIRD PEB SERIES ELECTRIC REMOTE CONTROL VALVE
- RAINBIRD PEB SERIES ELECTRIC REMOTE CONTROL, "TREE BUBBLER ZONE" VALVE SEE INSTALLATION NOTE #12 REGARDING TREE BUBBLER LATERAL PIPE
- NETAFIM LVCZ SERIES DRIP VALVE ASSEMBLY WITH PSI REGULATOR AND 140 MESH FILTER USE MODEL LVCZS8010075-LF FOR DRIP ZONES WITH .25 TO 4.4 GPM FLOW RATE USE MODEL LVCZ10075-HFHP FOR DRIP ZONES WITH 4.5 TO 17.6 GPM FLOW RATE USE MODEL LVCZ-150HP FOR DRIP ZONES WITH 11 TO 35 GPM FLOW RATE
- HUNTER HQ-33DLRC-R QUICK COUPLING VALVE WITH LOCKING PURPLE COVER AND 3/4" PVC BALL VALVE
- LASCO "V101N" SERIES SCH. 80 PVC TRUE UNION BALL VALVE, MAINLINE SIZE
- M&E BRONZE MJ SERIES IRRIGATION WATER METER AND TAP, SIZE AS NOTED ON THE PLAN
- FEBCO BRASS PRESSURE VACUUM BREAKER MODEL 765, ZURN 850 FULL PORT SERIES BRONZE BALL VALVE, AND DRAIN VALVE INSTALLED PER CITY CODE
- WEATHERTRAK-ET-PRO/LTE SERIES CONTROLLER WITH WIRELESS RAIN / FREEZE SENSOR LOCATE SENSOR AS FIELD DIRECTED BY THE LANDSCAPE ARCHITECT
- WEATHERTRAK FLOW3 SERIES FLOW SENSOR / MASTER VALVE
- SCHEDULE 40 PVC MAINLINE PIPE
- CLASS 200 (EXCEPT 1/2 INCH #315) PVC LATERAL PIPE
- ONE 4" CLASS 200 SLEEVE PIPES
- ONE 6" AND ONE 4" CLASS 200 SLEEVE PIPES

L.I.C. SHALL SELECT MP ROTATOR NOZZLES FOR "HEAD-TO-HEAD" COVERAGE, ADJUSTED FOR NO OVERSPRAY ONTO WALLS AND WALKS. NO OVERSPRAY INTO STREETS IS PERMITTED.

LONE STAR COLLEGE IRRIGATION NOTES

- ALL NEW IRRIGATION SYSTEMS SHALL USE THE WEATHERTRAK ET PRO3 SERIES SYSTEM WITH THE WEATHERTRAK FLOW3 INTEGRATED FLOW SENSOR, SUB-METER AND MASTER VALVE, OR THE MOST CURRENT EQUIVALENT MODEL.
- THE WEATHERTRAK SYSTEM SHALL BE SPECIFIED FOR IRRIGATION SYSTEM CONTROLLERS AND SHALL INCLUDE THE 10-YEAR EXTENDED WARRANTY/UPGRADES FOR ALL CONTROLLERS AND TECHNICAL SUPPORT AS WELL AS 10 YEARS OF SUBSCRIPTION SERVICES.
- CONSIDER DESIGNING MICRO IRRIGATION SYSTEMS, SUCH AS DRIP AND BUBBLER SYSTEMS.
- IRRIGATION SYSTEM SHALL BE INCLUDED IN THE BASE PROPOSAL.
- IRRIGATION CONTROLLERS SHALL INCLUDE RAIN/FREEZE SENSORS AND FLOW SENSOR VALVES.
- THE CONTRACTOR SHALL SUBMIT A HARD COPY AND DIGITAL AUTOCAD COPY OF THE RECORD DRAWINGS OF THE IRRIGATION SYSTEM UPON COMPLETION OF THE PROJECT.
- SPRINKLER HEADS SHALL NOT SPRAY ONTO PAVEMENT OR BUILDINGS AND BE SELECTED TO OPTIMIZE COVERAGE AND MINIMIZE WATER USAGE.
- THE PRESSURE VACUUM BREAKER SHALL BE LOCATED IN A SECURE AREA. IF NOT PRACTICAL, IT SHALL BE SECURED IN A LOCKABLE BOX THAT IS KEYED TO CAMPUS'S MASTER KEY SYSTEM.
- THE CONTROLLER LOCATION SHALL BE COORDINATED WITH THE OWNER.
- ALL IRRIGATION SYSTEM COMPONENTS SHALL BE COMPATIBLE AND FROM THE SAME MANUFACTURER'S SYSTEM. IT SHALL BE DESIGNED FOR FUTURE GROWTH.
- SYSTEM COMPONENTS SHALL BE INTERCHANGEABLE.
- 5% EXTRA HEADS AND NOZZLES OF EACH TYPE SHALL BE PROVIDED TO CAMPUS FOR MAINTENANCE AND REPAIRS.
- EXTENDED WARRANTY SHALL BE PROVIDED ON ALL HEADS FOR 2 YEARS AFTER SUBSTANTIAL COMPLETION.
- ALL HEADS SHALL BE OF THE "ROTOR TYPE" FOR BETTER SPREAD AND WATER SAVINGS.
- POP-UP HEADS SHALL HAVE EXTENDERS, AS NECESSARY, TO MEET MATURE PLANT SIZE REQUIREMENTS.
- THE LANDSCAPE CONTRACTOR SHALL ADJUST HEADS AND SCHEDULE OPTIMUM WATER USE EFFICIENCY WITHIN SIX MONTHS AFTER SITE HAS BEEN IN FULL USE.
- THE LANDSCAPE CONTRACTOR SHALL TEST, START-UP AND COMMISSION THE IRRIGATION CONTROL SYSTEM. ALL INTERLOCKS AND FEATURES OF THE SYSTEM SHALL BE TESTED AND WITNESSED BY THE OWNER'S REPRESENTATIVE. FAILURE OF ANY TESTED ITEMS SHALL BE NOTED, CORRECTED BY THE LANDSCAPING CONTRACTOR, AND THEN RETESTED.
- THE INSTALLATION SHALL MEET ALL REQUIREMENTS OF THE LOCAL WATER SUPPLIER AND BE ELIGIBLE TO RECEIVE EVAPORATION CREDITS FOR IRRIGATION AND COOLING TOWERS.

COORDINATION WITH EXISTING IRRIGATION

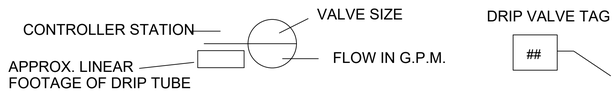
THE CONTRACTOR SHALL VISIT THE SITE BEFORE CONSTRUCTION BEGINS TO BECOME FAMILIAR WITH THE EXISTING SYSTEM LAYOUT. REROUTE, REPAIR, OR REINSTALL EXISTING EQUIPMENT, INCLUDING MAINLINE AND CONTROL WIRES AS REQUIRED TO MAINTAIN CONTINUED AUTOMATIC OPERATION OF ALL AREAS OUTSIDE THE LIMITS OF WORK. PROTECT EXISTING EQUIPMENT WITHIN THE LIMITS OF WORK, WHICH IS INTENDED TO REMAIN. CONTRACTOR SHALL KEEP EXISTING IRRIGATION (OUTSIDE OF THE SCOPE OF WORK) OPERABLE DURING CONSTRUCTION. L.I.C. SHALL RE-WORK EXISTING IRRIGATION TO INCLUDE AND ACCOUNT FOR NEW PLANTINGS. RE-WORKED IRRIGATION SHALL BE INSTALLED ACCORDING TO STATE SPECIFICATIONS.

COORDINATION WITH EXISTING TREES

NO MACHINE TRENCHING SHALL BE PERMITTED WITHIN THE ROOT ZONE OF EXISTING TREES. HAND-DIG ONLY WITHIN THE ROOT ZONES OF EXISTING TREES. NO ROOTS OVER 1" DIAMETER SHALL BE CUT. STAKE ALL PROPOSED TRENCH ROUTES NEAR EXISTING TREES FOR APPROVAL BY THE LANDSCAPE ARCHITECT BEFORE DIGGING BEGINS.

TEMPORARY IRRIGATION

THE CONTRACTOR SHALL COORDINATE WITH THE PLANTING PLAN AND PROVIDE TEMPORARY IRRIGATION FOR THE ESTABLISHMENT OF ALL PROPOSED PLANT MATERIALS LOCATED OUTSIDE THE LIMITS OF COVERAGE PROVIDED BY THE PERMANENT SYSTEM.



IRRIGATION IN TEXAS IS REGULATED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) (MC-178) P.O. BOX 13087 T.C.E.Q.'S WEB SITE IS: WWW.TCEQ.STATE.TX.US

STATE OF TEXAS CHRISTOPHER J. DIGGS 10311 LICENSED IRRIGATOR

James Pole
IRRIGATION CONSULTANTS
IRRIGATION DESIGN, CONSULTING, AND LANDSCAPE WATER MANAGEMENT

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THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

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MATRIX STRUCTURAL
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713.664.0130

LANDSCAPE
ASAKURA ROBINSON
2500 SUMMER STREET, SUITE 3228
713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
IRRIGATION DETAILS & NOTES

Project Mgr:
Designer:
Drawn By:
Checked By:
Date: 07/22/2025
Job No.: 1503

L3.01



SD02 - STONE AND WOOD BRIDGE



SD03 - WOOD PLAYGROUND (LARGE)



SD04 - SLIDE



SD06 - WOOD WALLED RAISED PLANTER BEDS



SD07 - WOOD PLAYGROUND (SMALL)



SD08 - LANDSCAPED GRAVEL GARDEN (FOREGROUND)
SD09 - SHED AND CONCRETE PAD (LEFT/BACKGROUND)



SD14 - CONCRETE DRAINAGE SWALE. DEMO SURROUNDING WOOD FENCE



SD18 - LOW WOOD WALL STRUCTURES

SITE DEMO GENERAL NOTES

1. DEMOLITION IS TO BE COORDINATED WITH OWNER. PARKING LOT IS TO REMAIN OPEN AND USABLE BY THE COLLEGE. PARKING LOT LIGHTING TO REMAIN FUNCTIONAL. CONTRACTOR TO CONFIRM PARKING LOT LIGHTING IS NOT POWERED BY BUILDING PANEL. IF, SO - ALERT OWNER AND ARCHITECT IMMEDIATLEY FOR FURTHER INSTRUCTION.

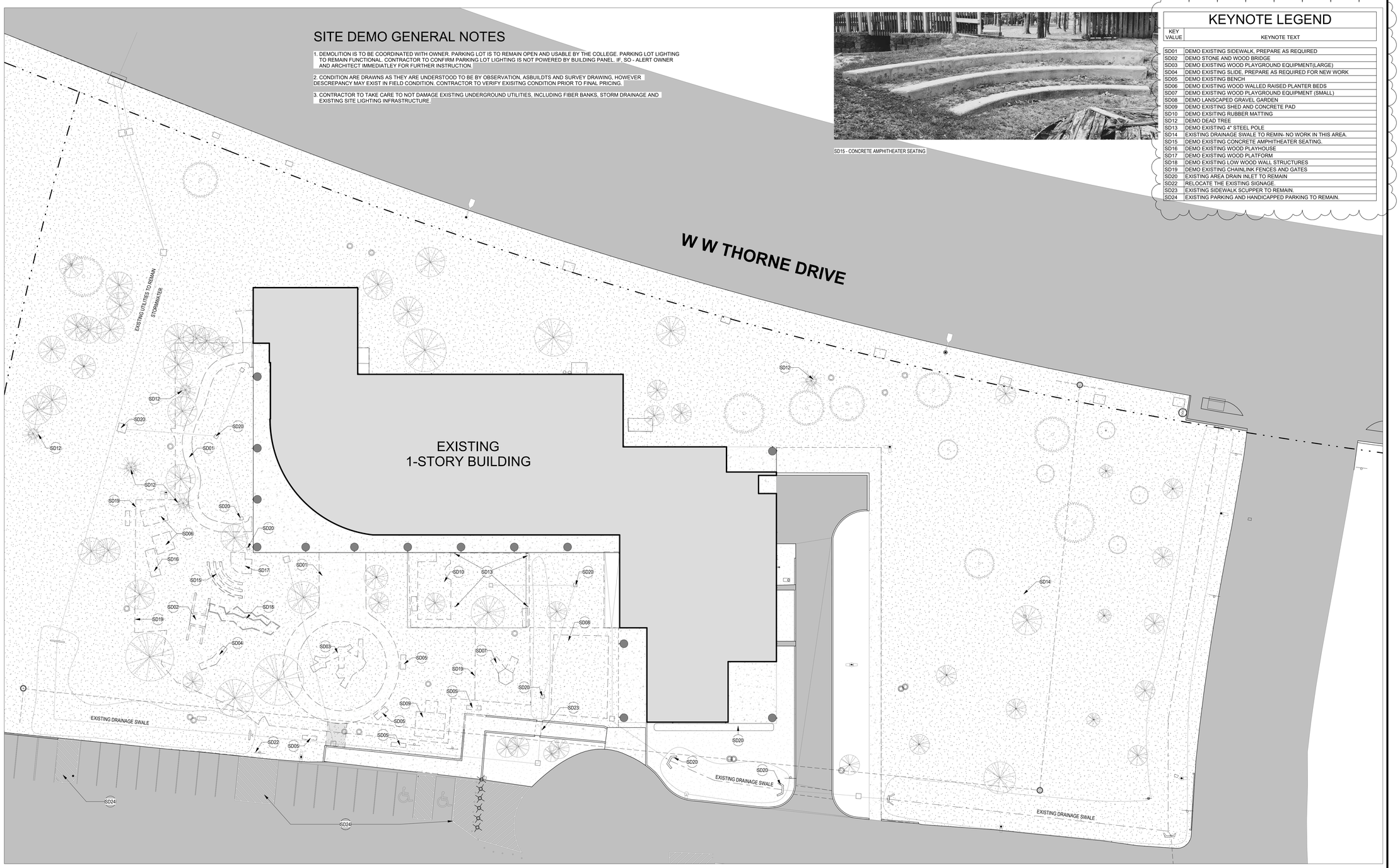
2. CONDITION ARE DRAWNS AS THEY ARE UNDERSTOOD TO BE BY OBSERVATION, ASBUILDTS AND SURVEY DRAWING, HOWEVER DESCREPANCY MAY EXIST IN FIELD CONDITION. CONTRACTOR TO VERIFY EXISITNG CONDITION PRIOR TO FINAL PRICING.

3. CONTRACTOR TO TAKE CARE TO NOT DAMAGE EXISTING UNDERGROUND UTILITIES, INCLUDING FIBER BANKS, STORM DRAINAGE AND EXISTING SITE LIGHTING INFRASTRUCTURE.

SD15 - CONCRETE AMPHITHEATER SEATING

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
SD01	DEMO EXISTING SIDEWALK, PREPARE AS REQUIRED
SD02	DEMO STONE AND WOOD BRIDGE
SD03	DEMO EXISTING WOOD PLAYGROUND EQUIPMENT(LARGE)
SD04	DEMO EXISTING SLIDE, PREPARE AS REQUIRED FOR NEW WORK
SD05	DEMO EXISTING BENCH
SD06	DEMO EXISTING WOOD WALLED RAISED PLANTER BEDS
SD07	DEMO EXISTING WOOD PLAYGROUND EQUIPMENT (SMALL)
SD08	DEMO LANSCAPED GRAVEL GARDEN
SD09	DEMO EXISTING SHED AND CONCRETE PAD
SD10	DEMO EXISTING RUBBER MATTING
SD12	DEMO DEAD TREE
SD13	DEMO EXISTING 4" STEEL POLE
SD14	EXISTING DRAINAGE SWALE TO REMIN- NO WORK IN THIS AREA.
SD15	DEMO EXISTING CONCRETE AMPHITHEATER SEATING.
SD16	DEMO EXISTING WOOD PLAYHOUSE
SD17	DEMO EXISTING WOOD PLATFORM
SD18	DEMO EXISTING LOW WOOD WALL STRUCTURES
SD19	DEMO EXISTING CHAINLINK FENCES AND GATES
SD20	EXISTING AREA DRAIN INLET TO REMAIN
SD22	RELOCATE THE EXISTING SIGNAGE.
SD23	EXISTING SIDEWALK SCUPPER TO REMAIN.
SD24	EXISTING PARKING AND HANDICAPPED PARKING TO REMAIN.



1 SITE PLAN - DEMOLITION
SCALE: 1/16" = 1'-0"

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

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Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
DEMOLITION SITE PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,FF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

AD-011

DEMOLITION PLAN GENERAL NOTES

1. CONFIRM LIST OF ALL ITEMS TO BE SALVAGED AND RETURNED TO OWNER WITH A SITE WALK WITH ARCHITECT AND OWNER'S REP PRIOR TO COMMENCING DEMOLITION.
2. THE GC SHALL PATCH AND FINISH, TO MATCH EXISTING, ANY ADJACENT WALLS, CEILING, FLOOR COVERINGS, FINISHES, ETC. AFFECTED IN ANY MANNER BY CONSTRUCTION IF THEY ARE INTENDED TO REMAIN IN PLACE.
3. THE GC SHALL BE RESPONSIBLE FOR THE REPAIRS OF ANY DAMAGE CAUSED BY THE GC OR SUBCONTRACTORS DURING THE CONSTRUCTION PERIOD. WHEN DAMAGE IS CONSIDERED UNAVOIDABLE, SUBMIT WRITTEN NOTIFICATION PRIOR TO UNDERTAKING WORK. IF NOTIFICATION IS NOT GIVEN, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR DAMAGE & THE COST OF SATISFACTORILY REPAIRING OR REPLACING DAMAGED WORK.
4. ALL EXISTING CEILING TILE, GRID AND LIGHTING TO BE REMOVED.
5. REMOVE ALL EXISTING FLOORING, TAKING CARE NOT TO DAMAGE UNDERLYING CONCRETE WHERE FEASIBLE - REFER TO FINISH PLANS FOR LOCATIONS OF EXPOSED EXISTING CONCRETE AS FINISH FLOORING MATERIAL.
6. SEE MEP DRAWINGS FOR SCOPE OF DEMOLITION FOR EXISTING MECHANICAL, ELECTRICAL & PLUMBING.
7. DEMO ALL EXISTING INTERIOR DOORS. DOOR HARDWARE TO BE SALVAGED AND RETURNED TO THE OWNER. TYPICAL ALL INTERIOR DOORS UNO.

LEGEND:

- EXISTING WALLS TO REMAIN
- WALLS TO BE DEMOLISHED
- EXISTING VCT FLOORING TO BE REMOVED
- EXISTING TILE FLOORING TO BE REMOVED
- SAWCUT EXISTING SLAB FOR MEP CONNECTION

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
D1	REMOVE EXISITING VCT FLOORING - STRIP ALL GLUE AND STAINING. PREPARE EXISTING CONCRETE FLOOR BELOW FOR POLISHING.
D2	DEMO EXISTING CERAMIC TILE OR QUARRY TILE AND EXISTING MUDBED.
D3	DEMO EXISTING PLUMBING FIXTURES AND PIPING - INCLUDING VENT PIPING, BACK TO MAIN. CAP AND ABANDON. ROOFING REPAIRS TO BE PROVIDED AS REQUIRED DURING THE DEMOLITION AND MODIFICATION OF VENTS.
D4	DEMO EXISTING PLUMBING FIXTURES. EXISTING SANITARY PIPING TO REMAIN. EXISTING SUPPLY PIPING CAN BE SALVAGED AND REUSED AT CONTRACTOR'S OPTION.
D6	DEMO EXISTING VENT HOOD AND EXHAUST EQUIPMENT. REMOVE ACCESSORIES, EQUIPMENT ETC. AT EXISTING ROOF. ROOFING REPAIRS TO BE PROVIDED AS NECESSARY.
D7	DEMO EXISTING INTERIOR PARTITIONS INCLUDING ELECTRICAL, PLUMBING AND OTHER SYSTEMS WITHIN WALLS. TYPICAL ALL INTERIOR PARTITIONS UNO.
D9	DEMO EXISTING MILLWORK.
D10	DEMO EXISTING FIRE ALARM CONTROL PANEL. EXISTING FIRE ALARM SYSTEM AND DEVICES. NEW PANEL WILL BE RELOCATED TO NEW LOBBY.
D11	DEMO EXISTING SECURITY SYSTEM. SALVAGE AND RETURN ALL EXISTING CAMERAS TO OWNER.
D12	SALVAGE EXISTING LAMINATED GLASS PANELS.
D13	FIBER CONNECTION TO NOT BE DEMOLISHED PROTECT DURING DEMOLITION AND CONSTRUCTION
D14	IN IDF S265

1 DEMO FLOOR PLAN

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

2 Existing Images (AD-111)

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



1 - 3,4,5YR. CLASSROOM



2 - 3,4,5YR. CLASSROOM MILWORK



3 - WORKROOM



4 - PART TIME



5 - 3,4,5YR. RR



6 - 3/4YR. RR



7 - FACULTY



8 - KITCHEN



9 - PORCH

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Project Status:

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No.	DATE	DESCRIPTION
1	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title

DEMOLITION FLOOR PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	FF,KF,SP
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

AD-111

SITE PLAN GENERAL NOTES

1. SITE PLAN INDICATED GENERAL DESIGN INTENT OF ARCHITECTURAL SITE WORK. REFER TO LANDSCAPE DRAWINGS AND SPECIFICATIONS FOR OTHER WORK NOT SPECIFIED HEREIN.

2. REFER TO G SHEETS FOR TYPICAL ACCESSIBILITY STANDARDS FOR ALL DESIGN STANDARDS AND REQUIREMENTS RELATED TO ACCESSIBILITY.

3. COMPLY WITH THE REQUIREMENTS OF THE TEXAS ACCESSIBILITY STANDARDS FOR ALL DESIGN STANDARDS AND REQUIREMENTS RELATED TO ACCESSIBILITY.

4. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST POSSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE ENTRANCE.

5. ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 96" WIDE AND LEVEL WITH SLOPES NOT EXCEEDING 2% IN ALL DIRECTIONS.

6. ACCESSIBLE PARKING SPACES SHALL BE DESIGNATED AS RESERVED BY A SIGN SHOWING THE "SYMBOL OF ACCESSIBILITY". AN ADDITIONAL "VAN ACCESSIBLE" SIGN SHALL BE MOUNTED BELOW FOR ALL VAN ACCESSIBLE SPACES.

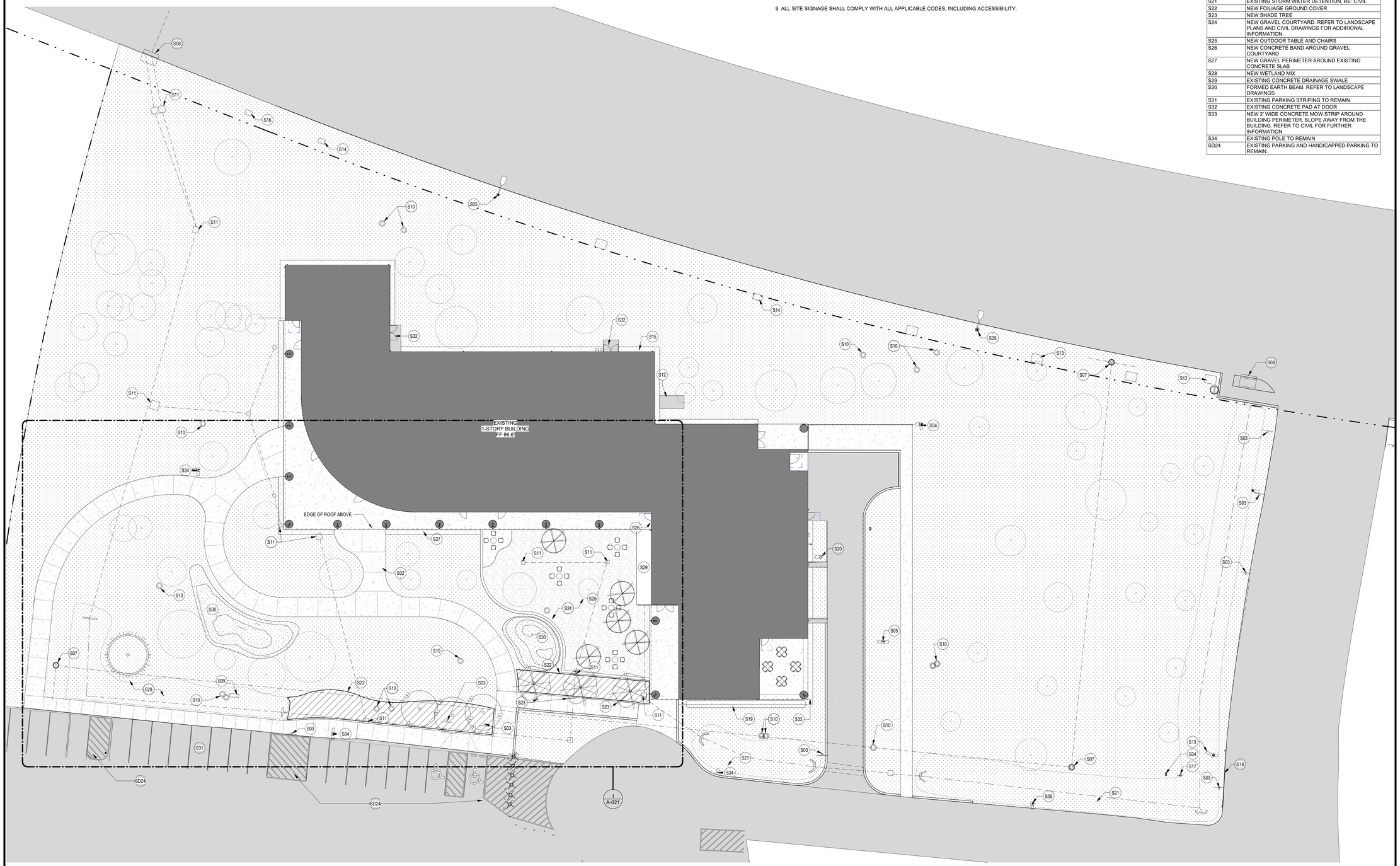
7. SLOPES OF CURB RAMPS ALONG AN ACCESSIBLE PATH SHALL NOT EXCEED 1:20. TRANSITIONS FROM RAMPS TO TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. THE MIN. WIDTH OF A CURB RAMP SHALL BE 36" EXCLUSIVE OF FLARED SIDES. RAMP SURFACES SHALL BE SLIP RESISTANT.

8. CHANGES IN LEVEL UP TO 1/4" MAY BE VERTICAL WITHOUT EDGE TREATMENT, 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.

9. ALL SITE SIGNAGE SHALL COMPLY WITH ALL APPLICABLE CODES, INCLUDING ACCESSIBILITY.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
S02	NEW CONCRETE SIDEWALK
S03	EXISTING SIGNAGE
S04	EXISTING FIRE HYDRANT
S05	EXISTING UTILITY POLE/LIGHT POLE
S07	EXISTING SANITARY MANHOLE
S08	EXISTING CURB INLET
S09	EXISTING IRRIGATION METER
S10	EXISTING IRRIGATION CONTROL VALVE
S11	EXISTING GRATE INLET
S12	EXISTING ELECTRICAL TRANSFORMER
S13	EXISTING ELECTRICAL PULLBOX
S14	EXISTING NEWBASIS COMMS PULLBOX
S15	EXISTING WALL MOUNTED ELECTRICAL PANEL
S16	EXISTING AT&T PULLBOX
S17	EXISTING WATER VALVE
S18	EXISTING GATE POST
S19	EXISTING BOX HEDGE
S20	EXISTING CLEAN OUT
S21	EXISTING STORM WATER DETENTION, RE: CIVIL
S22	NEW FOILIAGE GROUND COVER
S23	NEW SHADE TREE
S24	NEW GRAVEL COURTYARD. REFER TO LANDSCAPE PLANS AND CIVIL DRAWINGS FOR ADDIRIONAL INFORMATION.
S25	NEW OUTDOOR TABLE AND CHAIRS
S26	NEW CONCRETE BAND AROUND GRAVEL COURTYARD
S27	NEW GRAVEL PERIMETER AROUND EXISTING CONCRETE SLAB
S28	NEW WETLAND MIX
S29	EXISTING CONCRETE DRAINAGE SWALE
S30	FORMED EARTH BEAM. REFER TO LANDSCAPE DRAWINGS
S31	EXISTING PARKING STRIPING TO REMAIN
S32	EXISTING CONCRETE PAD AT DOOR
S33	NEW 2' WIDE CONCRETE MOW STRIP AROUND BUILDING PERIMETER. SLOPE AWAY FROM THE BUILDING. REFER TO CIVIL FOR FURTHER INFORMATION
S34	EXISTING POLE TO REMAIN
SD24	EXISTING PARKING AND HANDICAPPED PARKING TO REMAIN.



1 OVERALL SITE PLAN
SCALE: 1/16" = 1'-0"

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Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION

Sheet Title
ARCHITECTURAL SITE PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF
Checked By:	DO
Date:	07/22/25
Job No.:	1503

A-011

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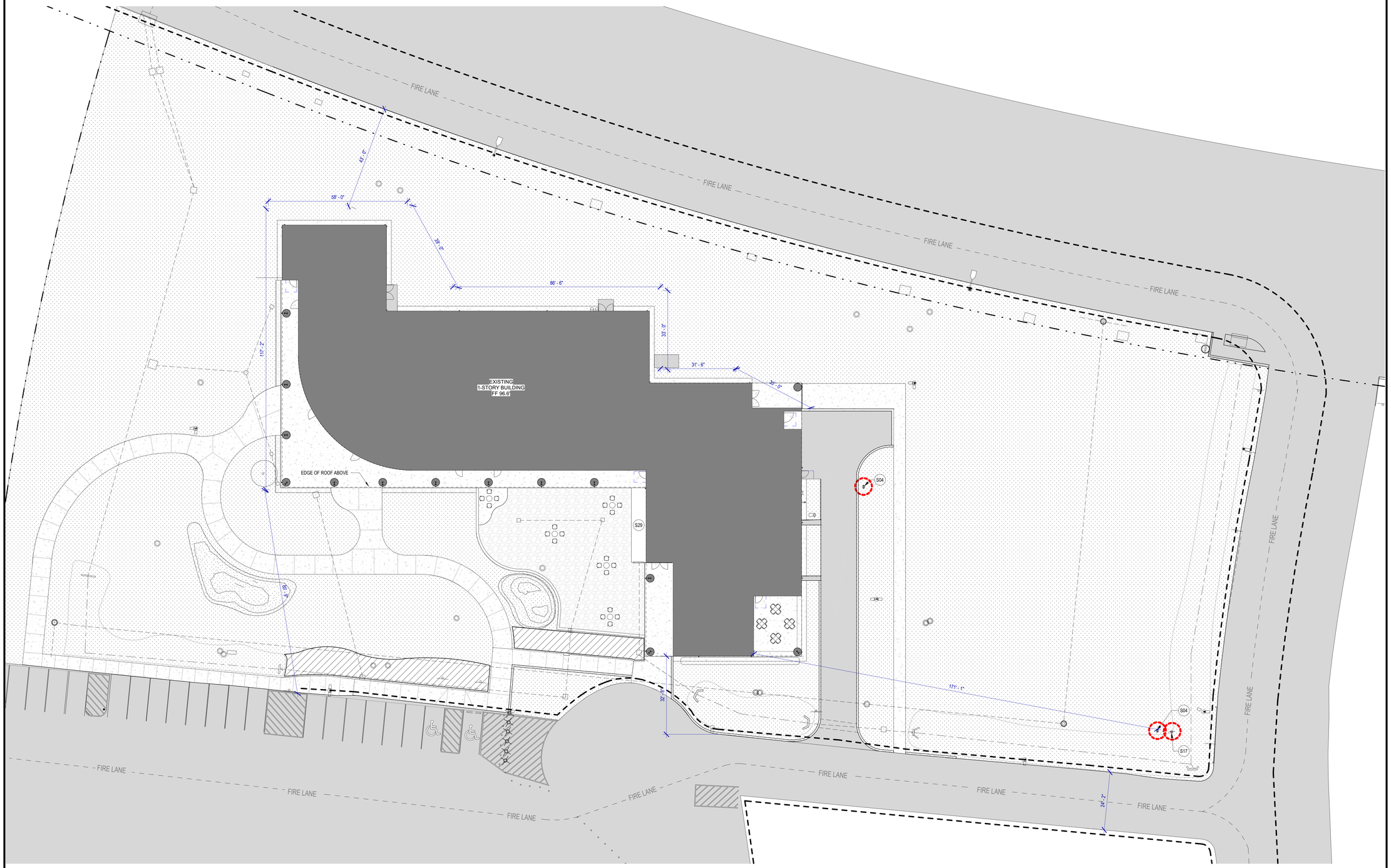
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8. CHANGES IN LEVEL UP TO 1/4" MAY BE VERTICAL WITHOUT EDGE TREATMENT, 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.

9. ALL SITE SIGNAGE SHALL COMPLY WITH ALL APPLICABLE CODES, INCLUDING ACCESSIBILITY.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
S04	EXISTING FIRE HYDRANT
S17	EXISTING WATER VALVE
S29	EXISTING CONCRETE DRAINAGE SWALE



1 SITE PLAN - FIRE SAFETY
SCALE: 1/16" = 1'-0"

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3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
ARCHITECTURAL SITE PLAN- FIRE SAFTY

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-012

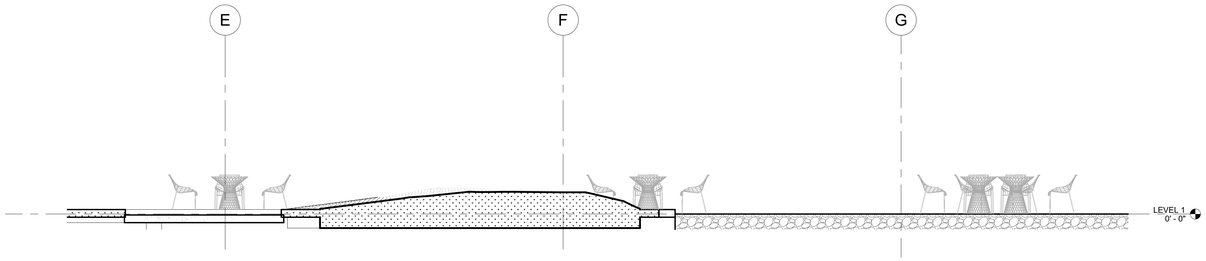
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LEGEND

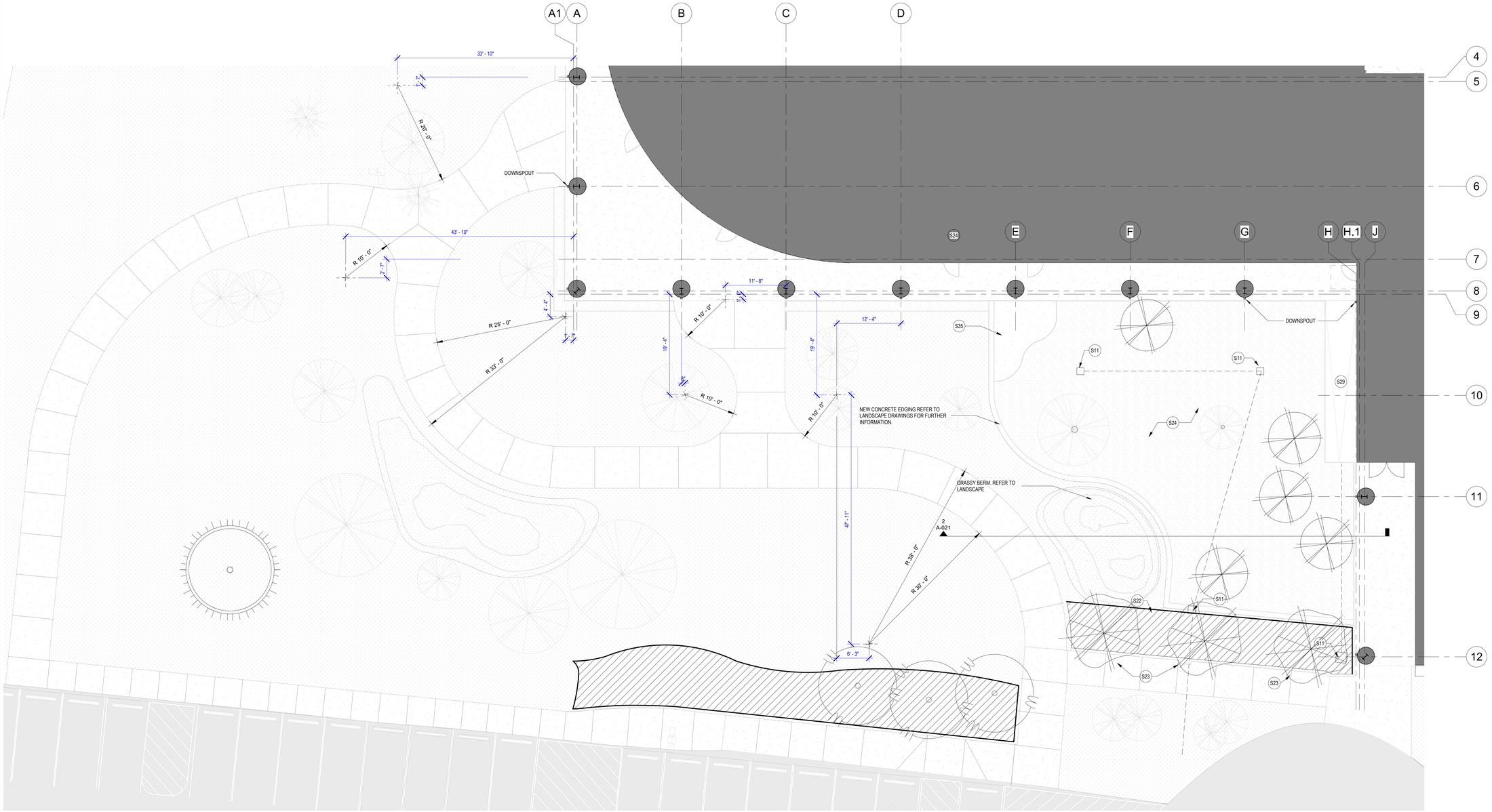
- CONCRETE
- GRAVEL
- GRASS

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
S11	EXISTING GRATE INLET
S22	NEW FOILIAGE GROUND COVER
S23	NEW SHADE TREE
S24	NEW GRAVEL COURTYARD. REFER TO LANDSCAPE PLANS AND CIVIL DRAWINGS FOR ADDIRIONAL INFORMATION.
S29	EXISTING CONCRETE DRAINAGE SWALE.
S35	NEW CONCRETE PAD FOR ACCESSIBLE TAB.E. POUR FLUSH AT EXISTING SIDEWALK AND SLOPE TO DRAIN INTO GRAVEL. NOT MORE THAN 1/8" PER FOOT SLOPE.



2 SITE SECTION
SCALE: 1/4" = 1'-0"



1 ENLARGED SITE PLAN
SCALE: 1/8" = 1'-0"

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Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION

Sheet Title
ENLARGED SITE PLAN AND DETAILS

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-021

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FLOOR PLAN GENERAL NOTES

1. REFER TO SHEET G-002 FOR KEY TO SYMBOLS LEGEND AND ABBREVIATIONS

2. REFER TO G-111- G-121 FOR PARTITION TYPES AND TYPICAL DETAILS

3. REFER TO A-551 FOR CASEWORK TYPES AND DETAILS.

4. ALL LOCATIONS OF ELECTRICAL DEVICES, FIRE ALARM DEVICES, SECURITY DEVICES AND ACCESS PANELS SHALL BE VERIFIED IN THE FIELD WITH THE ARCHITECT PRIOR TO ROUGH-IN.

5. PARTITIONS LOCATED ON COLUMN GRIDS SHALL BE LOCATED CENTERLINE OF THE COL. GRID UNLESS OTHERWISE DIMENSIONED. ALL DIMENSIONS ARE TAKEN FROM FACE OF STUD UNLESS OTHERWISE NOTED.

6. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE LOCATED 4" FROM THE FINISHED WALL OR PARTITION TO OUTSIDE OF FINISHED JAMB.

7. THE CONTRACTOR SHALL PROVIDE AND INSTALL CONTINOUS COMPRESSIBLE JOINT FILLER AT THE INTERIOR SLAB ON GRADE PERIMETER AND AT INTERVAL COLUMN BLOCK-OUTS; 1/2" WIDTH.

8. ANY SLAB GRADE JOINTS, INCLUDING SLAB PERIMETER JOINTS, SHALL BE FILLED WITH SEALANT; SEALANT COLOR TO BE VEIRIFIED WITH ARCHITECT FOR ALL JOINT EXPOSED TO VIEW.

9. PROVIDE 2" X2" X60" S.S. CORNER GUARDS AT ALL OUTSIDE CORNERS.

10. ALL PARTITIONS ASHALL BE "A3A" U.N.O.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
P12	COUNTER DEPTH STAND ALONE FULL HEIGHT REFRIGERATOR WITHOUT FREEZER
P14	VENDING MACHINES BY OWNER. PROVIDE POWER AND DATA
P27	EXISTING ENCLOSURE TO REMAIN
P39	EXISTING EXTERIOR WALL. REPAIR OR REPLACE EXISTING GWB AT INTERIOR. REFER TO FINISH SCHEDULE FOR ADDITIONAL INFO
SE11	FIRE EXTINGUISHER CABINET-ACTIVAR CONSTRUCTION WITH 10 LB CLASS ABC EXTINGUISHER

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

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

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11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION

Sheet Title
REFERENCE FLOOR PLAN

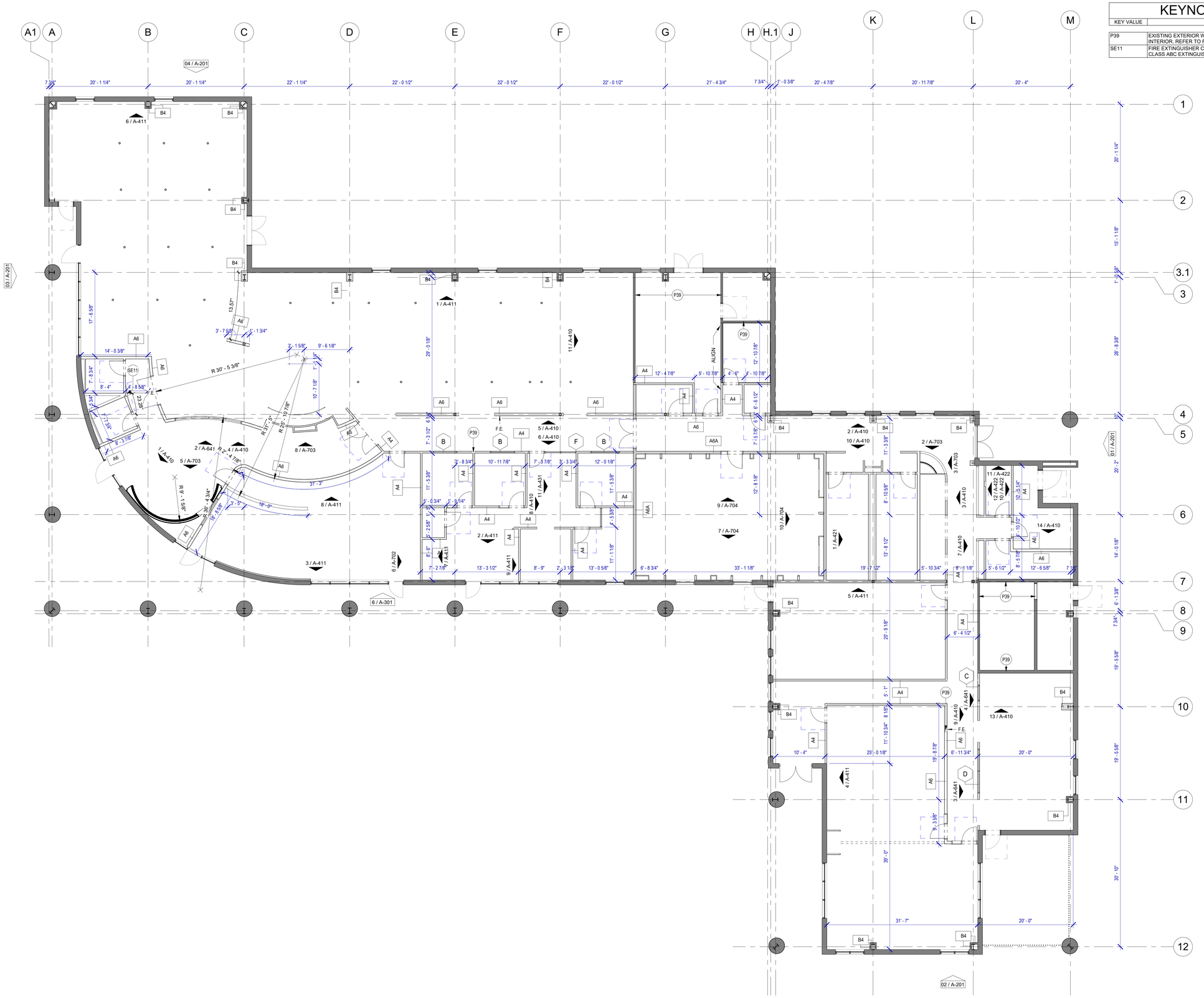
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-111

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KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
P39	EXISTING EXTERIOR WALL. REPAIR OR REPLACE EXISTING GWB AT INTERIOR. REFER TO FINISH SCHEDULE FOR ADDITIONAL INFO
SE11	FIRE EXTINGUISHER CABINET-ACTIVAR CONSTRUCTION WITH 10 LB CLASS ABC EXTINGUISHER



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

0 4' 8' 16'
SCALE : 1/8" = 1'-0"

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LONE STAR COLLEGE
NORTH HARRIS

SCHOOL OF COSMETOLOGY
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JENNIFER M. DUNN
31730
STATE OF TEXAS

CLIENT:
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2700 W W THORNE DRIVE
LEIGHANN BAILIE
281.290.3755

MEP
JONES ENGINEERS
9820 WHITHOM DRIVE
713.222.7766

STRUCTURAL
MATRIX STRUCTURAL
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713.664.0130

LANDSCAPE
ASAKURA ROBINSON
2500 SUMMER STREET, SUITE 3228
713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
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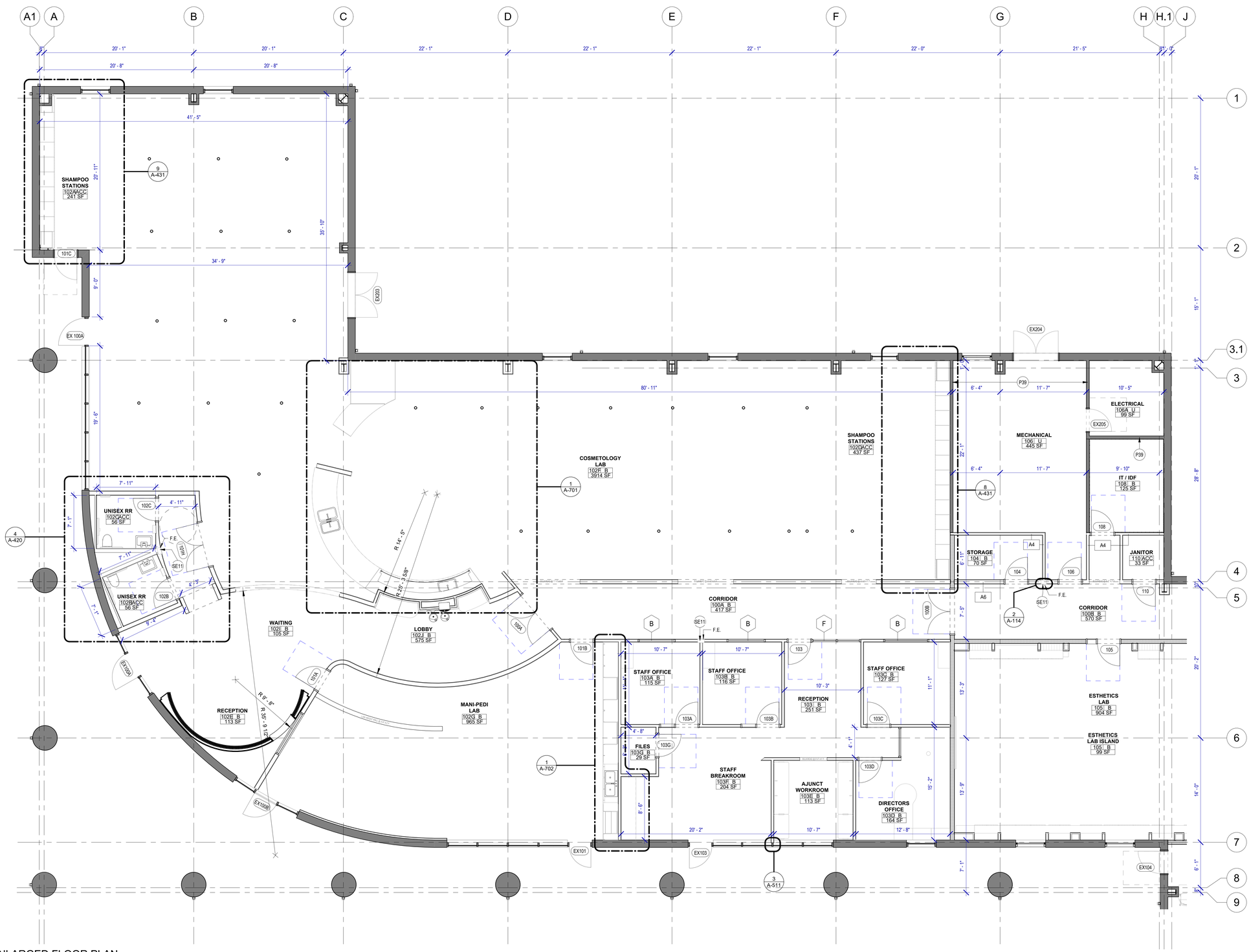
Sheet Title
DIMENSION FLOOR PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-112

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
P39	EXISTING EXTERIOR WALL. REPAIR OR REPLACE EXISTING GWB AT INTERIOR. REFER TO FINISH SCHEDULE FOR ADDITIONAL INFO
SE11	FIRE EXTINGUISHER CABINET-ACTIVAR CONSTRUCTION WITH 10 LB CLASS ABC EXTINGUISHER



1 ENLARGED FLOOR PLAN.
SCALE: 3/16" = 1'-0"

0 4' 8' 16'
SCALE : 1/8" = 1'-0"

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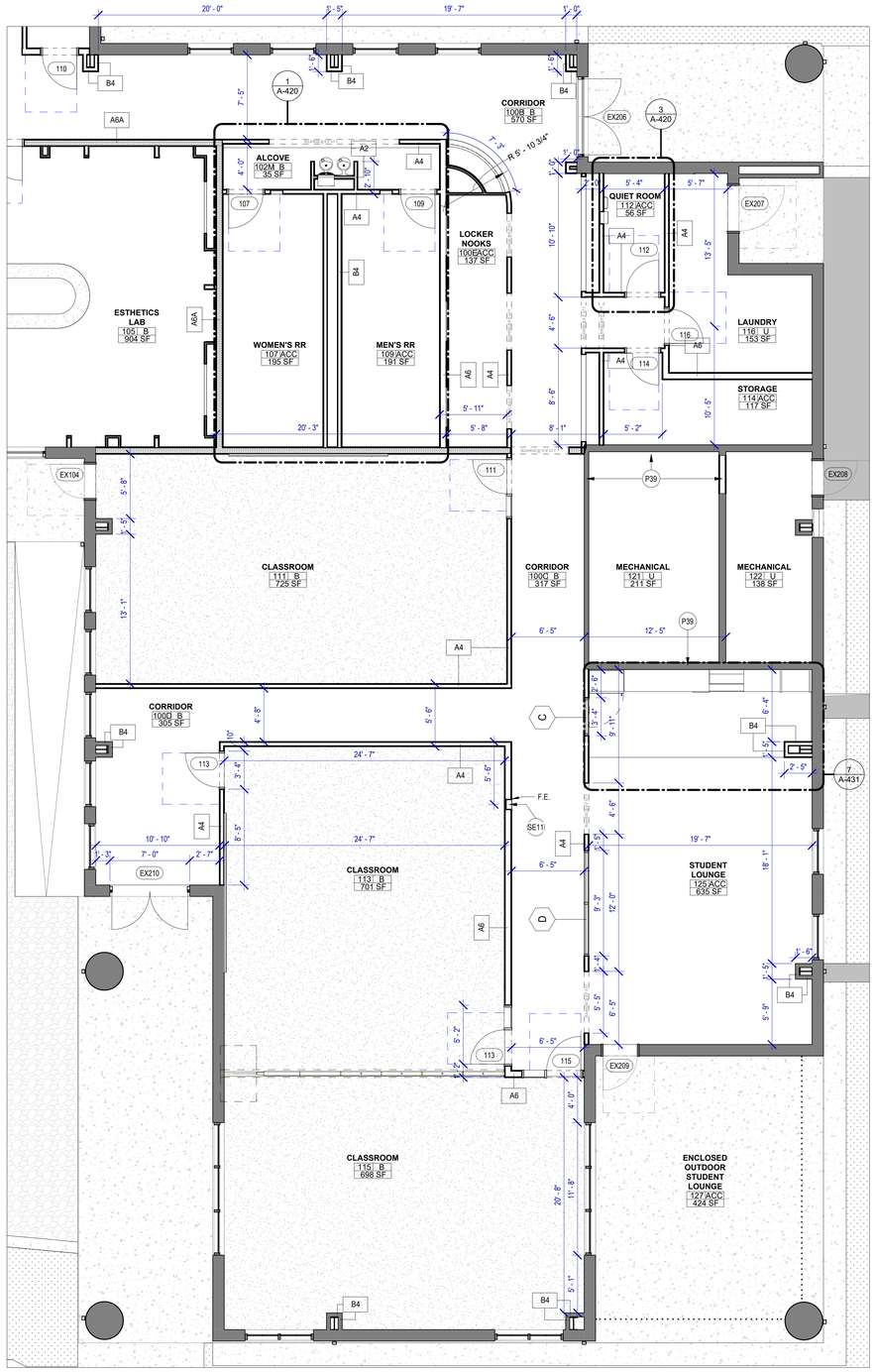
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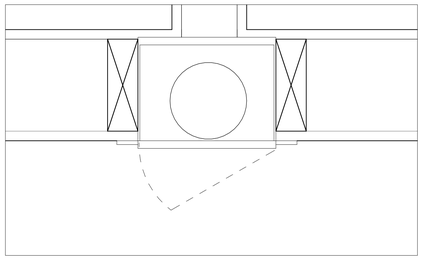
Sheet Title
ENLARGED FLOOR PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-113



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



2 FIRE EXTINGUISHER- DETAIL PLAN
SCALE: 3" = 1'-0"

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
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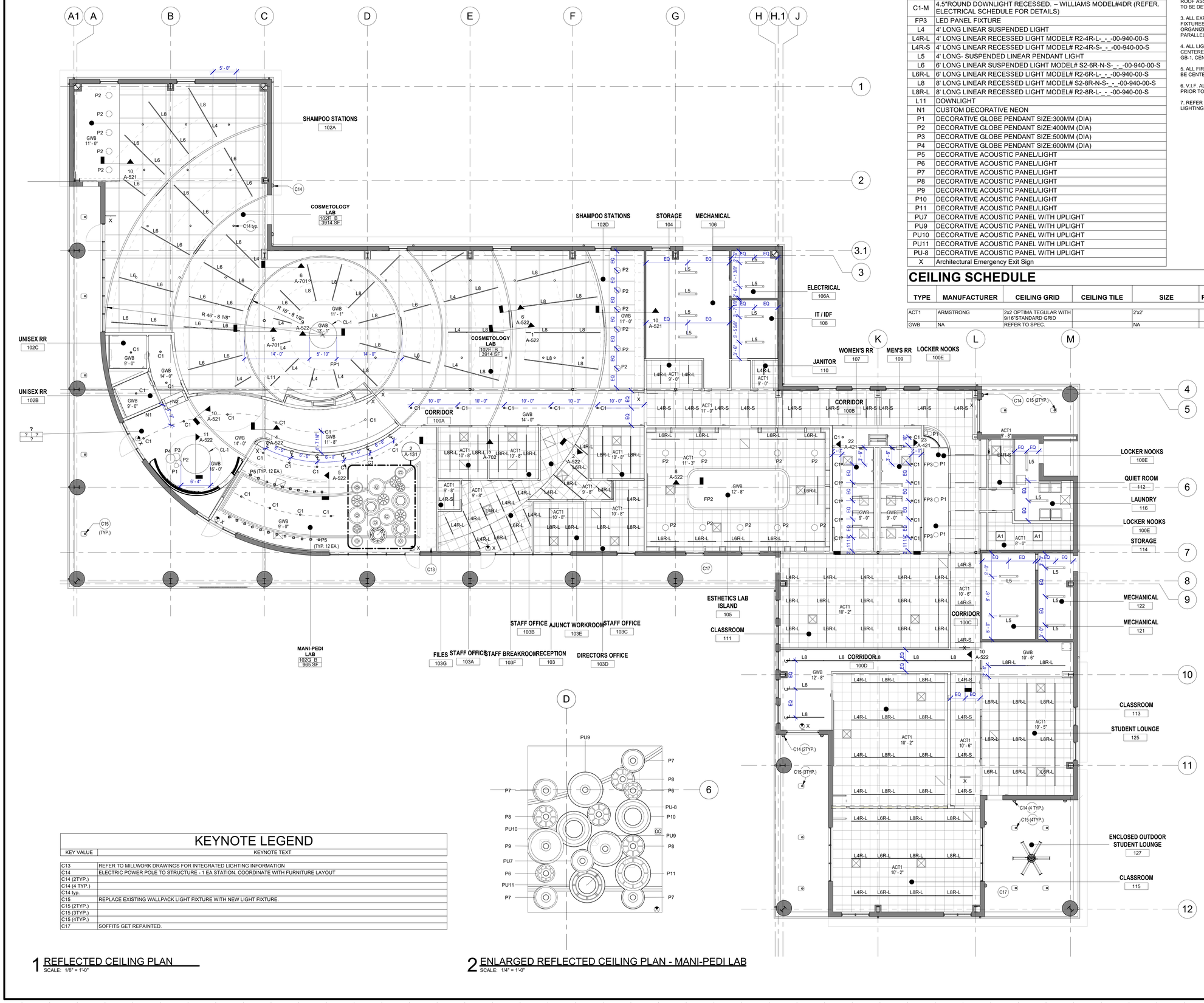
No.	DATE	DESCRIPTION

Sheet Title
ENLARGED FLOOR PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP
Checked By:	DO
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Job No.:	1503

A-114

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LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION
A1	2X2 RECESSED TROFFER
C1	4.5"ROUND DOWNLIGHT RECESSED. – WILLIAMS MODEL#4DR (REFER. ELECTRICAL SCHEDULE FOR DETAILS)
C1-M	4.5"ROUND DOWNLIGHT RECESSED. – WILLIAMS MODEL#4DR (REFER. ELECTRICAL SCHEDULE FOR DETAILS)
FP3	LED PANEL FIXTURE
L4	4' LONG LINEAR SUSPENDED LIGHT
L4R-L	4' LONG LINEAR RECESSED LIGHT MODEL# R2-4R-L-_-_-00-940-00-S
L4R-S	4' LONG LINEAR RECESSED LIGHT MODEL# R2-4R-S-_-_-00-940-00-S
L5	4' LONG- SUSPENDED LINEAR PENDANT LIGHT
L6	6' LONG LINEAR SUSPENDED LIGHT MODEL# S2-6R-N-S-_-_-00-940-00-S
L6R-L	6' LONG LINEAR RECESSED LIGHT MODEL# R2-6R-L-_-_-00-940-00-S
L8	8' LONG LINEAR RECESSED LIGHT MODEL# S2-8R-N-S-_-_-00-940-00-S
L8R-L	8' LONG LINEAR RECESSED LIGHT MODEL# R2-8R-L-_-_-00-940-00-S
L11	DOWNLIGHT
N1	CUSTOM DECORATIVE NEON
P1	DECORATIVE GLOBE PENDANT SIZE:300MM (DIA)
P2	DECORATIVE GLOBE PENDANT SIZE:400MM (DIA)
P3	DECORATIVE GLOBE PENDANT SIZE:500MM (DIA)
P4	DECORATIVE GLOBE PENDANT SIZE:600MM (DIA)
P5	DECORATIVE ACOUSTIC PANEL/LIGHT
P6	DECORATIVE ACOUSTIC PANEL/LIGHT
P7	DECORATIVE ACOUSTIC PANEL/LIGHT
P8	DECORATIVE ACOUSTIC PANEL/LIGHT
P9	DECORATIVE ACOUSTIC PANEL/LIGHT
P10	DECORATIVE ACOUSTIC PANEL/LIGHT
P11	DECORATIVE ACOUSTIC PANEL/LIGHT
PU7	DECORATIVE ACOUSTIC PANEL WITH UPLIGHT
PU9	DECORATIVE ACOUSTIC PANEL WITH UPLIGHT
PU10	DECORATIVE ACOUSTIC PANEL WITH UPLIGHT
PU11	DECORATIVE ACOUSTIC PANEL WITH UPLIGHT
PU-8	DECORATIVE ACOUSTIC PANEL WITH UPLIGHT
X	Architectural Emergency Exit Sign

CEILING SCHEDULE

TYPE	MANUFACTURER	CEILING GRID	CEILING TILE	SIZE	NRC RATING	NOTES
ACT1	ARMSTRONG	2x2 OPTIMA TEGULAR WITH 9/16"STANDARD GRID		2'x2'		TEGULAR
GWB	NA	REFER TO SPEC.		NA		

RCP GENERAL NOTES

1.REFER TO G-003 FOR LIGHTING GENERAL NOTES AND FLOOR PLAN SCHEDULE SHEETS A-540'S FOR FINISH MATERIAL SCHEDULE.

2. ALL EXPOSED CONDUIT, HVAC DUCTS , HVAC DIFFUSERS, ROOF ASSEMBLIES AND STRUCTURAL TO BE PAINTED (COLOR TO BE DETERMINED), UNLESS NOTED OTHERWISE.

3. ALL EXPOSED CONDUIT AND WIRING SUPPLYING CEILING FIXTURES SHALL BE GANGED TOGETHER IN A CLEAN AND ORGANIZED MANNER AND RUN PERPENDICULAR AND/OR PARALLEL TO ROOF FRAMING.

4. ALL LIGHT FIXTURES NOT LOCATED BY DIMENSIONS ARE TO BE CENTERED IN CEILING TILES WHERE FIXTURE ARE LOCATED IN GB-1, CENTER FIXTURE IN ROOM UNLESS NOTED.

5. ALL FIRE SPRINKLER HEADS LOCATED IN ATC AND APC SHALL BE CENTERED WITHIN TILE.

6. V.I.F. ALL FIXTURE MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO INSTALLATION.

7. REFER TO MEP DRAWINGS FOR EGRESS / EMERGENCY LIGHTING.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
C13	REFER TO MILLWORK DRAWINGS FOR INTEGRATED LIGHTING INFORMATION
C14	ELECTRIC POWER POLE TO STRUCTURE - 1 EA STATION. COORDINATE WITH FURNITURE LAYOUT
C14 (2TYP.)	
C14 (4 TYP.)	
C14 typ.	
C15	REPLACE EXISTING WALLPACK LIGHT FIXTURE WITH NEW LIGHT FIXTURE.
C15 (2TYP.)	
C15 (3TYP.)	
C15 (4TYP.)	
C17	SOFFITS GET REPAINTED.

1 REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

2 ENLARGED REFLECTED CEILING PLAN - MANI-PEDI LAB
SCALE: 1/4" = 1'-0"

0 4' 8' 16'
SCALE : 1/8" = 1'-0"

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07.22.2025

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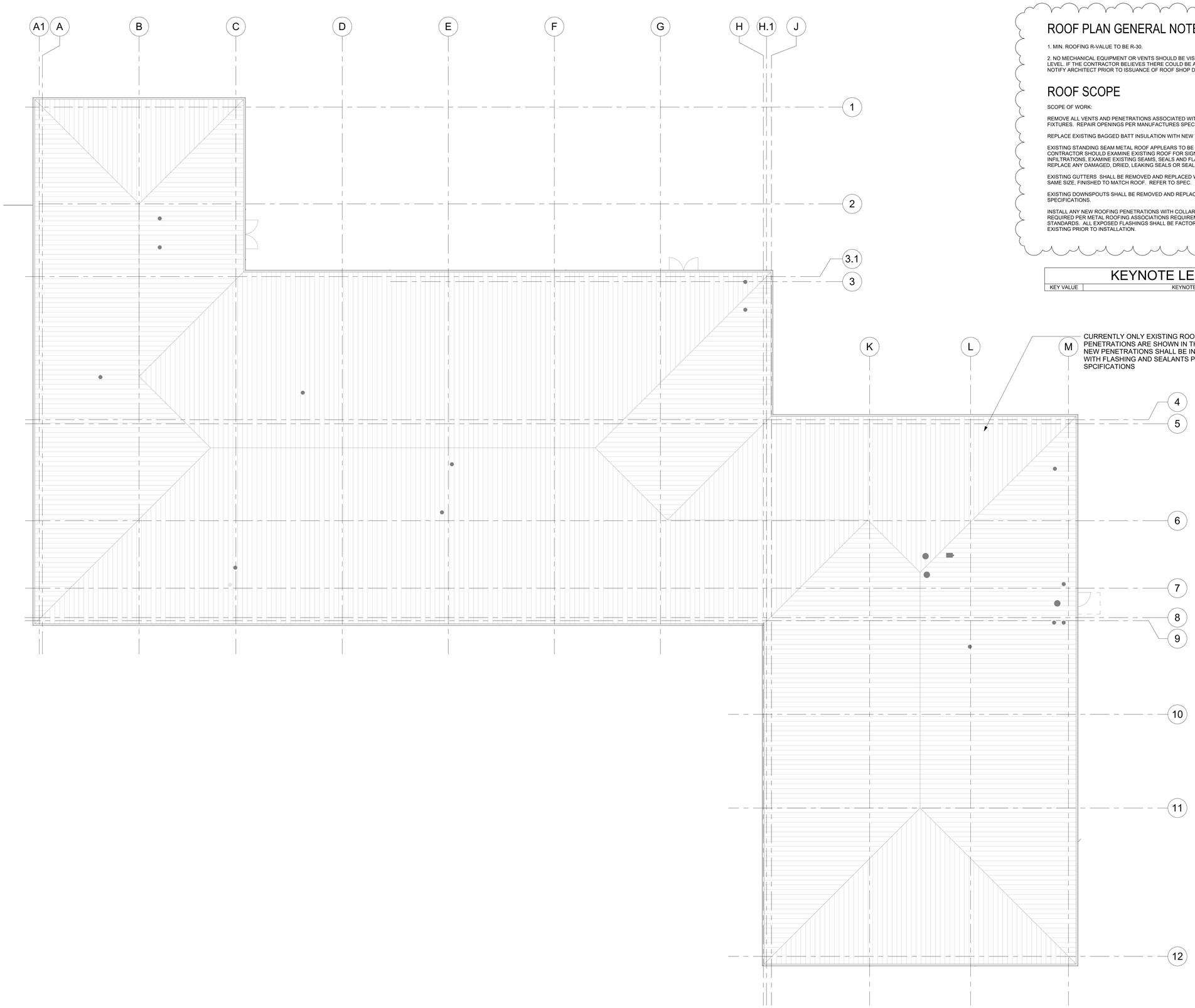
No.	DATE	DESCRIPTION
1	07/02/25	Addendum-2- Cancelled by LSC

Sheet Title
REFLECTED CEILING PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-131

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ROOF PLAN GENERAL NOTES

1. MIN. ROOFING R-VALUE TO BE R-30.

2. NO MECHANICAL EQUIPMENT OR VENTS SHOULD BE VISIBLE FROM THE GROUND LEVEL. IF THE CONTRACTOR BELIEVES THERE COULD BE A CONFLICT, HE/SHE SHOULD NOTIFY ARCHITECT PRIOR TO ISSUANCE OF ROOF SHOP DRAWINGS.

ROOF SCOPE

SCOPE OF WORK:

REMOVE ALL VENTS AND PENETRATIONS ASSOCIATED WITH DEMOLISHED PLUMBING FIXTURES. REPAIR OPENINGS PER MANUFACTURES SPECIFICATIONS.

REPLACE EXISTING BAGGED BATT INSULATION WITH NEW TO ACHIEVE MIN. R30.

EXISTING STANDING SEAM METAL ROOF APPLEARS TO BE IN GOOD CONDITION. CONTRACTOR SHOULD EXAMINE EXISTING ROOF FOR SIGNS OF LEAKS OR AIR INFILTRATIONS, EXAMINE EXISTING SEAMS, SEALS AND FLASHING, AND REPAIR / REPLACE ANY DAMAGED, DRIED, LEAKING SEALS OR SEALS AT THE END OF USEFUL LIFE.

EXISTING GUTTERS SHALL BE REMOVED AND REPLACED WITH NEW GUTTERS OF THE SAME SIZE, FINISHED TO MATCH ROOF. REFER TO SPEC.

EXISTING DOWNSPOUTS SHALL BE REMOVED AND REPLACED. REFER TO SPECIFICATIONS.

INSTALL ANY NEW ROOFING PENETRATIONS WITH COLLARS, FLASHINGS, SEALANTS AS REQUIRED PER METAL ROOFING ASSOCIATIONS REQUIREMENTS AND SMACNA STANDARDS. ALL EXPOSED FLASHINGS SHALL BE FACTORY PAINTED TO MATCH EXISTING PRIOR TO INSTALLATION.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT

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

0 4' 8' 16'
SCALE : 1/8" = 1'-0"

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Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
ROOF PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF,SF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-151

ROOM FINISH SCHEDULE REMARKS LEGEND

1. ALL GWB PARTITIONS TO BE PT1 UNLESS OTHERWISE NOTED.
2. GWB CEILINGS TO BE PT5 UNLESS OTHERWISE NOTED.
3. CEILING HEIGHT VARIES.

MATERIALS AND FINISHES GENERAL NOTES

1. WHERE MULTIPLE MATERIALS, FINISHES &/OR VARIATIONS IN ELEVATION ARE SPECIFIED FOR A SINGLE SURFACE, REFERENCE INFORMATION IS LOCATED ON THE PLANS AND ELEVATIONS.
2. INTERIOR WALL FINISHES ARE REFERENCED FROM THE ROOM FINISH SCHEDULE OR FROM THE INTERIOR ELEVATIONS.
3. INTERIOR FLOOR FINISHES ARE REFERENCED FROM THE ROOM FINISH SCHEDULE OR FROM THE FLOOR PLANS.
4. INTERIOR CEILING FINISHES ARE REFERENCED FROM THE ROOM FINISH SCHEDULE OR FROM THE REFLECTED CEILING PLANS.
5. EXTERIOR BUILDING FINISHES ARE REFERENCED FROM THE BUILDING ELEVATIONS.
6. WHERE GYPSUM BOARD LAYERS DIFFER BETWEEN BETWEEN TWO ADJOINING WALLS, MAINTAIN A CONTINUOUS FINISH FACE OF WALL.
7. FINISH FLOOR ELEVATIONS ARE TO TOP OF CONCRETE SLAB UNLESS OTHERWISE NOTED.
8. ALL INTERIOR PAINT SHEENS TO BE EGGSHELL UNLESS OTHERWISE NOTED.
9. PROVIDE RUBBER TRANSITION STRIPS AT ALL FLOOR MATERIAL TRANSITIONS UNLESS OTHERWISE NOTED. MATCH ROPPE #50 TILE/CARPET JOINER, BLACK 100. ALL LOCATIONS ARE TO BE VERIFIED IN THE FIELD WITH THE ARCHITECT PRIOR TO INSTALLATION.
10. ALL PAINT COLOR LOCATIONS ARE TO BE VERIFIED IN THE FIELD WITH THE ARCHITECT PRIOR TO INSTALLATION.

FURNITURE SCHEDULE

TYPE	MANUFACTURER	MODEL	OWNER PROVIDED
CH-1	Global Furniture Group	6335, 6335L	
CH-2	AMQ		
CH-3			•
CH-4	KI, Inc.	LL2111/GSL	
CH-5	KI, Inc.	LL5111	
CH-7	Sandler	Escalas 0600TA	
CH-10			•
CH-11	Steelcase		
TA-1	Steelcase		
TA-2	Steelcase	CURRENCY ENHANCED ONE PEDESTAL	
TA-3	Steelcase		
TA-4	Steelcase		
TA-5			•
TA-6	Steelcase		
TA-19	Steelcase	UNIVERSAL ROUND TABLE 36 DIA.	

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

0 4' 8' 16'
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Sheet Title
FURNITURE FLOOR PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF,SF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-161

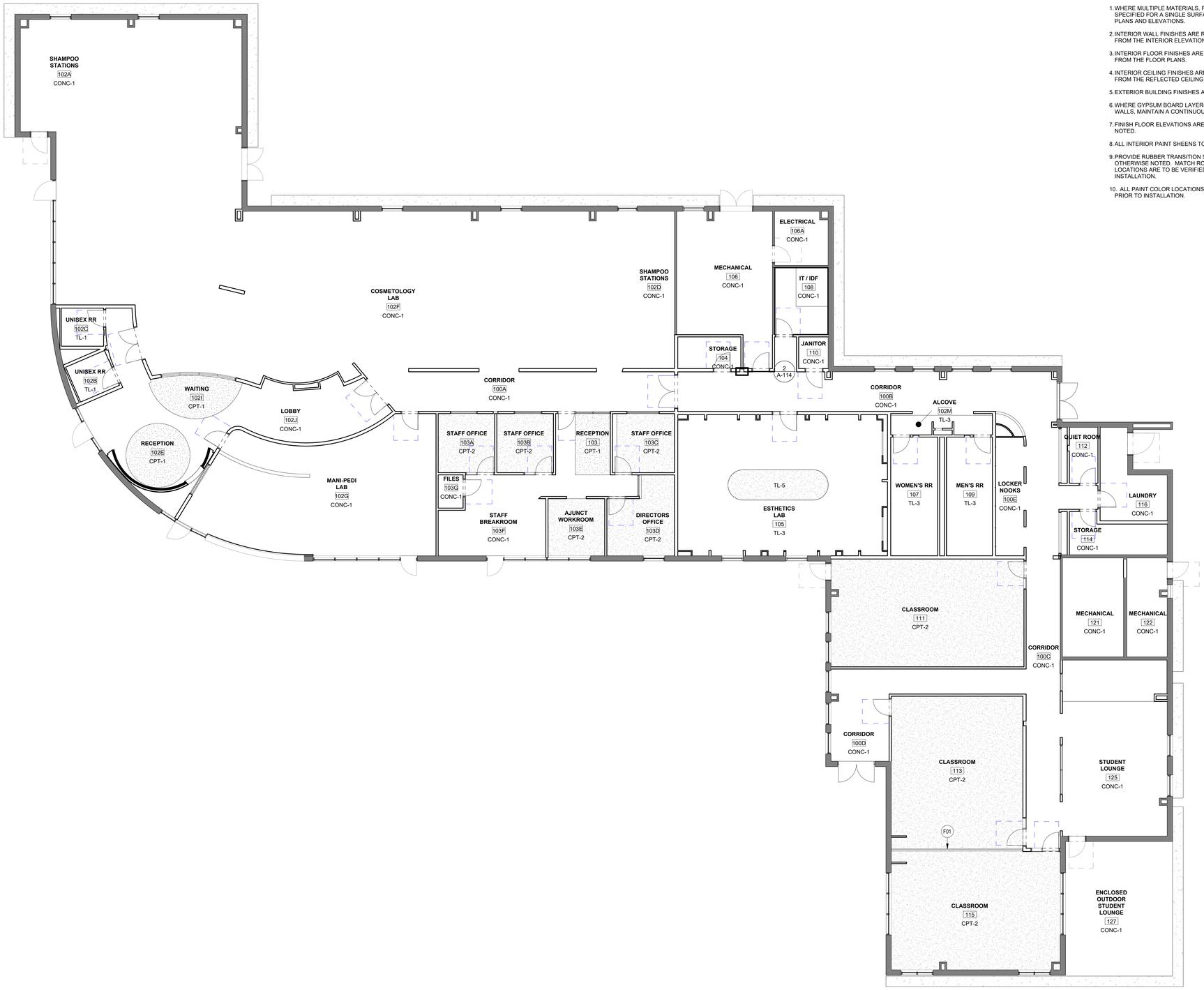
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ROOM FINISH SCHEDULE REMARKS LEGEND

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10. ALL PAINT COLOR LOCATIONS ARE TO BE VERIFIED IN THE FIELD WITH THE ARCHITECT PRIOR TO INSTALLATION.



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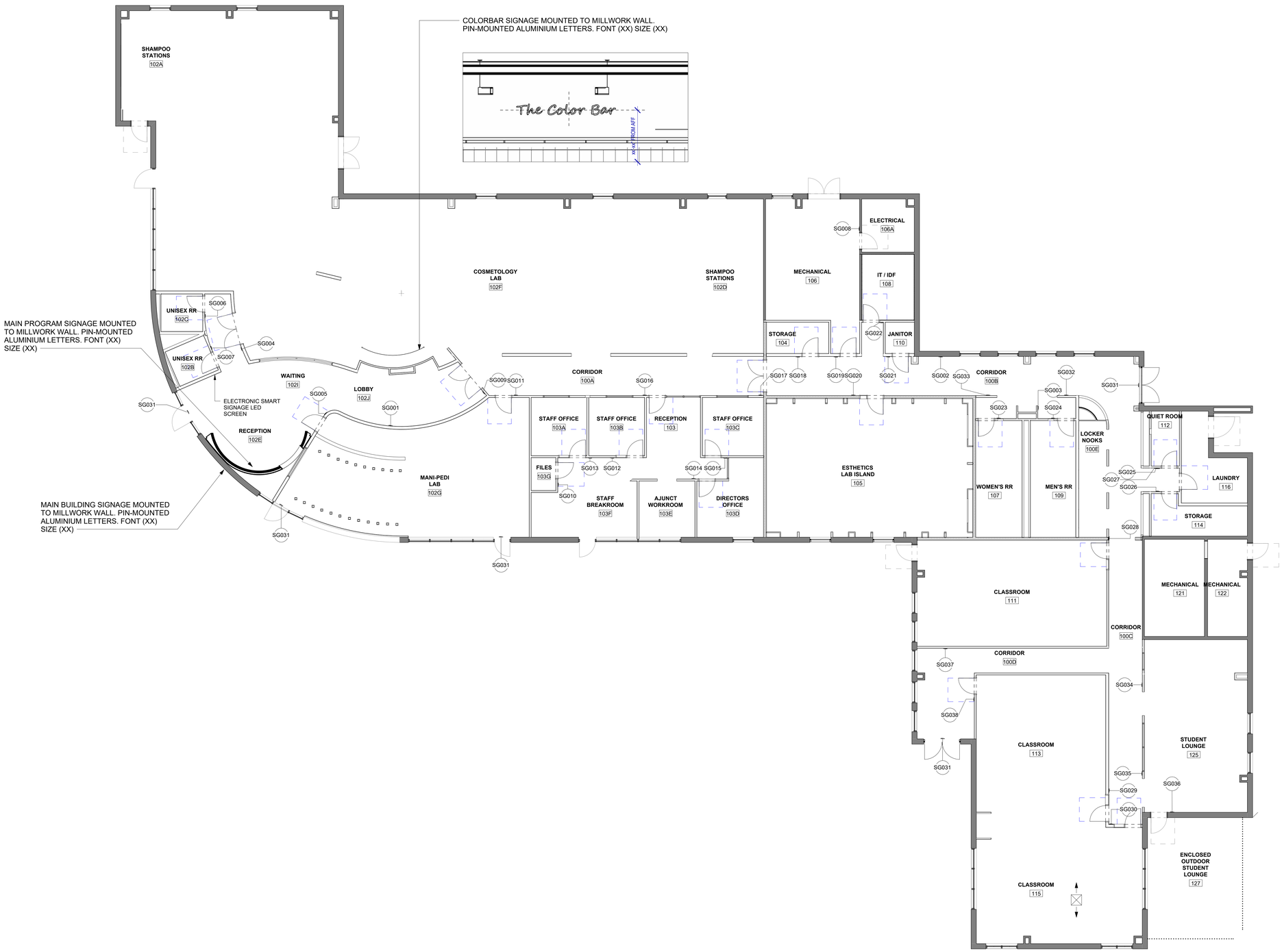
No.	DATE	DESCRIPTION

Sheet Title
FINISHES FLOOR PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF,SF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-162

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



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

LONE STAR COLLEGE
NORTH HARRIS

SCHOOL OF COSMETOLOGY
2700 W W THORNE BLVD, 77073

RDLR Architects
ARCHITECTURE PLANNING INTERIORS

800 Sampson St. #104
Houston, TX 77003

713.868.3121
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REGISTERED ARCHITECT
JENNIFER M. DUNN
31730
STATE OF TEXAS
07.22.2025

CLIENT:
LONE STAR COLLEGE - NORTH HARRIS
2700 W W THORNE DRIVE
LEIGHANN BAILIE
281.290.3755

MEP
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STRUCTURAL
MATRIX STRUCTURAL
5177 RICHMOND AVENUE, SUITE 70
713.664.0130

LANDSCAPE
ASAKURA ROBINSON
2500 SUMMER STREET, SUITE 3228
713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
ISSUE FOR BID

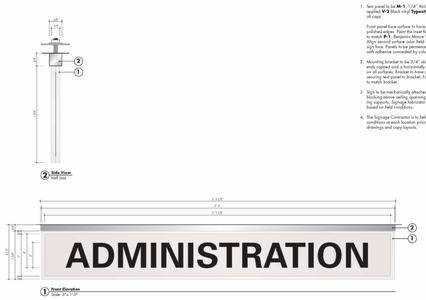
No.	DATE	DESCRIPTION

Sheet Title
SIGNAGE PLAN

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF,SF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-163

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



Notes

This is a double sided sign.

1. Text panel to be **M-1**, 1/4" thick clear acrylic with applied **V-2** Black vinyl **Typestyle:** Univers 65 Bold, all caps.

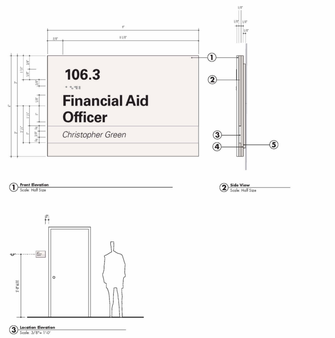
   Front panel face surface to have matte finish with flame polished edges. Paint the inset field on second surface to match **P-1**, Benjamin Moore Winter White OC21. Align second surface color field with color field of other sign face. Panels to be permanently adhered together with adhesive concealed by color field.

2. Mounting bracket to be 2/4" aluminum channel with each capped and a horizontally brushed US #4 finish on all surfaces. Bracket to have countersunk fasteners with finish to match bracket. Fasteners to be finished to match bracket.

3. Sign to be mechanically attached flush to ceiling with blocking above ceiling spanning a minimum of to ceiling supports. Signage fabricator to determine hardware based on field conditions.

4. The Signage Contractor is to field verify all existing conditions at each location prior to submitting detail drawings and copy layouts.

SIGN TYPE: OH — OVERHEAD MOUNTED SIGNAGE



Notes

1. Front panel to be **M-1**, 1/4" thick clear acrylic with **M-3**, acrylic black 1.125" ADA compliant. Ecrosk cut out letterforms. **Typestyle:** Univers 65 Bold, upper and lower case. Grade 2 braille is to be clear and surface applied.

   Front panel face surface to have matte finish with flame polished, smooth edges. Paint second surface to match **P-1**, Benjamin Moore Winter White OC21. Align second surface color field with back panel edges on edges to match **P-1**, Benjamin Moore Winter White OC21. Flame polish all edges prior to painting. Use continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seems etc.) are to be visible to staff, students or visitors.

2. Spacers are 1/8" thick clear acrylic and glued to back panel and accommodate Clear acrylic laser printed inserts with names. Use continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seams etc.) are to be visible to staff, students or visitors.

3. Inserts to be clear acetate with laser printed names. Sign Contractor to furnish initial installation of inserts. Names will be available at time of fabrication. Prior Names /titles will be **P-2**, black. For signs without Optic Oblique, upper and lower case. For signs without names, contractor will supply 100 of 8.5 x 11 sheets of clear acetate for client.

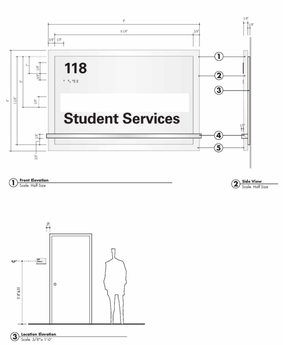
4. Back panel is 1/8" thick clear acrylic with painted edges and back to match **P-1**. Back plaque to have smooth edges prior to painting. Secure back panel to front panel with continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seems etc.) are to be visible to staff, students or visitors.

5. Mounting plate will be inset 1/2" all around. Paint edges and back to match **P-1**. Plate to have smooth edges prior to painting.

6. Secure sign unit to wall surface with thin mil VHB tape and silicone adhesive. No adhesive to be visible to staff, students or visitors.

7. The Signage Contractor is to field verify all existing conditions at each location prior to submitting detail drawings and copy layouts.

SIGN TYPE: SW — STAFF OFFICE WALL MOUNTED SIGNAGE



Notes

1. Front panel to be **M-1**, 1/4" thick clear acrylic with **M-3**, acrylic black 1.125" ADA compliant. Ecrosk cut out letterforms. **Typestyle:** Univers 65 Bold, upper and lower case. Grade 2 braille is to be clear and surface applied.

   Front panel face surface to have matte finish with flame polished, smooth edges. Paint second surface to match **P-1**, Benjamin Moore Winter White OC21. Align second surface color field with back panel edges on edges to match **P-1**, Benjamin Moore Winter White OC21. Flame polish all edges prior to painting. Use continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seams etc.) are to be visible to staff, students or visitors.

2. Spacers are 1/8" thick clear acrylic and glued to back panel and accommodate Clear acrylic laser printed inserts with names. Use continuous clear adhesive. No air bubbles or other adhesive inconsistencies(seams etc.) are to be visible to staff, students or visitors.

3. Inserts to be clear acetate with laser printed name/title. Sign contractor to furnish initial installation of inserts. Names /titles will be available at time of fabrication. Notes: Titles will be P-2, black. For signs without names contractor will supply 100 of 8.5 x 11 sheets of clear acetate for client.

4. Back panel is 1/8" thick clear acrylic with painted edges and back to match P-1. Secure back panel to front panel with continuous clear adhesive. No air bubbles or other adhesive inconsistencies(seams etc.) are to be visible to staff, students or visitors.

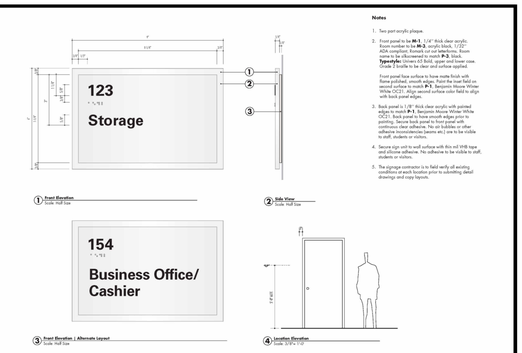
5. Decorative aluminum trim/bar to have a horizontal brushed finish on all surfaces. Trim/bar to be affixed with clear adhesive.

6. Mounting plate will be inset 1/2" all around and will match paint and back to match P-1. Plate to have smooth edges prior to painting.

7. Secure sign unit to glue/screw with thin mil VHB tape and silicone adhesive. No adhesive to be visible to staff, students or visitors.

8. The Signage Contractor is to field verify all existing conditions at each location prior to submitting detail drawings and copy layouts.

SIGN TYPE: DW — DEPARTMENT WALL MOUNTED SIGNAGE



Notes

1. Two part acrylic plaque.

2. Front panel to be **M-1**, 1/4" thick clear acrylic with **M-3**, acrylic black 1.125" ADA compliant. Ecrosk cut out letterforms. Room name to be silkscreened to match **P-3**, black. **Typestyle:** Univers 65 Bold, upper and lower case. Grade 2 braille is to be clear and surface applied.

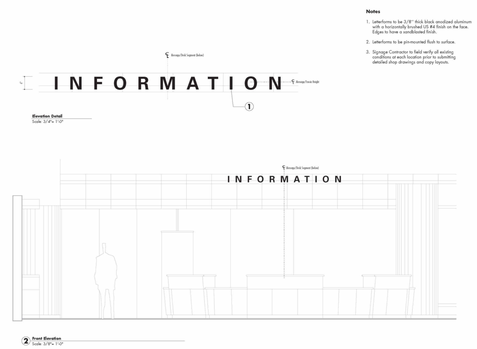
   Front panel face surface to have matte finish with flame polished, smooth edges. Paint the inset field on second surface to match **P-1**, Benjamin Moore Winter White OC21. Align second surface color field to align with back panel edges.

3. Back panel is 1/8" thick clear acrylic with painted edges to match **P-1**, Benjamin Moore Winter White OC21. Back panel to have smooth edges prior to painting. Secure back panel to front panel with continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seams etc.) are to be visible to staff, students or visitors.

4. Secure sign unit to wall surface with thin mil VHB tape and silicone adhesive. No adhesive to be visible to staff, students or visitors.

5. The signage contractor is to field verify all existing conditions at each location prior to submitting detail drawings and copy layouts.

SIGN TYPE: RW — ROOM IDENTITY WALL MOUNTED SIGNAGE



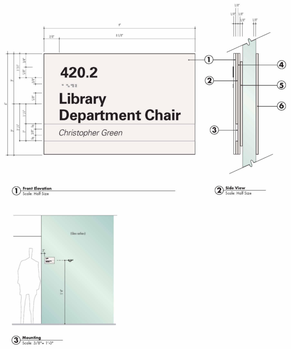
Notes

1. Letterforms to be 3/8" thick black anodized aluminum with a horizontally brushed US #4 finish on the face. Edges to have a sandblasted finish.

2. Letterforms to be pin-mounted flush to surface.

3. Signage Contractor to field verify all existing conditions at each location prior to submitting detailed shop drawings and copy layouts.

SIGN TYPE: MW — MILLWORK MOUNTED SIGNAGE



Notes

1. Front panel to be **M-1**, 1/4" thick clear acrylic with **M-3**, acrylic black 1.125" ADA compliant. Ecrosk cut out letterforms. **Typestyle:** Univers 65 Bold, upper and lower case. Grade 2 braille to be clear and surface applied.

   Front panel face surface to have matte finish with flame polished, smooth edges. Paint second surface to match **P-1**, Benjamin Moore Winter White OC21. Front panel is glued to 1/8" thick spacers painted on edges to match **P-1**, Benjamin Moore Winter White OC21. Flame polish all edges prior to painting. Use continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seems etc.) are to be visible to staff, students or visitors.

2. Spacers are 1/8" thick clear acrylic and glued to back panel and accommodate Clear acrylic laser printed inserts with names. Use continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seams etc.) are to be visible to staff, students or visitors.

3. Inserts to be clear acetate with laser printed name/title. Sign contractor to furnish initial installation of inserts. Names /titles will be available at time of fabrication. Names /titles will be **P-2**, black. For signs without names contractor will supply 100 of 8.5 x 11 sheets of clear acetate for client.

4. Back panel is 1/8" thick clear acrylic with painted edges and back to match **P-1**. Back plaque to have smooth edges prior to painting. Secure back panel to front panel with continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seams etc.) are to be visible to staff, students or visitors.

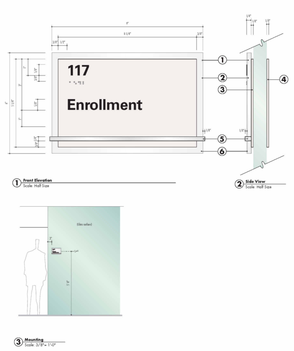
5. Mounting plate will be inset 1/2" all around. Paint edges and back to match **P-1**. Plate to have smooth edges prior to painting.

6. Additional back-up panel on inside surface of glass panel to match back panel's appearance and finish. Paint additional back panel to match **P-1**, all around.

7. Secure sign unit to glass first surface with thin mil VHB tape and silicone adhesive. No adhesive to be visible to staff, students or visitors.

8. The signage contractor is to field verify all existing conditions at each location prior to submitting detail drawings and copy layouts.

SIGN TYPE: SG — STAFF OFFICE GLASS MOUNTED SIGNAGE



Notes

1. Two part acrylic plaque with decorative trim.

2. Front panel to be **M-1**, 1/4" thick clear acrylic. Room name to be **M-3**, acrylic black 1.125" ADA compliant. Ecrosk cut out letterforms. Room name to be silkscreened to match **P-3**, black. **Typestyle:** Univers 65 Bold, upper and lower case. Grade 2 braille is to be clear and surface applied.

   Front panel face surface to have matte finish with flame polished edges. Paint the inset field on second surface to match **P-1**, Benjamin Moore Winter White OC21. Align second surface color field with back panel edges.

3. Back panel is 1/8" thick clear acrylic with painted edges and back to match **P-1**. Back panel to have smooth edges prior to painting. Secure back panel to front panel with continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seams etc.) are to be visible to staff, students or visitors.

4. Additional back-up panel on inside surface of glass. Paint edges and back to match back panel to appearance of finish. Paint additional back panel to match **P-1**, all around.

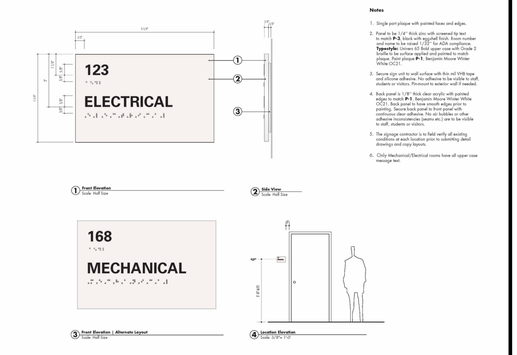
5. Decorative aluminum trim/bar to have a horizontal brushed finish on all surfaces. Trim/bar to be affixed with clear adhesive.

6. Lower front bevel panel to be adhered to back panel with continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seams etc.) are to be visible to staff, students or visitors.

7. Secure sign unit to glass surface with thin mil VHB tape and silicone adhesive. No adhesive to be visible to staff, students or visitors.

8. The Signage Contractor is to field verify all existing conditions at each location prior to submitting detail drawings and copy layouts.

SIGN TYPE: DG — DEPARTMENT GLASS MOUNTED SIGNAGE



Notes

1. Single part plaque with painted faces and edges.

2. Panel to be 1/4" thick zinc with screened lip text **P-3**, black. Room name to be 1/2" thick zinc letter and name to be raised 1/32" for ADA compliance. **Typestyle:** Univers 65 Bold upper case with Grade 2 braille is to be surface applied and painted to match plaque. Paint plaque **P-1**, Benjamin Moore Winter White OC21.

3. Secure sign unit to wall surface with thin mil VHB tape and silicone adhesive. No adhesive to be visible to staff, students or visitors. Pin-mount to exterior wall if needed.

4. Back panel is 1/8" thick clear acrylic with painted edges to match **P-1**. Benjamin Moore White OC21. Back panel to have smooth edges prior to painting. Secure back panel to front panel with continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seams etc.) are to be visible to staff, students or visitors.

5. The signage contractor is to field verify all existing conditions at each location prior to submitting detail drawings and copy layouts.

6. Only Mechanical/Electrical rooms have all upper case message text.

SIGN TYPE: UW — UTILITY WALL MOUNTED SIGNAGE

FUTURA LT BT LIGHT

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
01234567890

FUTURA BOOK BT REGULAR

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
01234567890

FUTURA BOLD

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
01234567890

FUTURA MEDIUM

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
01234567890

ARROWS ↖ ← ↑ → ↗

PAINT COLORS

Blue PMS 540	Red PMS 201	Yellow c0 m20 y100 k0	Cool Grey PMS 432	White	Black
P1	P2	P3	P4	P5	P6

PRINTED FILM

F1 Digitally Printed Lintec UV Scratch Resistant Optically Clear PET E-2200ZC

METAL

M1 BRUSHED ALUMINUM

M2 BRUSHED STAINLESS STEEL

VINYL

V1 WHITE
3M ScotchCal
Matte White 7725-20

V2 REFLECTIVE WHITE
3M ScotchLite
Reflective White 5000

ACRYLIC

A1 CLEAR ACRYLIC

NOTE
Signage contractor to provide samples and color test prints as needed for review by architect, signage designer, and owner for approval, prior to final production

MATERIAL IDENTIFICATION

A **PRINTED FILM**
Material: **F1,** White + color print.
Add clear matte laminate on top of the full coverage film to help protect against UV fading. Install on first surface

B **DOOR PANEL**
Various conditions. Fabricator to provide detail measurements for final art

Note: Fabricator to remove existing film or vinyl.

NOTE

THE INFORMATION SHOWN ON THIS SHEET IS A GENERIC SIGNAGE TYPE TO ESTABLISH APPROXIMATE SIZES, APPROXIMATE FORM FACTOR, MOUNTING TYPES AND LOCATIONS, AND IS FOR THE PRICING PURPOSE ONLY. A FINAL FULL SIGNAGE PACKAGE BASED ON LSC CAMPUS STANDARDS (CURRENTLT IN REVISION) WILL BE ISSUED POST BID ONCE FINAL STANDARDS ARE AVAILABLE



SIGN TYPE: BE1 BUILDING NAME EXTERIOR SINGLE ENTRY SIGNAGE



SIGN TYPE: BE2 BUILDING NAME EXTERIOR DOUBLE ENTRY SIGNAGE

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LANDSCAPE
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SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
SIGNAGE STANDARDS

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF,SF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-164

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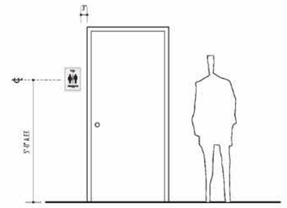
1 **Front Elevation**
Scale: Half Size

2 **Side View**
Scale: Half Size

Notes

1. Two part acrylic plaque.
2. Front of panel to be **M-1**, 1/4" thick clear acrylic with **M-3**, acrylic black 1/32" ADA compliant, Komark cut out letterforms and graphic icons. **Typestyle:** Univers 65 Bold, upper and lower case. Grade 2 braille to be clear and surface applied.

   Front panel face surface to have matte finish with flame polished edges. Paint the inset field on second surface to match **P-1**, Benjamin Moore Winter White OC21. Align second surface color field to align with back panel edges.
3. Back panel is 1/8" thick clear acrylic with painted edges to match **P-1**, Benjamin Moore Winter White OC21. Back panel to have smooth edges prior to painting. Secure back panel to front panel with continuous clear adhesive. No air bubbles or other adhesive inconsistencies (seams etc.) are to be visible to staff, students or visitors.
4. Secure sign unit to wall surface with thin mil VHB tape and silicone adhesive. No adhesive to be visible to staff, students or visitors.
5. The signage contractor is to field verify all existing conditions at each location prior to submitting detail drawings and copy layouts.



3 **Location Elevation**
Scale: 3/8"= 1'-0"

SIGNAGE NOTES

1. LETTERFORMS AND LOGO TO BE 1/4" THICK ALUMINUM WITH PAINTED FACES AND EDGES. PAINT TO MATCH (P-XX) BLACK WITH EGGSHELL FINISH. ALL EDGES TO BE SLIGHTLY CRISP AND SMOOTH. **TYPESTYLE**: XX
2. LOGO TYPE IS TO MATCH (P-XX), BLACK WITH EGGSHELL FINISH. STAR TO MATCH (P-XX)
3. LOGO AND LETTERFORMS TO BE PIN-MOUNTED FLUSH TO WALL. NO ADHESIVE WILL BE VISIBLE TO STAFF, STUDENTS AND VISITORS.
4. ALL EDGES AND CORNERS TO BE SLIGHTLY EASED ON CRISP 90 DEGREE RETURNS AND FINISH SMOOTH.
5. THE SIGNAGE CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CONDITIONS AT EACH LOCATION PROPR TO SUBMITTING DETAIL DRAWINGS AND COPY LAYOUTS.

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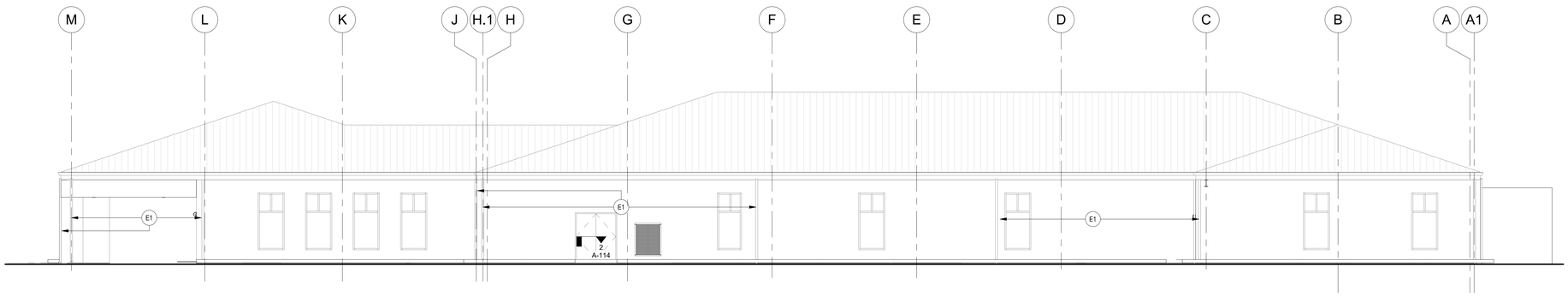
No.	DATE	DESCRIPTION
1	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
SIGNAGE STANDARDS -RESTROOM

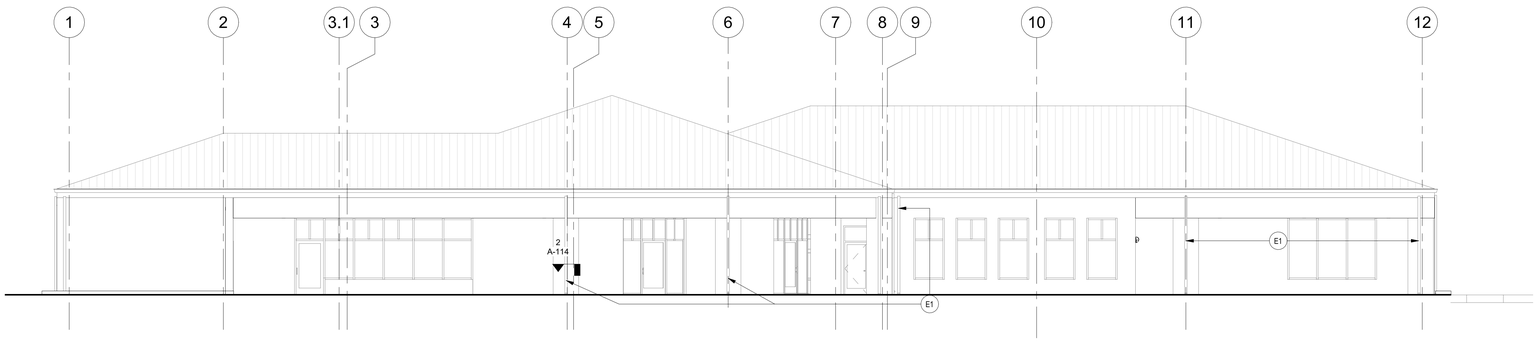
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-165

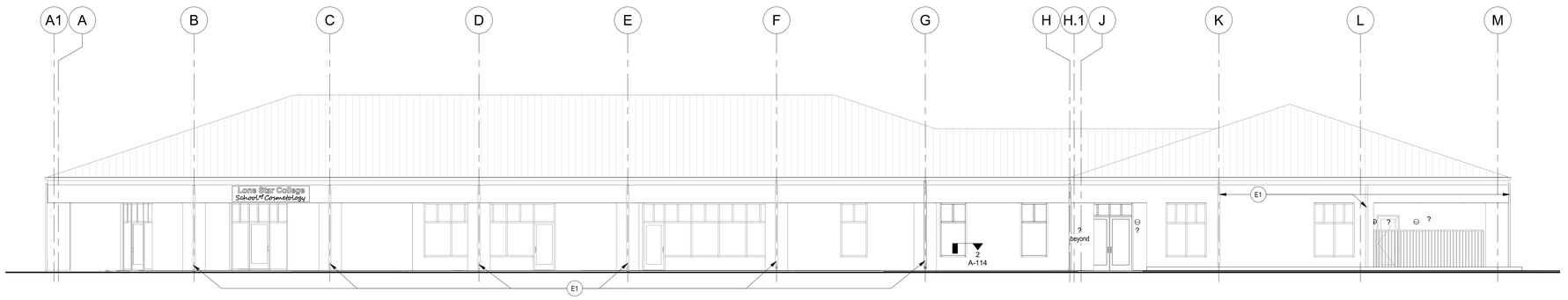
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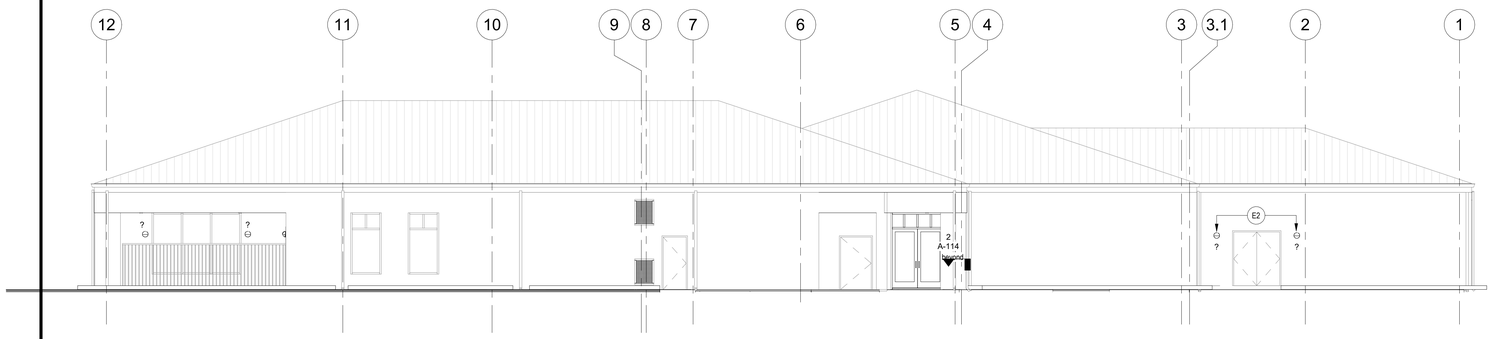
04 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



03 WEST ELEVATION
SCALE: 1/8" = 1'-0"



02 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



01 EAST ELEVATION
SCALE: 1/8" = 1'-0"

EXTERIOR BUILDING SCOPE OF WORK: LIMITED

- REPLACE EXISTING GUTTERS AND DOWNSPOUTS TO MATCH EXISTING.
- CHECK ALL EXISTING LOCK SEAM SEALS ON ROOF AND ACCESSORIES, PENETRATION FLASHINGS, AND CAPS. REPLACE AS NECESSARY.
- REPAINT EXISTING EXTERIOR SOFFIT. REPAIR ANY DAMAGED PANELS.
- REPLACE ALL EXISTING SOFFIT CAN LIGHT FIXTURES WITH NEW LED RETROFIT FIXTURES OF THE SAME DIAMETER. EXISTING SITE LIGHTING TO REMAIN.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
E1	REPLACE ALL EXISTING GUTTERS AND DOWNSPROUTS[TYP]
E2	REPLACE EXISTING WALLPACK FIXTURES WITH NEW[TYP]. REFER TO RCP FOR ADDITIONAL INFO

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CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION

Sheet Title
EXTERIOR ELEVATIONS

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF,SF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

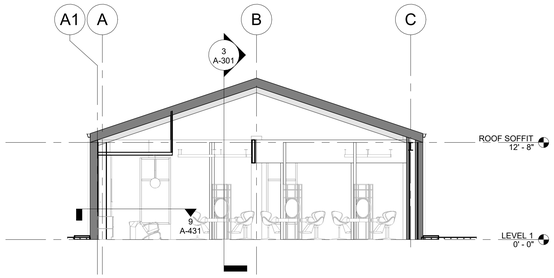
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THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

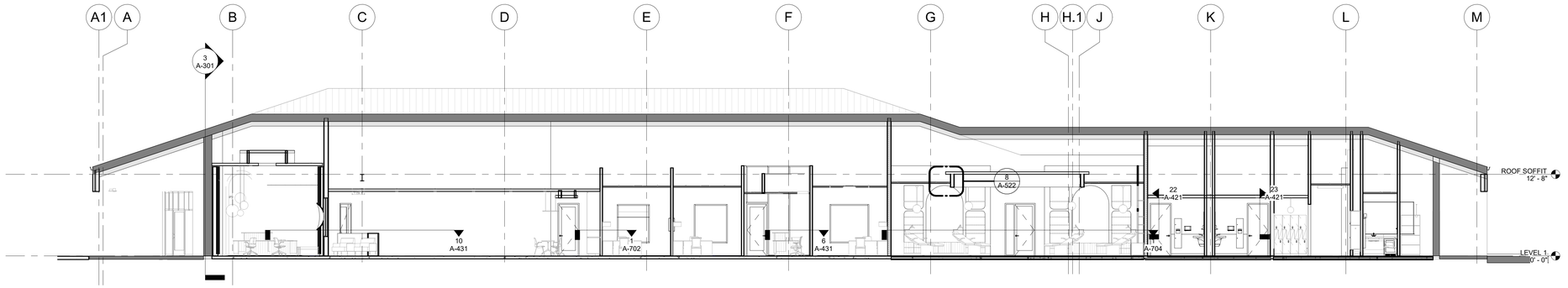
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KEY VALUE	KEYNOTE TEXT



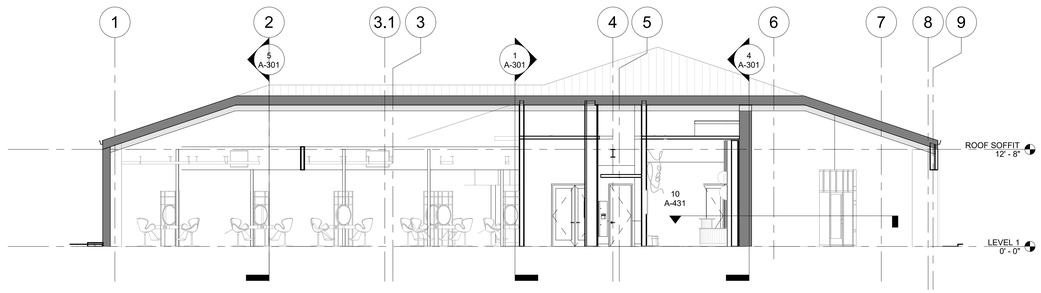
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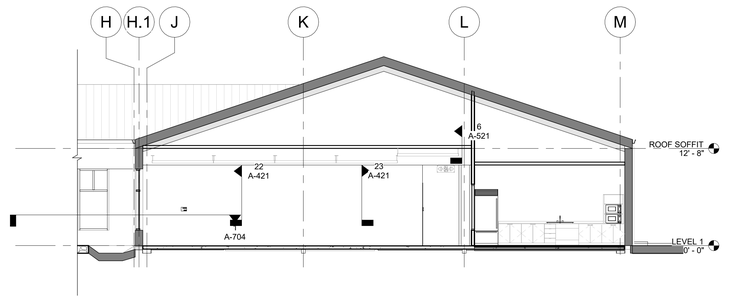
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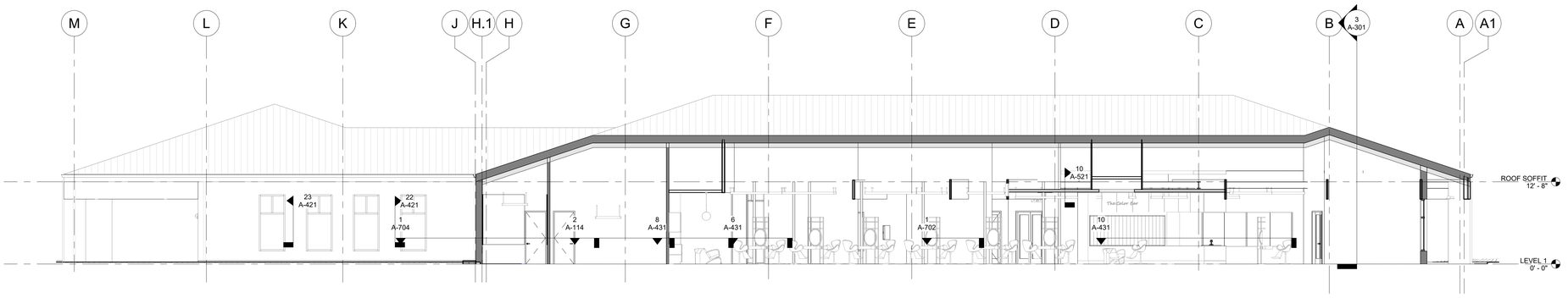
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3 BUILDING SECTION 3
SCALE: 1/8" = 1'-0"



2 BUILDING SECTION 2
SCALE: 1/8" = 1'-0"



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

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5177 RICHMOND AVENUE, SUITE 70
713.664.0130

LANDSCAPE
ASAKURA ROBINSON
2500 SUMMER STREET, SUITE 3228
713.337.5830

SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
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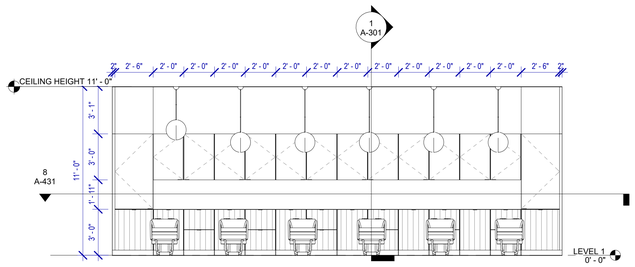
No.	DATE	DESCRIPTION

Sheet Title
BUILDING SECTIONS

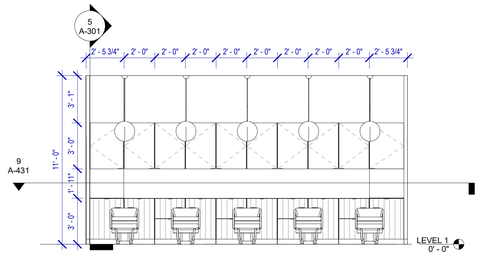
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF,SF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-301

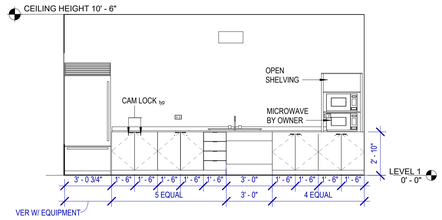
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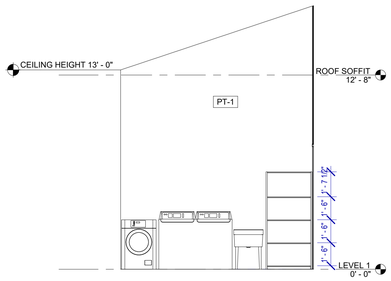
11 SHAMPOO STATION EAST ELEVATION
SCALE: 1/4" = 1'-0"



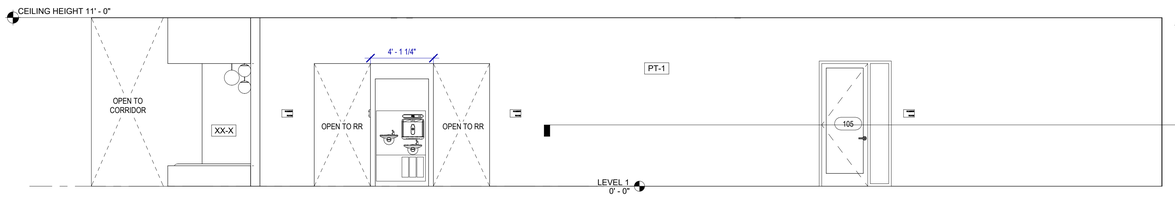
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SCALE: 1/4" = 1'-0"



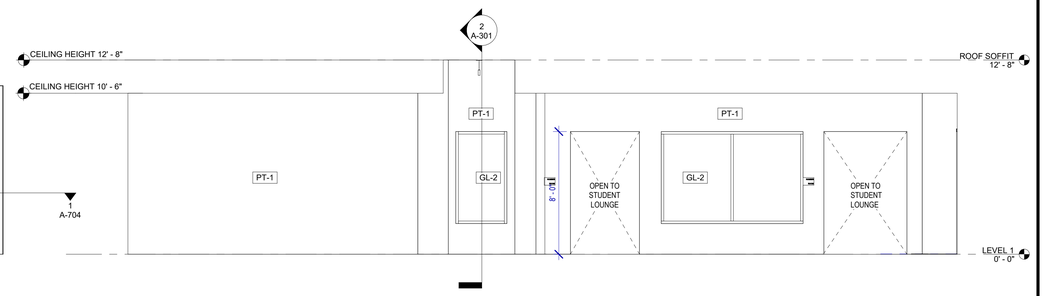
13 STUDENT LOUNGE
SCALE: 1/4" = 1'-0"



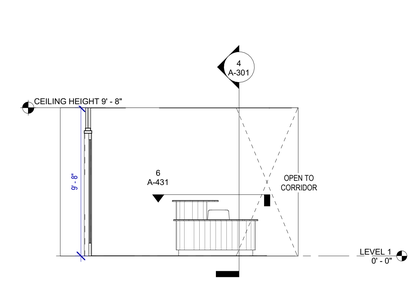
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SCALE: 1/4" = 1'-0"



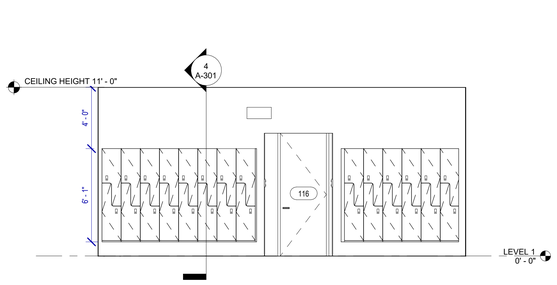
10 COORIDOR 2 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



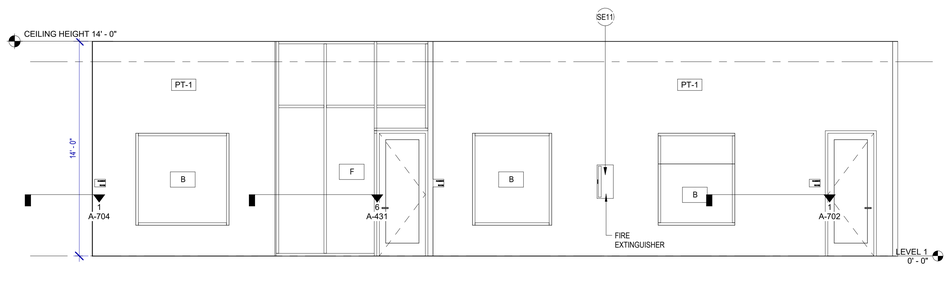
9 CORRIDOR EAST ELEVATION
SCALE: 1/4" = 1'-0"



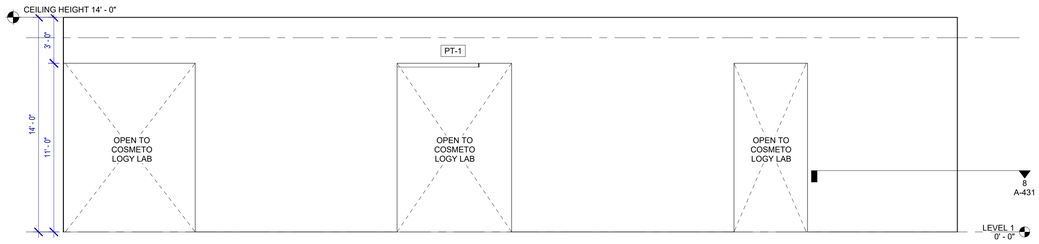
8 RECEPTION ELEVATION
SCALE: 1/4" = 1'-0"



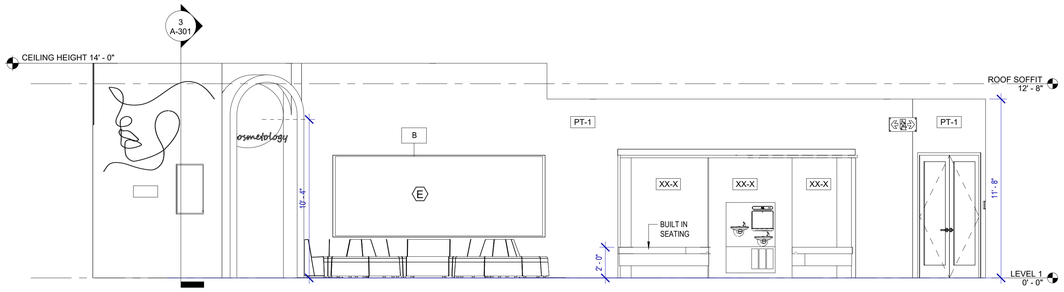
7 CORRIDOR LOCKERS EAST ELEVATION
SCALE: 1/4" = 1'-0"



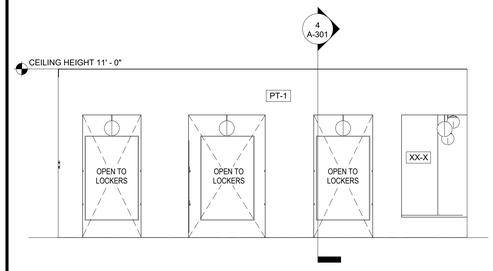
6 COORIDOR 1 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



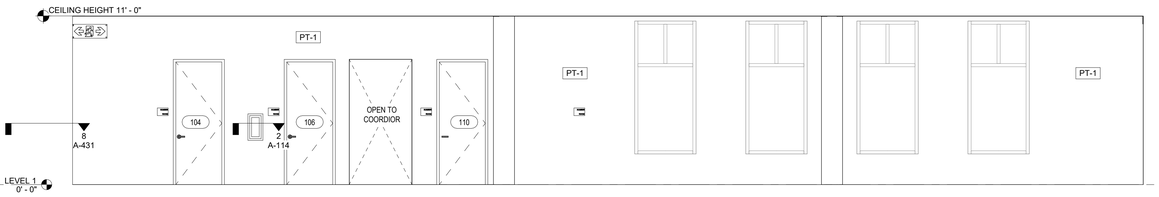
5 CORRIDOR 1 NORTH ELEVATION
SCALE: 1/4" = 1'-0"



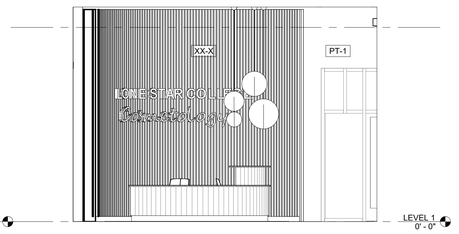
4 RECEPTION / WAITING LOUNGE NORTH ELEVATION
SCALE: 1/4" = 1'-0"



3 CORRIDOR LOCKERS WEST ELEVATION
SCALE: 1/4" = 1'-0"



2 COORIDOR 2 NORTH ELEVATION
SCALE: 1/4" = 1'-0"



1 RECEPTION / WAITING LOUNGE SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

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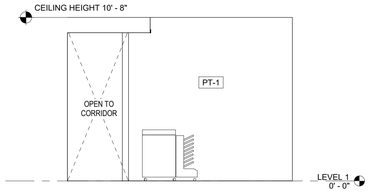
No.	DATE	DESCRIPTION

Sheet Title
INTERIOR ELEVATIONS

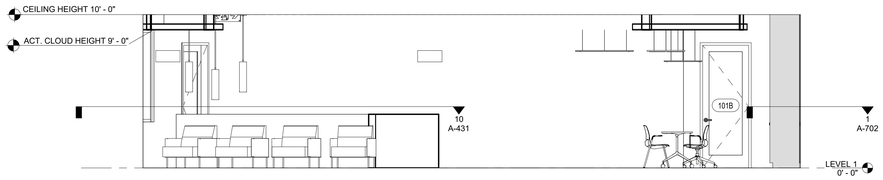
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF,SF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-410

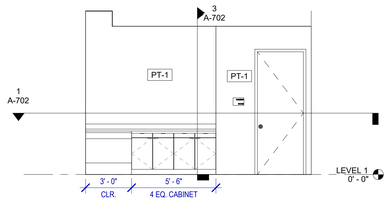
KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
E4	RECESSED PROJECTION SCREEN IN CEILING



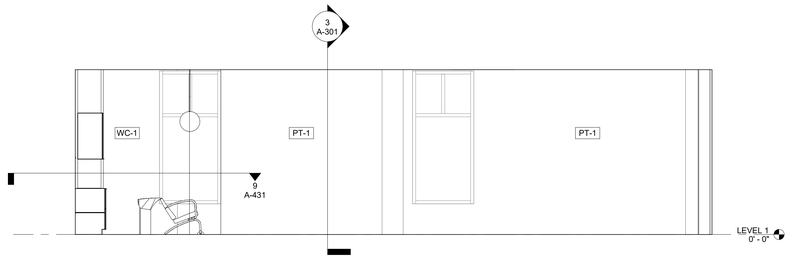
9 STAFF BREAKROOM EAST ELEVATION
SCALE: 1/4" = 1'-0"



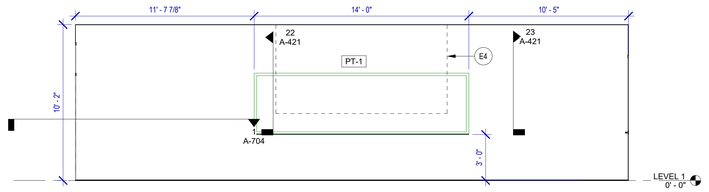
8 MANI-PEDI NORTH ELEVATION 2
SCALE: 1/4" = 1'-0"



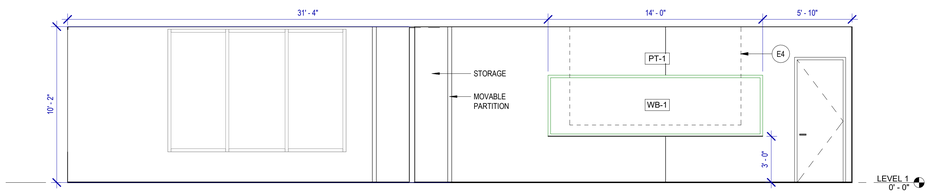
7 STAFF BREAKROOM WEST ELEVATION
SCALE: 1/4" = 1'-0"



6 COSMETOLOGY LAB
SCALE: 1/4" = 1'-0"



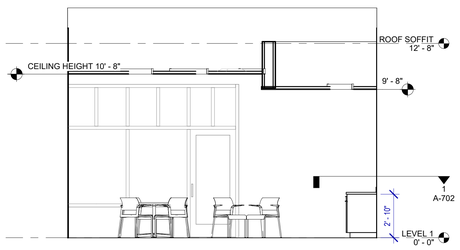
5 CLASSROOM 1 ELEVATION
SCALE: 1/4" = 1'-0"



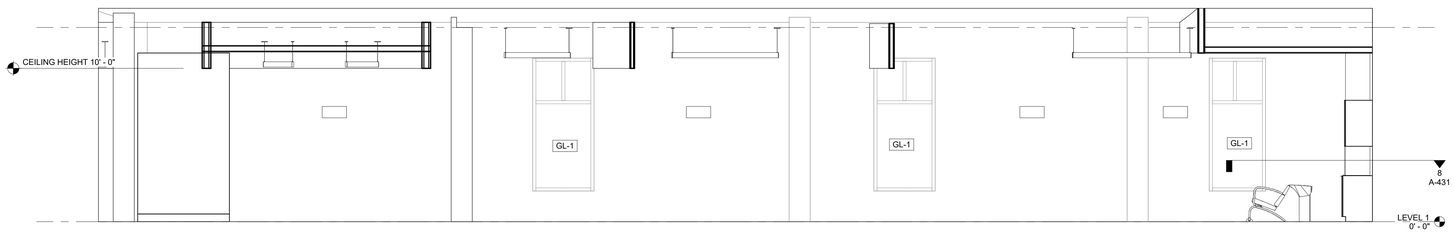
4 CLASSROOM 2 ELEVATION
SCALE: 1/4" = 1'-0"



3 MANI-PEDI SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



2 STAFF BREAKROOM SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



1 COSMETOLOGY LAB 2
SCALE: 1/4" = 1'-0"

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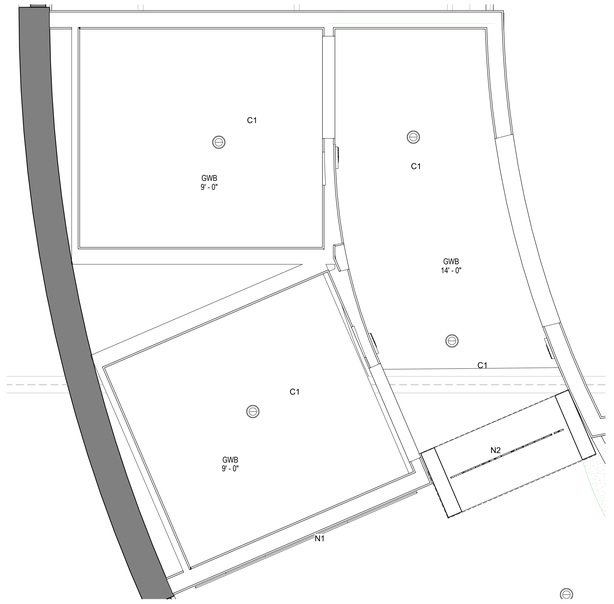
No.	DATE	DESCRIPTION

Sheet Title
INTERIOR ELEVATIONS

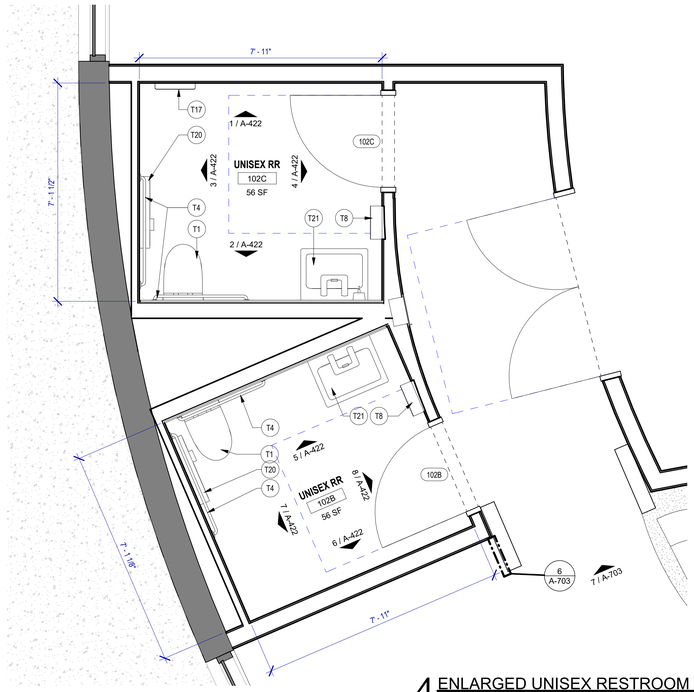
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF,SF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-411

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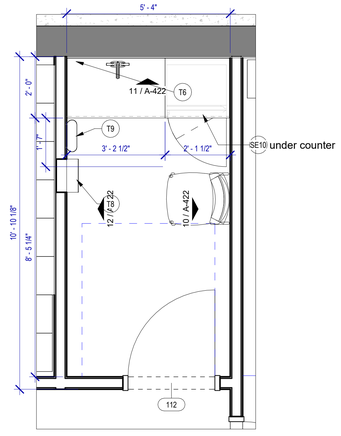
5 UNISEX RESTROOM REFLECTED CEILING PLAN
SCALE: 1/2" = 1'-0"



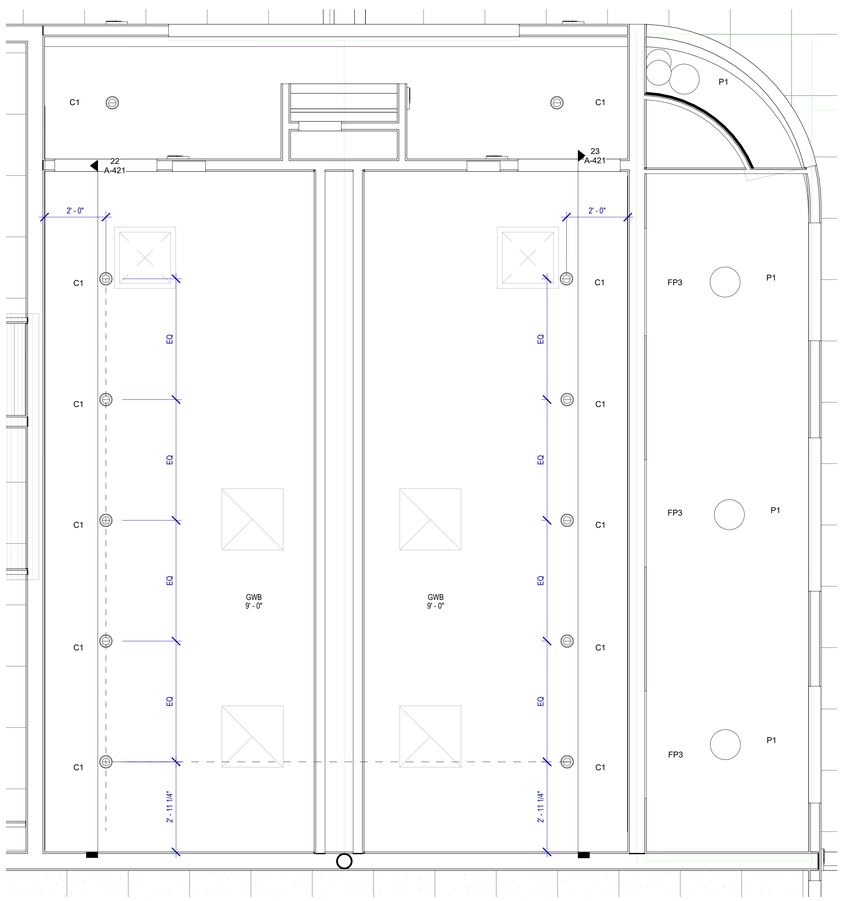
KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
SE10	SUMMIT REFRIGERATION, 24" WIDE BUILT-IN BEVERAGE CENTER, ADA Compliant-MODEL# (ASDG2411)
T1	WALL HUNG AMERICAN STNDARD WC AFWALL 3351.001
T4	GRAB BARS 1" WITH CONCEALED MOUNTING, BRADLEY CROP.MODEL #(852) 18 GAUGE SATIN FINISH STAINLESS.
T5	LAVATORY COUNTERTOP, BRADLEY EXPRESS GLX SERIES THREE STATION MODEL #(GLX-3)
T6	SURFACE MOUNTED SOAP DISPENSER, BRADLEY CROP.MODEL # (6562-73).
T8	BOBRICK RECESSED PAPER TOWEL DISPENSER/WATER RECEPTACLE, TRIMLINE SERIES,B-36903
T9	ELVARI ELECTRIC HAND DRYER, SURFACE MOUNTED BRADLEY CROP.MODEL # (2B4)
T12	PLATE MIRROR, SIZE AND HEIGHT AS INDICATED
T13	ELVARI NAPKIN DISPOSAL, SURFACE MOUNTED,BRADLEY CROP.MODEL # (4B2-11).
T14	(TP1)EURO STYLE PARTITION-FLOAT SERIES, BRADLEY CROP.COLOR-BIRCH (35003)-TOILET PARTITION.
T17	SEAT COVER DISPENSER, BRADLEY CROP.MODEL # (5B1)
T20	SEAT COVER DISPENSER/ TISSUE DISPENSER,BRADLEY CROP.MODEL # (5961.11)
T21	LAVATORY COUNTERTOP, BRADLEY EXPRESS GLX SERIES SINGLE STATION MODEL #(GLX-1)

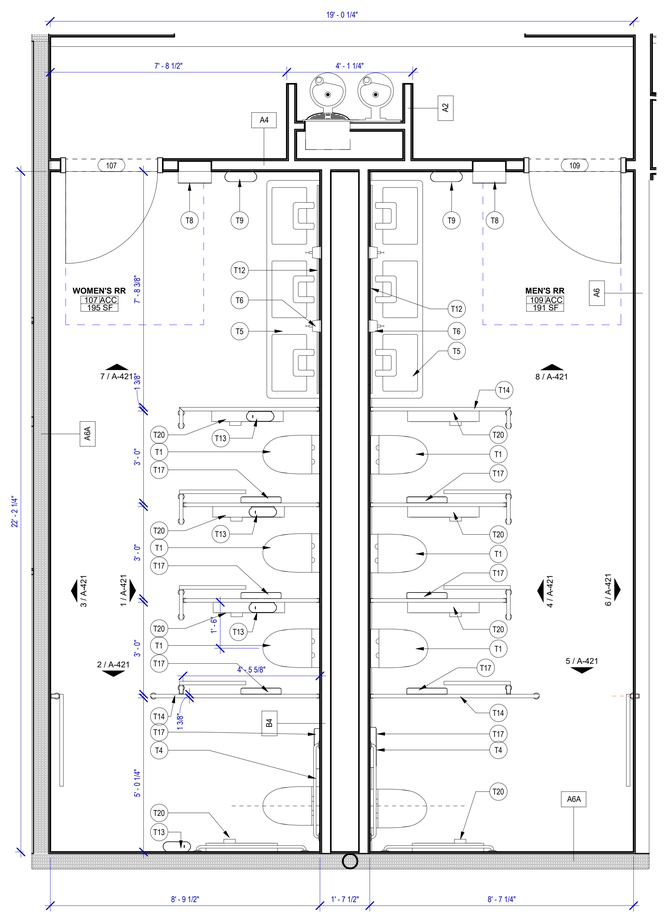
4 ENLARGED UNISEX RESTROOM PLAN
SCALE: 1/2" = 1'-0"



3 ENLARGED QUIET ROOM PLAN
SCALE: 1/2" = 1'-0"



2 RESTROOM REFLECTED CEILING PLAN
SCALE: 1/2" = 1'-0"



1 ENLARGED RESTROOM PLAN.
SCALE: 1/2" = 1'-0"

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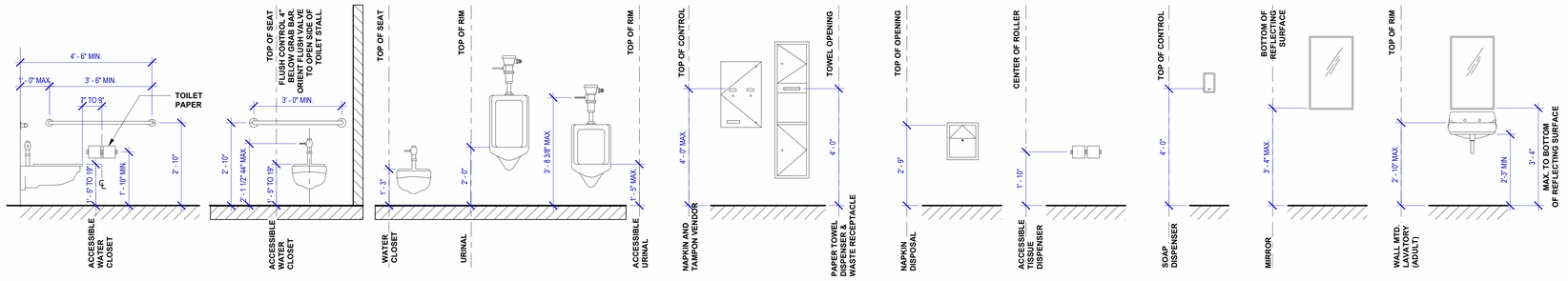
No.	DATE	DESCRIPTION

Sheet Title
ENLARGED RESTROOM FLOOR PLANS

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-420

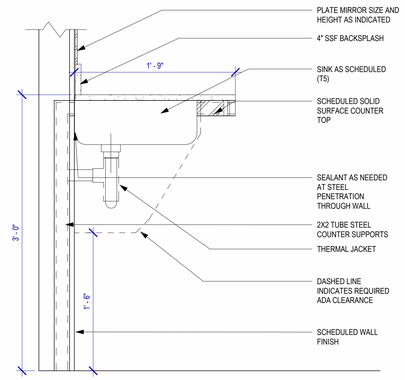
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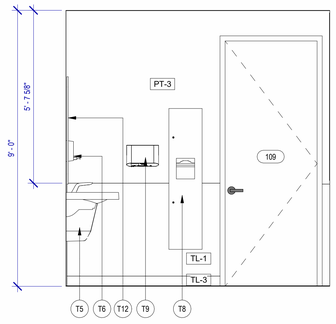
ADA MOUNTING LOCATIONS- RESTROOMS

KEYNOTE LEGEND

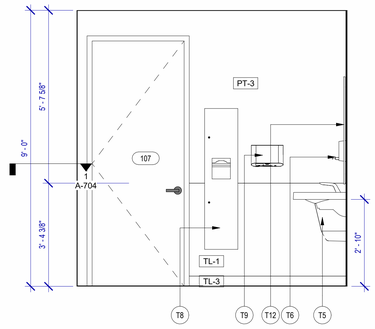
KEY VALUE	KEYNOTE TEXT
T1	WALL HUNG AMERICAN STNDARD WC AFWALL 3351.001
T2	WALL HUNG AMERICAN STNDARD WC AFWALL 3351.001, TAS COMPLIANT MOUNT AT ADA HEIGHTS
T3	AMERICAN STANDARD URINAL 6540.017 (ALLBROOK).
T4	GRAB BARS 1" WITH CONCEALED MOUNTING, BRADLEY CROP.MODEL #(852) 18 GAUGE SATIN FINISH STAINLESS.
T5	LAVATORY COUNTERTOP, BRADLEY EXPRESS GLX SERIES THREE STATION MODEL #(GLX-3)
T6	SURFACE MOUNTED SOAP DISPENSER, BRADLEY CROP.MODEL # (6562-73).
T8	BOBRICK RECESSED PAPER TOWEL DISPENSER/WATER RECEPTACLE, TRIMLINE SERIES,B-36903
T9	ELVARI ELECTRIC HAND DRYER, SURFACE MOUNTED BRADLEY CROP.MODEL # (2B4)
T12	PLATE MIRROR, SIZE AND HEIGHT AS INDICATED
T13	ELVARI NAPKIN DISPOSAL, SURFACE MOUNTED,BRADLEY CROP.MODEL # (4B2-11).
T14	(TP1)EURO STYLE PARTITION-FLOAT SERIES, BRADLEY CROP.COLOR-BIRCH (35003)-TOILET PARTITION.
T17	SEAT COVER DISPENSER, BRADLEY CROP.MODEL # (5B1)
T20	SEAT COVER DISPENSER/ TISSUE DISPENSER,BRADLEY CROP.MODEL # (5961.11)



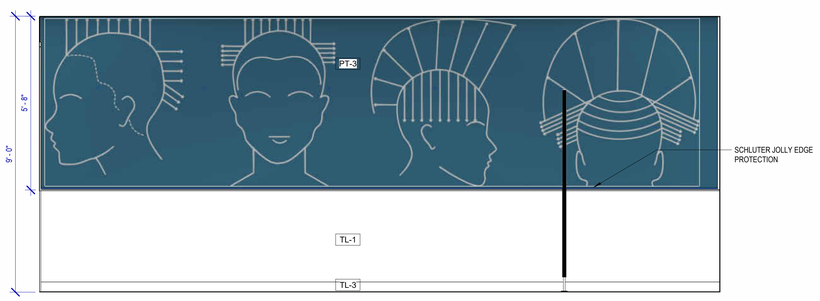
9 LAVATORY COUNTER DETAIL
SCALE: 1 1/2" = 1'-0"



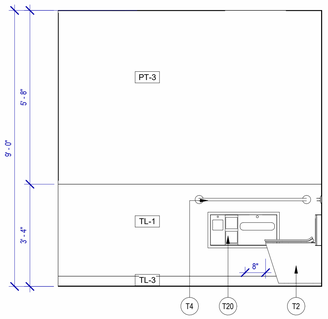
8 MEN'S RESTROOM NORTH ELEVATION
SCALE: 1/2" = 1'-0"



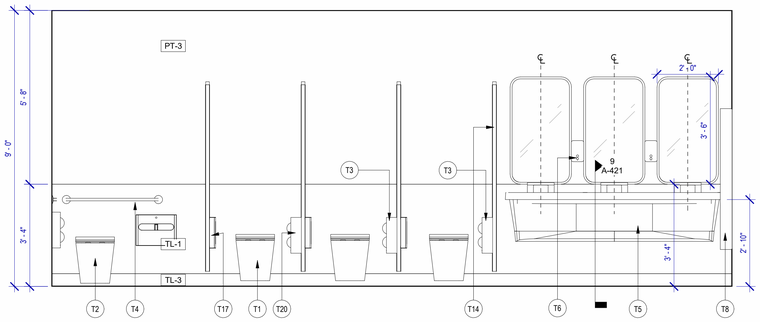
7 WOMENS RESTROOM NORTH ELEVATION
SCALE: 1/2" = 1'-0"



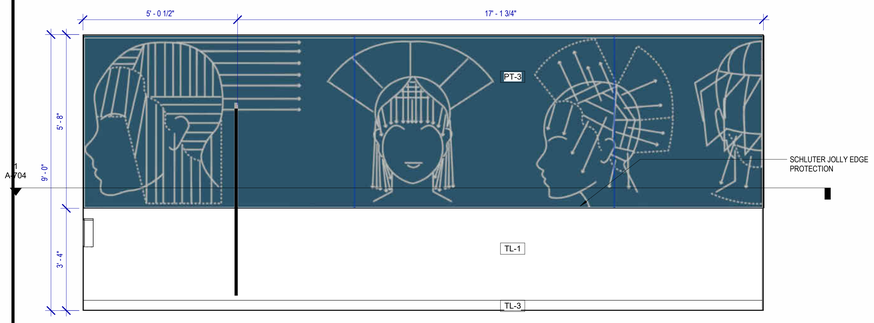
6 MEN'S RESTROOM EAST ELEVATION
SCALE: 1/2" = 1'-0"



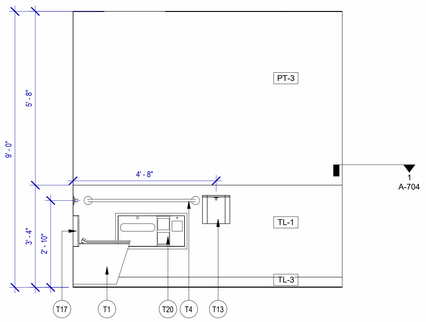
5 MEN'S RESTROOM SOUTH ELEVATION
SCALE: 1/2" = 1'-0"



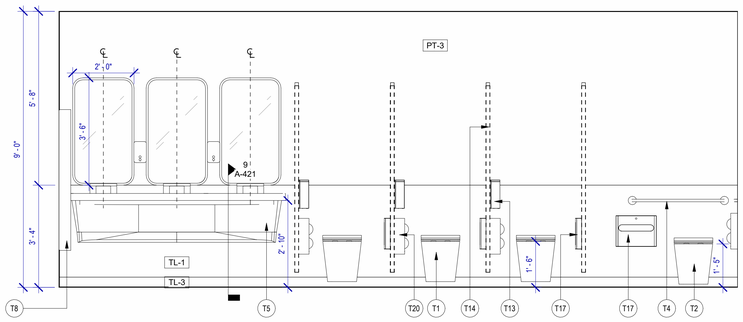
4 MENS RESTROOM WEST ELEVATION
SCALE: 1/2" = 1'-0"



3 WOMENS RESTROOM WEST ELEVATION
SCALE: 1/2" = 1'-0"



2 WOMEN'S RESTROOM SOUTH ELEVATION
SCALE: 1/2" = 1'-0"



1 WOMENS RESTROOM EAST ELEVATION
SCALE: 1/2" = 1'-0"

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STATE OF TEXAS
07.22.2025

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CIVIL ENGINEER
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11301 FALLBROOK DR STE 320
832-678-2110

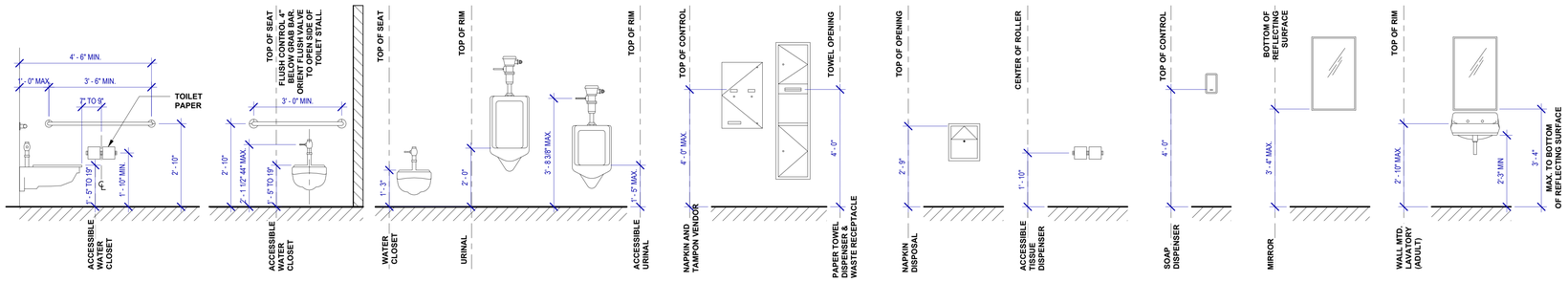
Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION

Sheet Title
ENLARGED RESTROOM ELEVATIONS

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

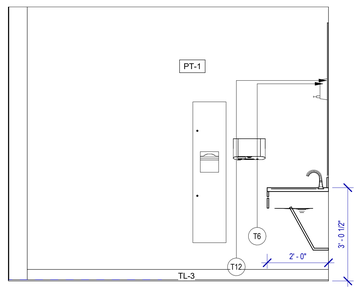
A-421



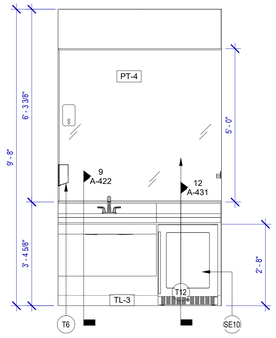
21 ADA MOUNTING LOCATIONS- RESTROOMS.
SCALE: 1/2" = 1'-0"

KEYNOTE LEGEND

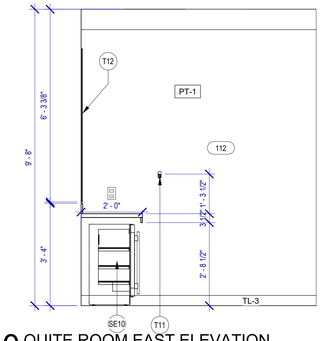
KEY VALUE	KEYNOTE TEXT
SE10	SUMMIT REFRIGERATION, 24" WIDE BUILT-IN BEVERAGE CENTER, ADA Compliant-MODEL# (ASDG2411)
T1	WALL HUNG AMERICAN STNDARD WC AFWALL 3351.001
T2	WALL HUNG AMERICAN STNDARD WC AFWALL 3351.001, TAS COMPLIANT MOUNT AT ADA HEIGHTS
T6	SURFACE MOUNTED SOAP DISPENSER, BRADLEY CROP.MODEL # (6562-73).
T8	BOBRICK RECESSED PAPER TOWEL DISPENSER/WATER RECEPTACLE, TRIMLINE SERIES,B-36903
T11	ROBE HOOK, BRADLEY CROP SINGLE HOOK MODEL # (9B1) SATIN STAINLESS STEEL
T12	PLATE MIRROR, SIZE AND HEIGHT AS INDICATED
T13	ELVARI NAPKIN DISPOSAL, SURFACE MOUNTED,BRADLEY CROP.MODEL # (4B2-11).
T17	SEAT COVER DISPENSER, BRADLEY CROP.MODEL # (5B1)
T20	SEAT COVER DISPENSER/ TISSUE DISPENSER,BRADLEY CROP.MODEL # (5961.11)
T21	LAVATORY COUNTERTOP, BRADLEY EXPRESS GLX SERIES SINGLE STATION MODEL #(GLX-1)



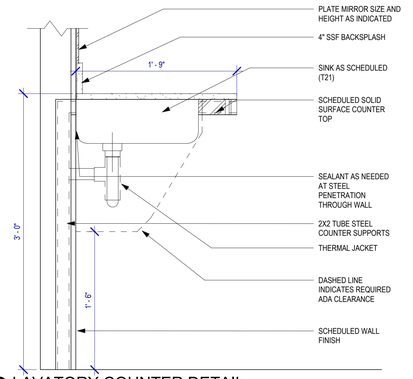
12 QUITE ROOM WEST ELEVATION
SCALE: 1/2" = 1'-0"



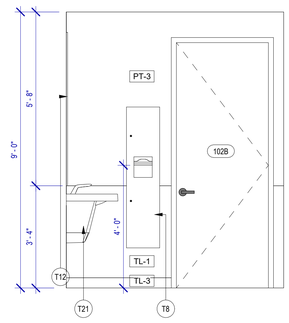
11 QUIET ROOM NORTH ELEVATION
SCALE: 1/2" = 1'-0"



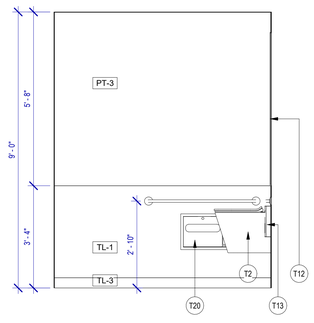
10 QUITE ROOM EAST ELEVATION
SCALE: 1/2" = 1'-0"



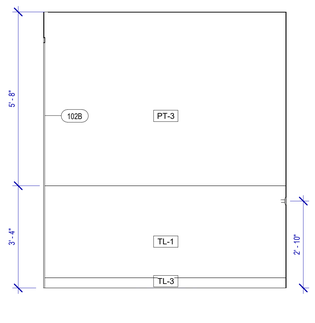
9 LAVATORY COUNTER DETAIL.
SCALE: 1 1/2" = 1'-0"



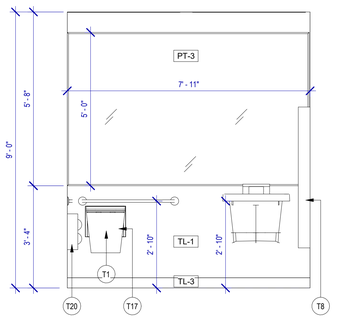
8 UNISEX RESTROOM B - EAST ELEVATION
SCALE: 1/2" = 1'-0"



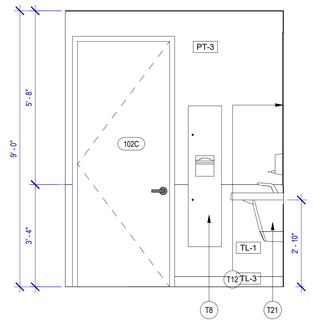
7 UNISEX RESTROOM B - WEST ELEVATION
SCALE: 1/2" = 1'-0"



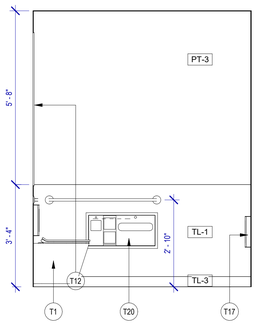
6 UNISEX RESTROOM B - SOUTH ELEVATION
SCALE: 1/2" = 1'-0"



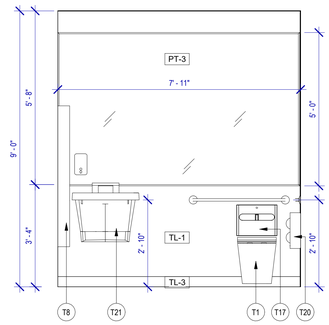
5 UNISEX RESTROOM B - NORTH ELEVATION
SCALE: 1/2" = 1'-0"



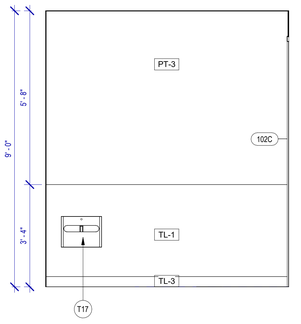
4 UNISEX RESTROOM A - EAST ELEVATION
SCALE: 1/2" = 1'-0"



3 UNISEX RESTROOM A - WEST ELEVATION
SCALE: 1/2" = 1'-0"



2 UNISEX RESTROOM A - SOUTH ELEVATION
SCALE: 1/2" = 1'-0"



1 UNISEX RESTROOM A - NORTH ELEVATION
SCALE: 1/2" = 1'-0"

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LANDSCAPE
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SPECIAL SYSTEMS (IT / SECURITY)
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346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

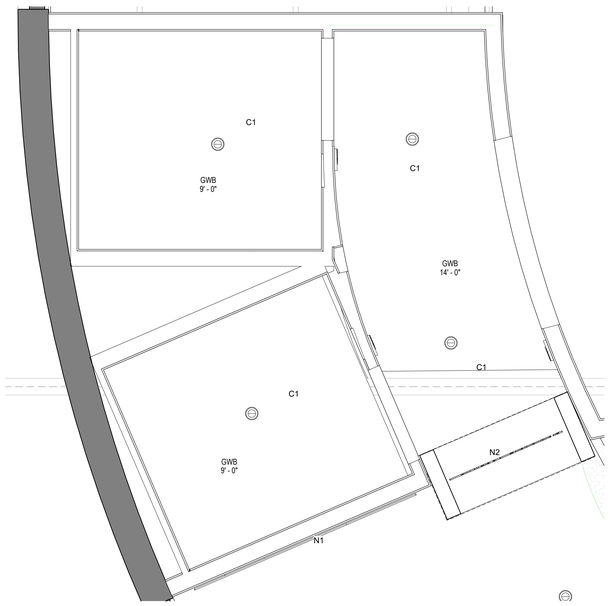
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No.	DATE	DESCRIPTION

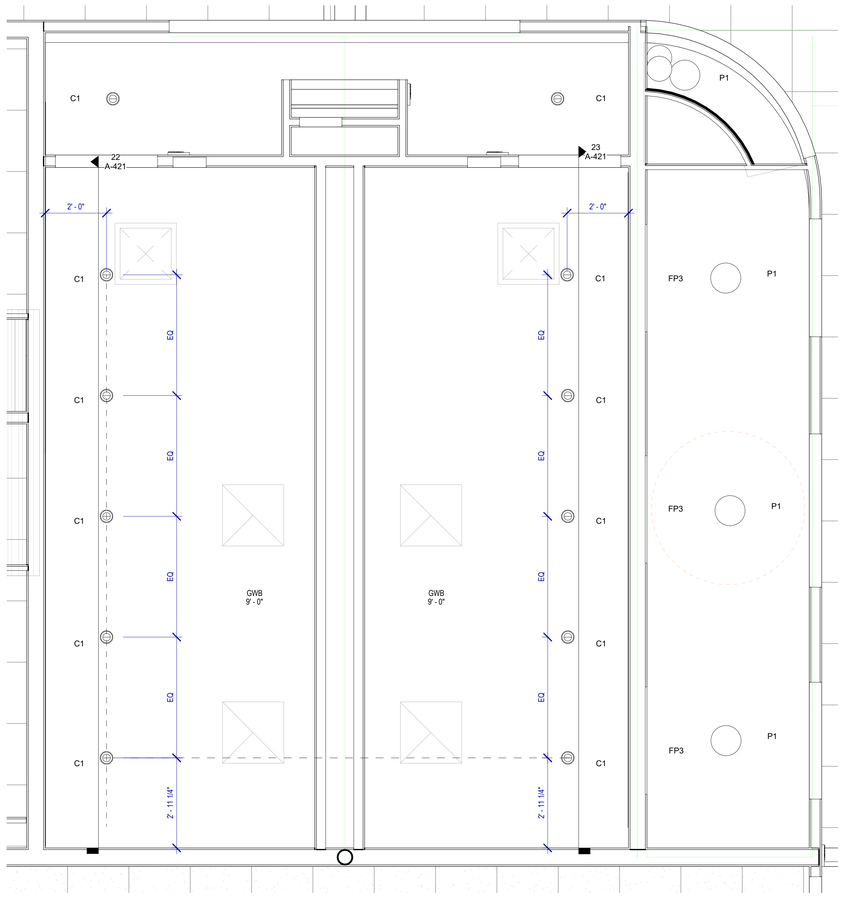
Sheet Title
ENLARGED RESTROOM ELEVATIONS

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

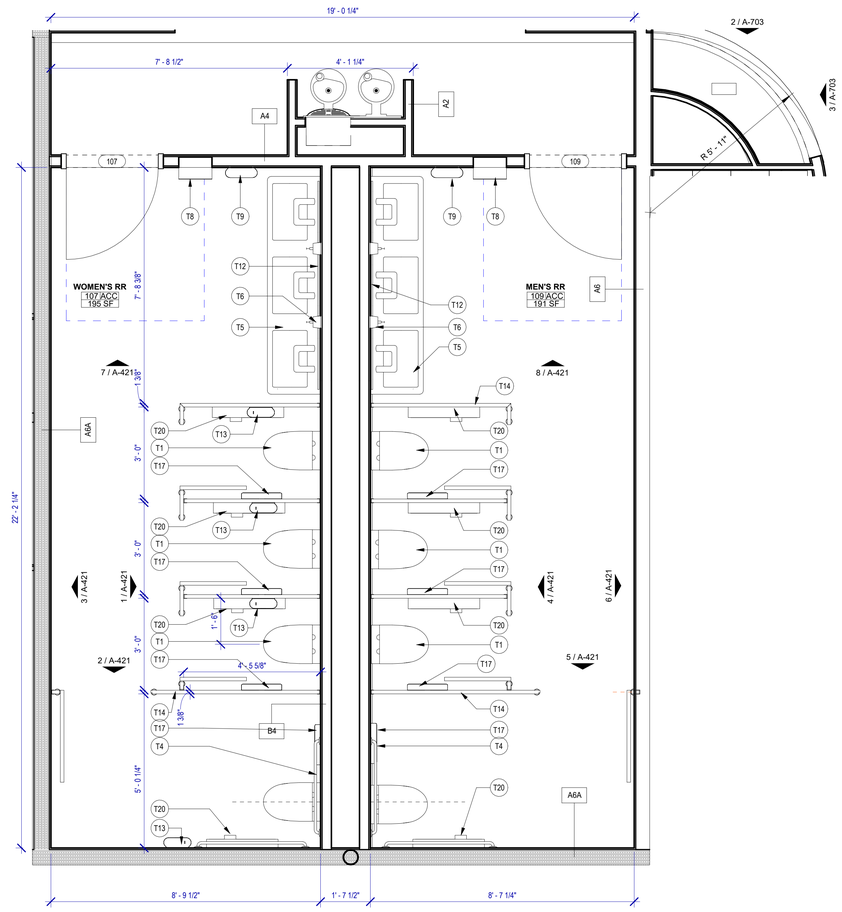
A-422



3 UNISEX RESTROOM REFLECTED CEILING PLAN
SCALE: 1/2" = 1'-0"



2 RESTROOM REFLECTED CEILING PLAN
SCALE: 1/2" = 1'-0"



1 ENLARGED RESTROOM PLAN.
SCALE: 1/2" = 1'-0"

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
T1	WALL HUNG AMERICAN STNDARD WC AFWALL 3351.001
T4	GRAB BARS 1" WITH CONCEALED MOUNTING, BRADLEY CROP.MODEL #(852) 18 GAUGE SATIN FINISH STAINLESS.
T5	LAVATORY COUNTERTOP, BRADLEY EXPRESS GLX SERIES THREE STATION MODEL #(GLX-3)
T6	SURFACE MOUNTED SOAP DISPENSER, BRADLEY CROP.MODEL # (6562-73).
T8	BOBRICK RECESSED PAPER TOWEL DISPENSER/WATER RECEPTACLE, TRIMLINE SERIES,B-36903
T9	ELVARI ELECTRIC HAND DRYER, SURFACE MOUNTED BRADLEY CROP.MODEL # (2B4)
T12	PLATE MIRROR, SIZE AND HEIGHT AS INDICATED
T13	ELVARI NAPKIN DISPOSAL, SURFACE MOUNTED,BRADLEY CROP.MODEL # (4B2-11).
T14	(TP1)EURO STYLE PARTITION-FLOAT SERIES, BRADLEY CROP.COLOR-BIRCH (35003)-TOILET PARTITION.
T17	SEAT COVER DISPENSER, BRADLEY CROP.MODEL # (5B1)
T20	SEAT COVER DISPENSER/ TISSUE DISPENSER,BRADLEY CROP.MODEL # (5961.11)

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02/27/2025

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Project Status:
ISSUE FOR CONSTRUCTION

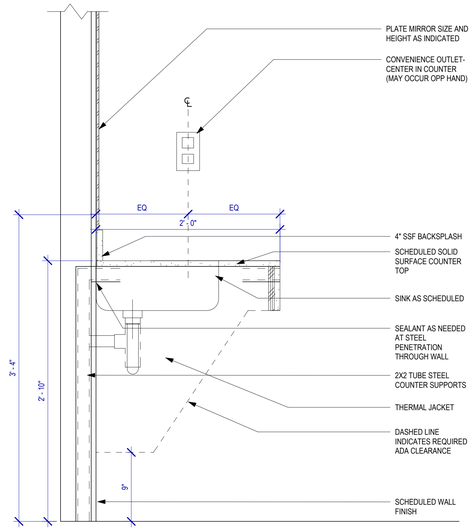
No.	DATE	DESCRIPTION
	02/27/2025	Issue for Bid

Sheet Title
ENLARGED RESTROOM FLOOR PLANS

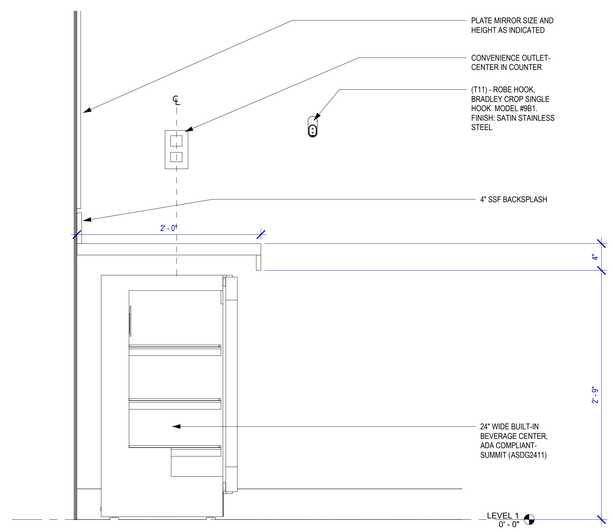
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP
Checked By:	DO
Date:	02/27/2025
Job No.:	1503

A-423

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



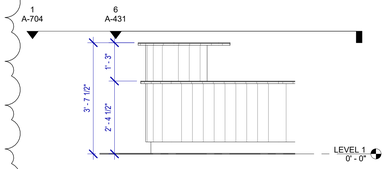
13 LAVATORY COUNTER DETAIL - QUITE ROOM
SCALE: 1 1/2" = 1'-0"



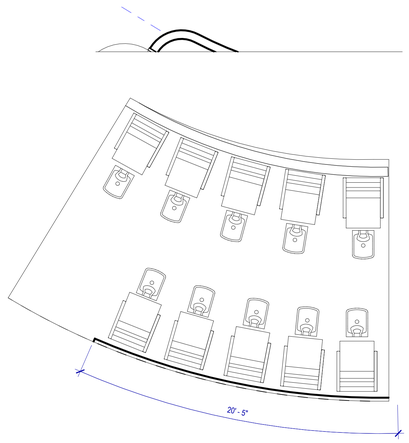
12 UC REFRIGETOR DETAIL - QUITE ROOM
SCALE: 1 1/2" = 1'-0"

KEYNOTE LEGEND

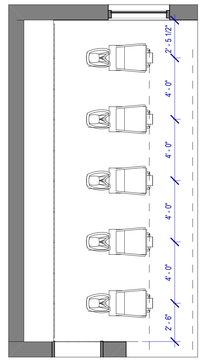
KEY VALUE	KEYNOTE TEXT



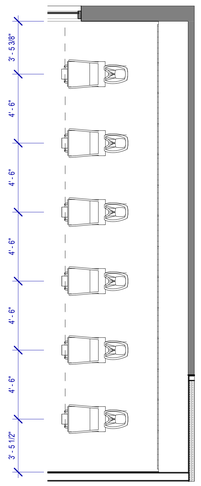
11 RECEPTION DESK ELEVATION.
SCALE: 1/2" = 1'-0"



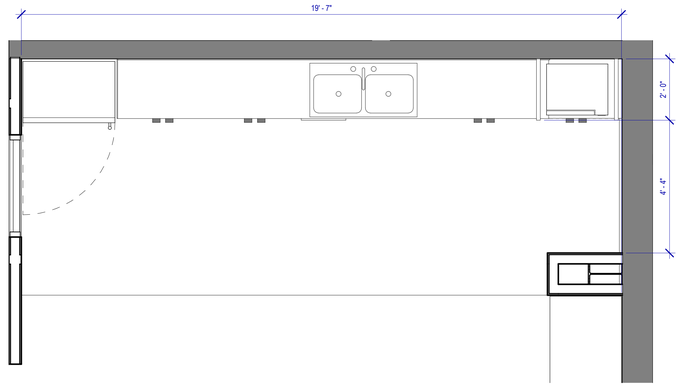
10 MANI-PEDI LAB
SCALE: 1/4" = 1'-0"



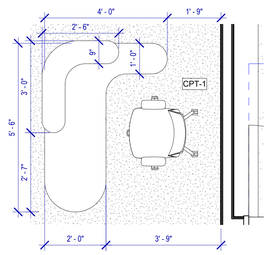
9 SHAMPOO STATIONS
SCALE: 1/4" = 1'-0"



8 SHAMPOO STATION
SCALE: 1/4" = 1'-0"



7 STUDENT LOUNGE
SCALE: 1/2" = 1'-0"



6 RECEPTION DESK
SCALE: 1/2" = 1'-0"

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NORTH HARRIS

SCHOOL OF COSMETOLOGY
2700 W W THORNE BLVD, 77073

RDLR Architects
ARCHITECTURE PLANNING INTERIORS

800 Sampson St. #104
Houston, TX 77003
713.868.3121
www.rdlr.com

REGISTERED ARCHITECT
JENNIFER M. DUNN
31730
STATE OF TEXAS

CLIENT:
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2700 W W THORNE DRIVE
LEIGHANN BAILIE
281.290.3755

MEP
JONES ENGINEERS
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MATRIX STRUCTURAL
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LANDSCAPE
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346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
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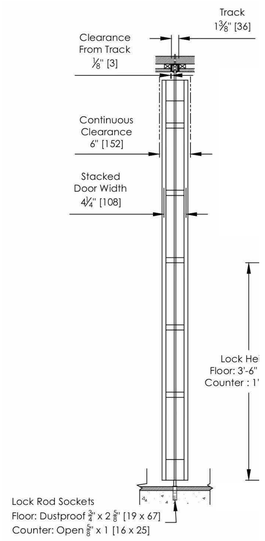
No.	DATE	DESCRIPTION
1	07/02/25	Addendum-2- Cancelled by LSC

Sheet Title
ENLARGED FLOOR PLANS AND ELEVATIONS

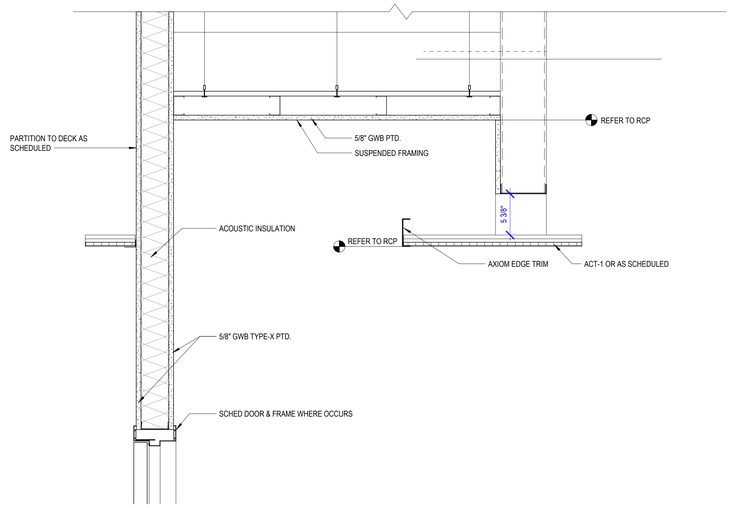
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-431

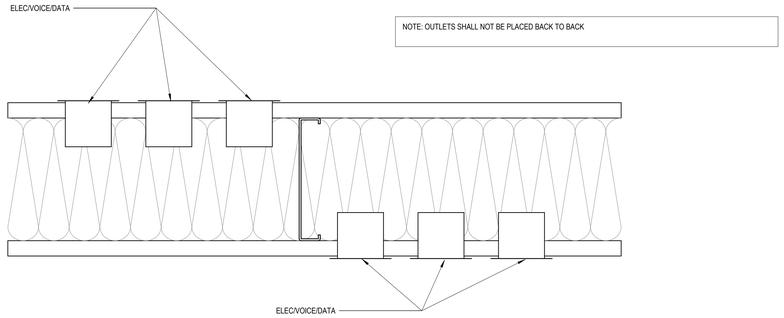
THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



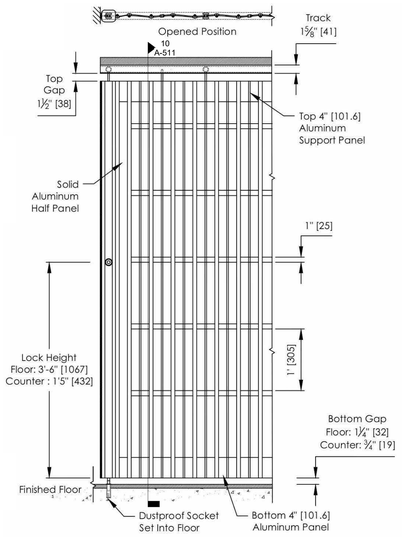
10 CURVED SECURITY GATE ELEVATION1 - SECTION
SCALE: 1" = 1'-0"



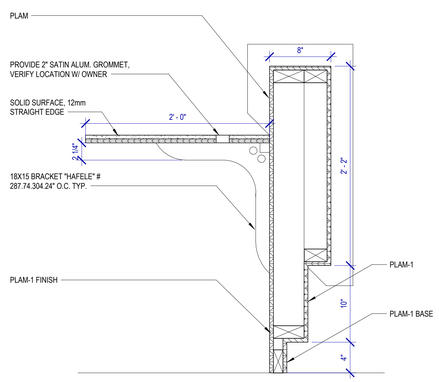
9 GWB SUSPENDED CEILING TO ACT TRANSITION
SCALE: 1 1/2" = 1'-0"



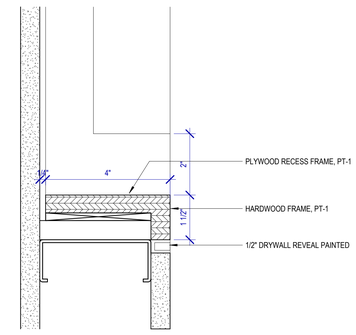
8 TYP. PLAN DETAIL CONDITION AT ACOUST. PARTITIONS
SCALE: 3" = 1'-0"



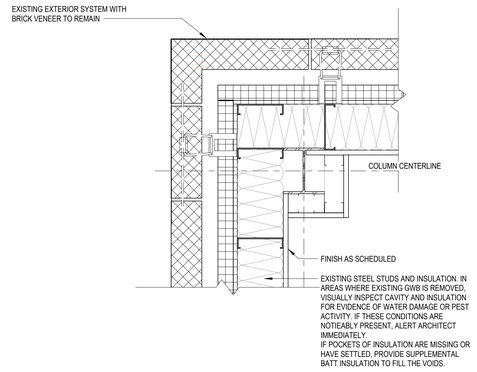
2 CURVED SECURITY GATE ELEVATION
SCALE: 1" = 1'-0"



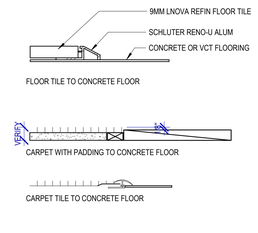
7 RECEPTION DESK AT STAFF OFFICES
SCALE: 1 1/2" = 1'-0"



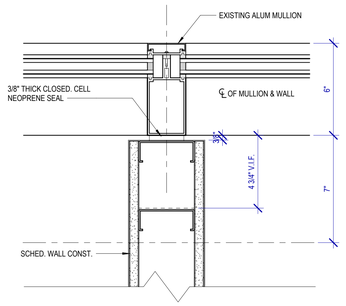
6 ENLARGED DETAIL @ MONITOR FRAME
SCALE: 6" = 1'-0"



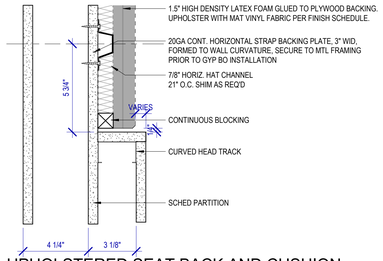
5 GWB CORNER CONDITION AT EXISTING COLUMN
SCALE: 1 1/2" = 1'-0"



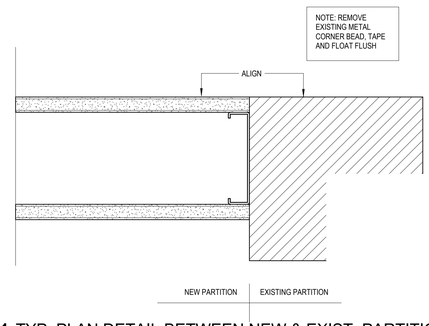
4 FLOORING TRANSITION DETAILS
SCALE: 6" = 1'-0"



3 WALL AT EXISTING JAMB DETAIL
SCALE: 3" = 1'-0"



21 UPHOLSTERED SEAT BACK AND CUSHION
SCALE: 3" = 1'-0"



1 TYP. PLAN DETAIL BETWEEN NEW & EXIST. PARTITION
SCALE: 3" = 1'-0"

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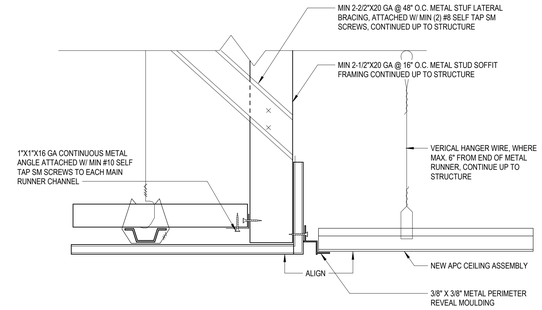
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INTERIOR PLAN DETAILS

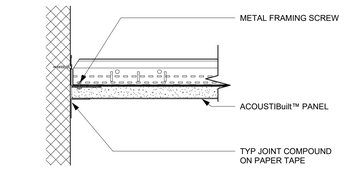
Project Mgr:	JMD
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A-511

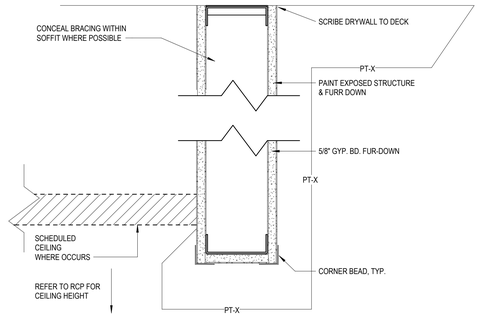
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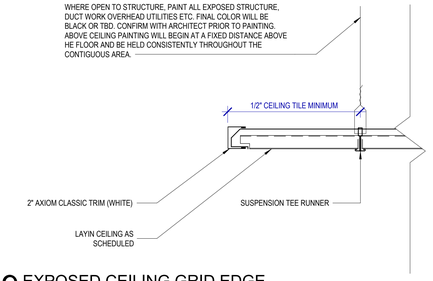
12 FLUSH TRANSITION FROM GWB TO ACT AT REVEAL. (TYP @ CORRIDOR)
SCALE: 3" = 1'-0"



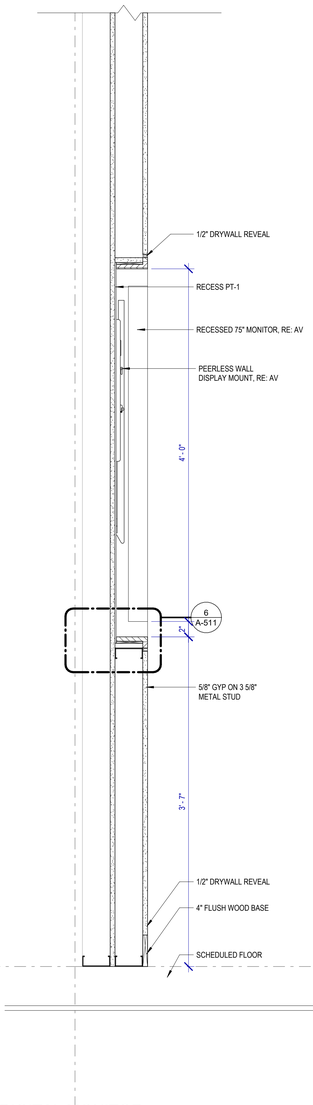
11 GWB CEILING TO WALL TRANSITION
SCALE: 3" = 1'-0"

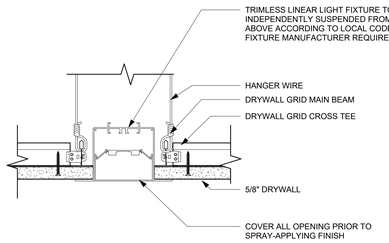


10 TYP. CEILING - DRYWALL FURR-DOWN
SCALE: 3" = 1'-0"

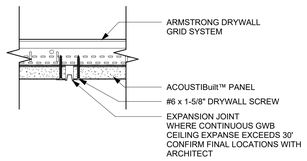


9 EXPOSED CEILING GRID EDGE
SCALE: 3" = 1'-0"

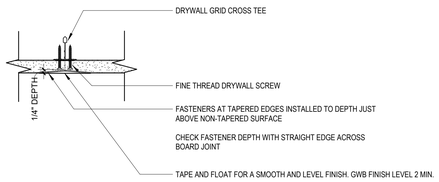




8 GWB CEILING AT FLUSH MOUNTED FIXTURE
SCALE: 3" = 1'-0"

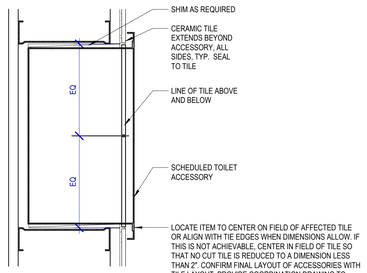


7 GWB CEILING - EXPANSION JOINT CONDITION (TYP)
SCALE: 3" = 1'-0"

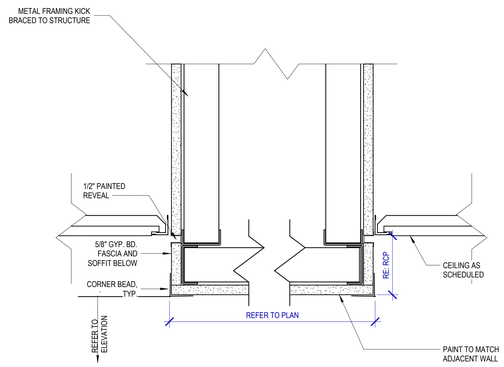


6 GWB CEILING AT PANEL JOINT (TYP)
SCALE: 3" = 1'-0"

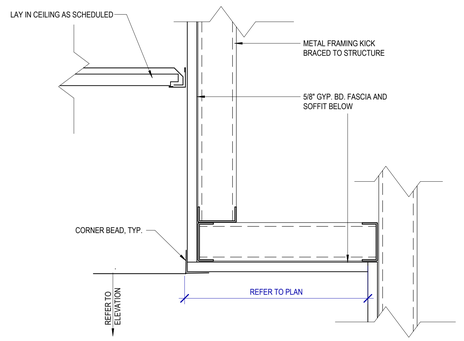
5 RECESSED DIGITAL MONITOR
SCALE: 1 1/2" = 1'-0"



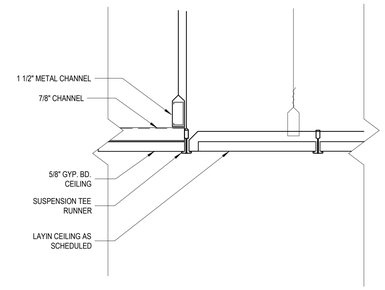
4 PLAN / SECTION - RECESSED ITEM IN TILE
SCALE: 3" = 1'-0"



3 DRYWALL FURDOWN
SCALE: 3" = 1'-0"



2 DRYWALL FURDOWN @ WALL
SCALE: 3" = 1'-0"



1 CEILING TRANSITION - GYP. BD. TO ACT
SCALE: 3" = 1'-0"

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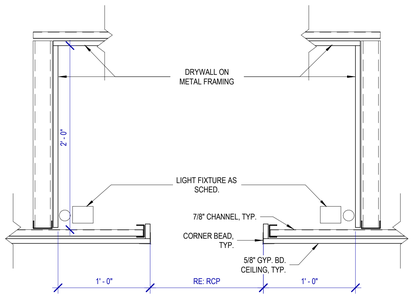
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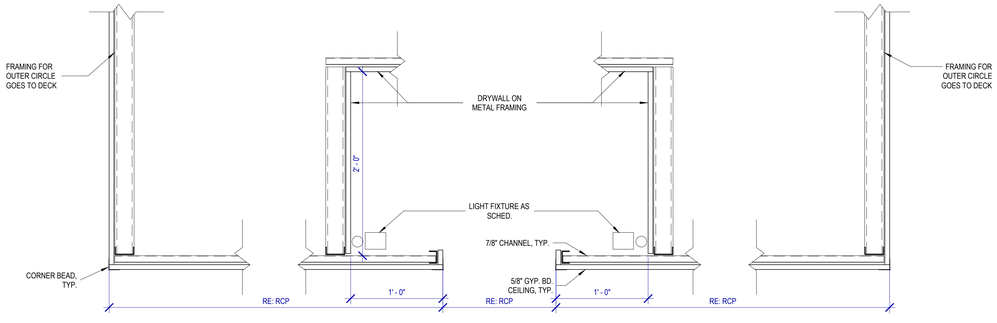
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Project Mgr:	JMD
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Drawn By:	SP,FF
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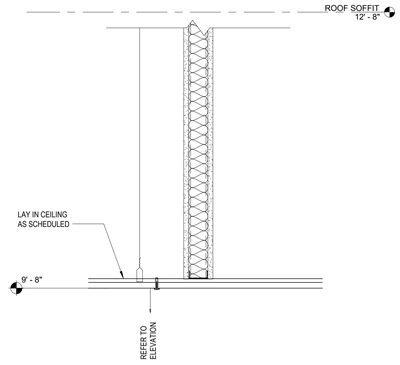
A-521



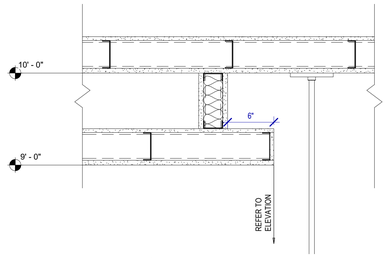
11 COVE LIGHT @ DRYWALL CEILING-LOBBY
SCALE: 1 1/2" = 1'-0"



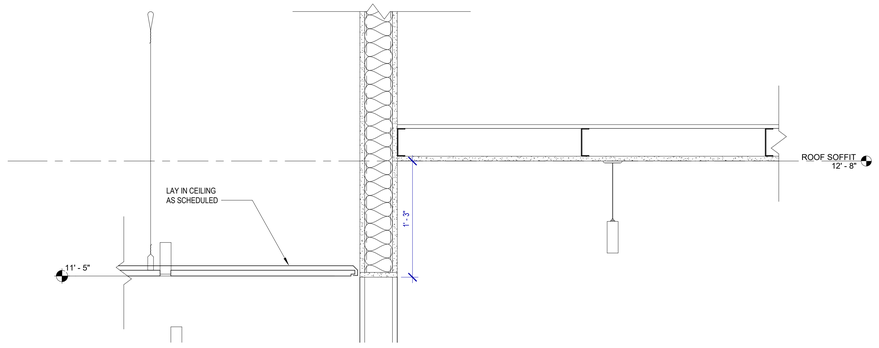
9 COVE LIGHT @ DRYWALL CEILING-LAB
SCALE: 1 1/2" = 1'-0"



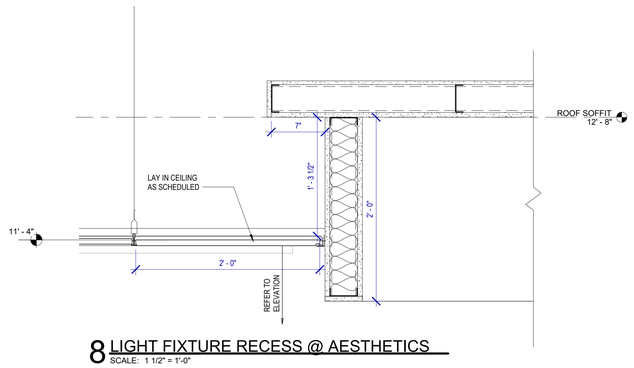
2 ACT CEILING TRANSITION
SCALE: 1 1/2" = 1'-0"



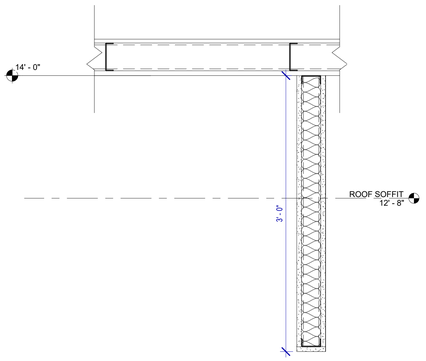
5 GWB CLOUD
SCALE: 1 1/2" = 1'-0"



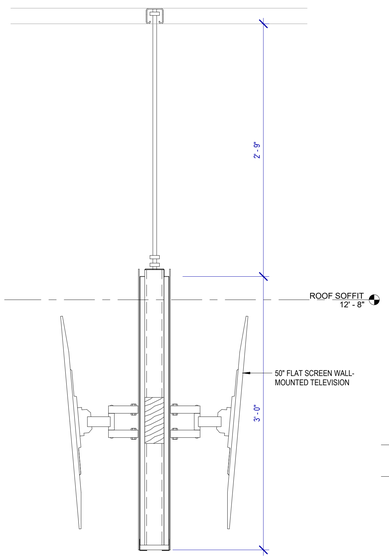
10 CORRIDOR CEILING POP-UP
SCALE: 1 1/2" = 1'-0"



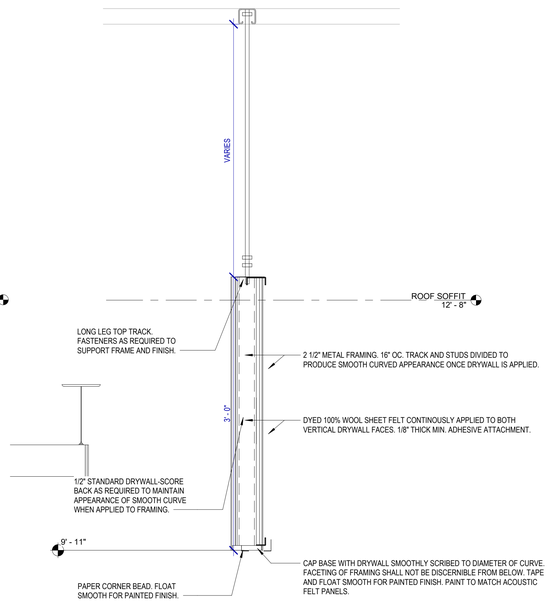
8 LIGHT FIXTURE RECESS @ AESTHETICS
SCALE: 1 1/2" = 1'-0"



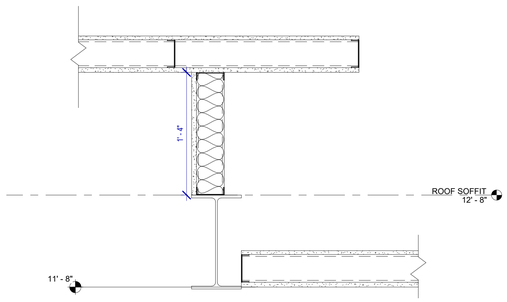
7 GWB CEILING TRANSITION
SCALE: 1 1/2" = 1'-0"



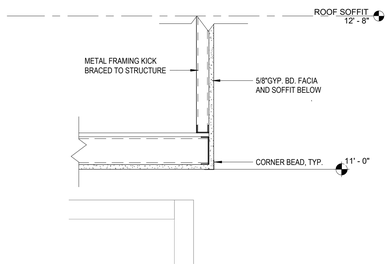
6 SCREEN SUPPORT @ BAFFLE
SCALE: 1 1/2" = 1'-0"



1 SCREEN SUPPORT @ BAFFLE Copy 1
SCALE: 1 1/2" = 1'-0"



4 CEILING HEIGHT CHANGE @ BEAM
SCALE: 1 1/2" = 1'-0"



3 CEILING DETAIL - DROPPED BULKHEAD
SCALE: 1 1/2" = 1'-0"

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Project Mgr:	JMD
Designer:	JMD
Drawn By:	RB
Checked By:	DO
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A-522

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MATERIALS & FINISH KEY

DIVISION 3 - CONCRETE

CONC-1
POLISHED BOMANITE VITRA FINISH OR EQUAL. MIN. 1000 GRIT GRIND WITH SATIN FINISH. REFER TO MANUFACTURER'S RECOMMENDATIONS. PROVIDE 3' X 3' MOCK UP FOR APPROVAL.

CONC2
SEALED.

DIVISION 4 - MASONRY

MAS1-(E)
EXISTING BRICK MASONRY TO REMAIN.

DIVISION 9 - METALS

MTL1
GORDON 1/2" ALUMINUM REVEAL MOLDINGS, REFER TO ELEVATIONS FOR PAINT DESIGNATION. FACTORY PAINTED. ON-SITE TOUCHUP WILL BE REQUIRED.

DIVISION 6 - WOODS AND PLASTIC

CUSTOM CABINETS: CUSTOM DESIGNED CASEWORK OF PLASTIC LAMINATE VENEER, SHOP FABRICATED AND FINISHED. ALSO INCLUDES RELATED HARDWARE AND ACCESSORIES WITH PLAM AND SOLID SURFACE COUNTERTOPS AS DESIGNATED.

WSL-1
WOOD SLATS OVER FELT BACKER AS DETAILED. REFER TO INTERIOR DETAILS.

DIVISION 6 – CABINET HARDWARE & ACCESSORIES

CH1
MOCKETT DP3 TAB PULL SERIES. SIZE: 3" FINISH: BLACK

CH2
1. GRASS, CONCEALED SELF CLOSING 120 HINGES.
2. ACCURIDE SOFT CLOSE HEAVY DUTY DRAWER SLIDE (NEED TO LOOK UP CATALOG#)
3. KNAPE & VOIGHT, #87 AND 187 SHELF STANDARD
4. CAM LOCKS - TYP ALL CABINETS AND DRAWERS

CH3
DISPLAY HINGE AND LOCK (THIS IS LIKE A JEWELRY COUNTER DISPLAY TYPE SETUP.

CH-4
2 ½" BRUSHED STAINLESS GROMMET. OCCURS: AT MILLWORK FOR ACCESS TO POWER, TYPICAL. REFER TO MILLWORK PLANS AND DETAILS.

CH5
RUBBERMAID. 3541 SLIM-JIM. COLOR GRAY. SIZE 23L X 11W X 24.9H. CONFIRM TOTALS.

CH6
1) GRASS, CONCEALED SELF CLOSING 120□ HINGES.

2) ACCURIDE, #C38000 DRAWER SLIDE

3) KNAPE & VOIGHT, #87 AND 187 SHELF STANDARD

CH7
RUBBERMAID. 2643-60 BRUTE. COLOR GRAY. SIZE 24W X 31.5H. CONFIRM TOTAL QUANTITIES FOR THE SPACE WITH THE USER. REFER TO PLANS, ELEVATIONS, AND KITCHEN CONSULTANT'S DRAWINGS.

DIVISION 8 – DOORS AND WINDOWS

ALFM1
RACO SOLUTIONS II WITH 1" TRIM. WIDTH TO MATCH PARTITON WIDTH. FINISH TO BE BLACK ANODIZED.

ALFM2
INTERIOR ALUMINIUM RIBBON WINDOW SYSTEM (NEED TO SPEC MANUFACTURED PRODUCT) FINISH: BLACK ANODIZED

HM1
EZU-JAMB DOOR FRAME. COLD ROLLED COMMERCIAL FRAME. PAINTED.

GL1
3/8" TEMPERED SAFETY GLASS. REFER TO ELEVATIONS FOR LOCATIONS

GL2
1/8" X 1/4" LAMINATED TEMPERED SAFETY GLASS WITH HEAVY FROSTED FILM APPLIED BETWEEN PANES. REFER TO GLAZING ELEVATIONS FOR HEIGHT OF FILM.

DIVISION 9 - FINISHES

PLASTIC LAMINATE
PLAM1
MANUFACTURER - COLOR

PLAM2
MANUFACTURER - COLOR

SOLID SURFACE
SS1
MANUFACTURER - COLOR

ACOUSTIC TILE
ACT1
2x2 OPTIMA TEGULAR WITH 9/16" STANDARD GRID

ACT2
2X2 LYRA TEGULAR WITH 9/16" STANDARD GRID

RUBBER BASE
RB1
ROPPE 4" TALL, 1/8" TPR RUBBER. CONTENT: 10% PRE CONSUMER. COVE BASE @ SEALED CONCRETE, STRAIGHT BASE @ CARPET AND DOOR PORTAL BUILD-OUTS. OCCURS: TYPICAL WALL BASE UNO. REFER TO FINISH PLAN FOR FURTHER INFORMATION.

RB2
ROPPE 4" TALL, 1/8" TPR RUBBER. CONTENT: 10% PRE CONSUMER. COVE BASE @ SEALED CONCRETE, STRAIGHT BASE @ CARPET AND DOOR PORTAL BUILD-OUTS. OCCURS: TYPICAL WALL BASE UNO. REFER TO FINISH PLAN FOR FURTHER INFORMATION.
EPOXY TERRAZZO FLOORING AT PATCH LOCATIONS. REFER TO FINISH FLOOR PLANS.

WALLCOVERING
WC1
WALLCOVERING - MANUFACTURER - MODEL - COLOR
WALLS BEHIND SHAMPOO STATION.

PAINT
PT-1
SW7013- WHITETAIL - EGGSHELL FINISH

PT-2
SWxxxx- XX - EGGSHELL FINISH

PT-3
SW9185- MAREA BAJA - EGGSHELL FINISH

PT-4
SW0031- DUTCH TILE BLUE - EGGSHELL FINISH

CARPET
CPT-1
CARPET TILE- SHAW CONTRACT- DESERT LIGHTS- HR60561
RUG

CPT2
CARPET TILE - TARKETT- EDGE EDIT 11615 DIRECT CURRENT 22405
24" X 24": VERTICAL ASHLAR

CPT3
CARPET TILE - SHAW CONTRACT- APOLLO TILE 21327 JADE PALLADIUM
24" X 24": QURTER TURN

TILE

TL-1
RESTROOM WALL- AUGUSTA CALACATTA -W7055 (WETWALL)- WILSONART

TL2

TL-3
RESTROOM FLOOR - EXCLUSIVE PORCELAIN TILE. SIZE- 12X24 POLISHED
ID#: CT15K. COLOR- LUXURY 00105
FINISH: POLISHED. (FLOORING LOCATIONS PER FINISH PLAN)

TL2
SUBWAY TILE - RESTROOM PLUMBING WALL UPPERS, SHAMPOO STATION BACKSPLASH.

DIVISION 13 – SPECIALTIES

FEC-1
J.L INDUSTRIES, INC. FIRE EXTINGUISHERS/CABINETS. COSMOPOLITAN, NON-FR, 10 ½"X24"X6",SEMI RECESSED, SOLID PULL, NO GLAZING, NO LOCK, STAINLESS STEEL. OCCURS: REFER PLAN.

TOILET PARTITIONS
TP1
BRADLEY CORP. - MODEL FLOAT SERIES EURO PARTITIONS - BIRCH (35003)-EURO STYLE PARTITIONS – FLOAT SERIES

DIVISION 11 – EQUIPMENT

NOTE:ALL APPLIANCES TO BE PROVIDED & INSTALLED BY G.C. UNLESS LISTED N.I.C OR BY VENDOR. REFER TO EQUIPMENT/UTILITY SCHEDULE FOR APPLIANCES AND EQUIPMENT.

DIVISION 12-FURNITURE AND FABRICS

REFER TO FF&E DRAWINGS

DIVISION 23 – MECHANICAL

REFER TO MECHANICAL DRAWINGS

DIVISION 26 – ELECTRICAL

REFER TO ELECTRICAL DRAWINGS

DIVISION 26 - LIGHTING

WIRING DEVICES
POWER/SIGNAL OUTLETS, SWITCHES AND SWITCH PLATES TO BE LEVITON DECORA, WHITE FINISH TYPICAL ON ALL PT-X WALLS.

MATERIALS AND FINISHES GENERAL NOTES

1. WHERE MULTIPLE MATERIALS, FINISHES &/OR VARIATIONS IN ELEVATION ARE SPECIFIED FOR A SINGLE SURFACE, REFERENCE INFORMATION IS LOCATED ON THE PLANS AND ELEVATIONS.
2. INTERIOR WALL FINISHES ARE REFERENCED FROM THE ROOM FINISH SCHEDULE OR FROM THE INTERIOR ELEVATIONS.
3. INTERIOR FLOOR FINISHES ARE REFERENCED FROM THE ROOM FINISH SCHEDULE OR FROM THE FLOOR PLANS.
4. INTERIOR CEILING FINISHES ARE REFERENCED FROM THE ROOM FINISH SCHEDULE OR FROM THE REFLECTED CEILING PLANS.
5. EXTERIOR BUILDING FINISHES ARE REFERENCED FROM THE BUILDING ELEVATIONS.
6. WHERE GYPSUM BOARD LAYERS DIFFER BETWEEN BETWEEN TWO ADJOINING WALLS, MAINTAIN A CONTINUOUS FINISH FACE OF WALL.
7. FINISH FLOOR ELEVATIONS ARE TO TOP OF CONCRETE SLAB UNLESS OTHERWISE NOTED.
8. ALL INTERIOR PAINT SHEENS TO BE EGGSHELL UNLESS OTHERWISE NOTED.
9. PROVIDE RUBBER TRANSITION STRIPS AT ALL FLOOR MATERIAL TRANSITIONS UNLESS OTHERWISE NOTED. MATCH ROPPE #50 TILE/CARPET JOINER, BLACK 100. ALL LOCATIONS ARE TO BE VERIFIED IN THE FIELD WITH THE ARCHITECT PRIOR TO INSTALLATION.
10. ALL PAINT COLOR LOCATIONS ARE TO BE VERIFIED IN THE FIELD WITH THE ARCHITECT PRIOR TO INSTALLATION.

ROOM FINISH SCHEDULE REMARKS LEGEND

1. ALL GWB PARTITIONS TO BE PT1 UNLESS OTHERWISE NOTED.
2. GWB CEILINGS TO BE PT5 UNLESS OTHERWISE NOTED.
3. CEILING HEIGHT VARIES.

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR FINISH
100A	CORRIDOR	CONC-1
100B	CORRIDOR	CONC-1
100C	CORRIDOR	CONC-1
100D	CORRIDOR	CONC-1
100E	LOCKER NOOKS	CONC-1
102A	SHAMPOO STATIONS	CONC-1
102B	UNISEX RR	TL-1
102C	UNISEX RR	TL-1
102D	SHAMPOO STATIONS	CONC-1
102E	RECEPTION	CPT-1
102F	COSMETOLOGY LAB	CONC-1
102G	MANI-PEDI LAB	CONC-1
102I	WAITING	CPT-1
102J	LOBBY	CONC-1
102M	ALCOVE	TL-3
103	RECEPTION	CPT-1
103A	STAFF OFFICE	CPT-2
103B	STAFF OFFICE	CPT-2
103C	STAFF OFFICE	CPT-2
103D	DIRECTORS OFFICE	CPT-2
103E	AJUNCT WORKROOM	CPT-2
103F	STAFF BREAKROOM	CONC-1
103G	FILES	CONC-1
104	STORAGE	CONC-1
105	ESTHETICS LAB ISLAND	TL-5
105	ESTHETICS LAB	TL-3
106	MECHANICAL	CONC-1
106A	ELECTRICAL	CONC-1
107	WOMEN'S RR	TL-3
108	IT / IDF	CONC-1
109	MEN'S RR	TL-3
110	JANITOR	CONC-1
111	CLASSROOM	CPT-2
112	QUIET ROOM	CONC-1
113	CLASSROOM	CPT-2
114	STORAGE	CONC-1
115	CLASSROOM	CPT-2
116	LAUNDRY	CONC-1
121	MECHANICAL	CONC-1
122	MECHANICAL	CONC-1
125	STUDENT LOUNGE	CONC-1
127	ENCLOSED OUTDOOR STUDENT LOUNGE	CONC-1

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346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
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Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION

Sheet Title
ROOM FINISH SCHEDULE AND MATERIALS LEGEND

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,FF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-601

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

DOOR AND DOOR SCHEDULE GENERAL NOTES

1. ALL DOOR SIZES ARE TO JAMB OPENING SIZE.
2. ALL UNDERCUT DOOR REQUIREMENTS FOR VARIOUS FLOOR FINISHES SHALL BE VERIFIED AND COORDINATED BY THE CONTRACTOR.
3. ALL DOOR OPENINGS, FRAMES, AND HARDWARE SHALL COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE CODES.
4. COORDINATE ALL DOORS AND DETAILS TO PROVIDE ADEQUATE CLEARANCE AND FRAME REINFORCEMENT FOR HARDWARE TYPES.
5. TYPICAL DOOR BEVEL TO BE 1/8" IN 2", UNLESS NOTED OTHERWISE BY THE REQUIRED HARDWARE TEMPLATES.
6. ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE SIDE OF EGRESS WITHOUT USE OF SPECIAL KNOWLEDGE OR EFFORT.
7. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE LOCATED 4" FROM THE FINISHED WALL TO OUTSIDE OF FINISHED JAMB.

DOOR SCHEDULE REMARKS LEGEND

1. DOOR CLOSER AND LATCHSET/LOCKSET, ALWAYS FREE EGRESS, FUNCTION PER HARDWARE SCHEDULE [REQUIRED AT ALL OPENINGS THROUGH FIRE RATED WALL ASSEMBLIES, OTHERS AS SCHEDULED]
2. PANIC EXIT DEVICE
3. AUTOMATIC-CLOSING FIRE DOOR ASSEMBLY; ELECTROMAGNETIC DOOR HOLDER TIED TO FIRE ALARM SYSTEM, RELEASES UPON ACTIVATION OF FIRE ALARM OR FIRE SPRINKLER SYSTEM OR LOSS OF POWER
4. ACCESS CONTROLLED INGRESS, ALWAYS FREE EGRESS; ACCESS CONTROL DEVICE [CARD READER] LOCATION AS INDICATED OR V.I.F. W/ ARCHITECT PRIOR TO INSTALLATION
5. ACCESSIBLE AUTO-OPERATOR; ACUATOR LOCATIONS AS INDICATED OR V.I.F. W/ ARCHITECT PRIOR TO INSTALLATION
6. REMOTE DOOR RELEASE, RELEASE BUTTON LOCATION AS INDICATED OR V.I.F. W/ ARCHITECT PRIOR TO INSTALLATION
7. DELAYED EGRESS LOCKING SYSTEM, RELEASES 15 SEC. MAX. AFTER REQUEST TO EXIT ACTIVATION, OR UPON ACTIVATION OF FIRE ALARM OR FIRE SPRINKLER SYSTEM OR COMMAND FROM FIRE COMMAND CENTER OR LOSS OF POWER
8. PUSH/PULL HARDWARE, NO LATCH [NOT ALLOWED AT RATED WALLS]
9. DOUBLE ACTING DOOR
10. FIRE / SMOKE SEALS RE: SPECIFCATION SECTION 08 07 00
11. SOUND SEALS
12. INSULATED EXTERIOR DOOR, MAX. U-VALUE ≤ 0.61
13. UNDERCUT DOOR 1-1/2"
14. DOOR SHOULD HAVE SIGNAGE INDICATING "EMERGENCY EXIT ONLY"
15. DOOR SHOULD HAVE SIGNAGE INDICATING "THIS IS NOT AN EXIT"

DOOR SCHEDULE

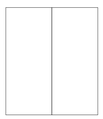
Mark	ROOM NAME	DOOR OPENING						RDLR_FIRE RATING	GLAZING TYPE	HARDWARE GROUP	DOOR FRAME					DETAILS				REMARKS
		TYPE	THICKNESS	WIDTH	HEIGHT	MATERIAL	FINISH				TYPE	HEIGHT	WIDTH	MATERIAL	FINISH	JAMB	HEAD	THRESHOLD	
100A	CORRIDOR	F	0' - 2"	3' - 0"	8' - 0"	ALUM & GLASS	Aluminum - Anodized Gray			2.0	5	8' - 2"	6' - 4"	ALUM	BLACK ANODIZED					
100B	CORRIDOR	F	0' - 2"	3' - 0"	8' - 0"	ALUM & GLASS	GL-4			2.0	2T	10' - 2"	6' - 4"	ALUM	BLACK ANODIZED					
101A	MANI-PEDI LAB	E	0' - 2"	3' - 0"	8' - 0"	ALUM & GLASS	Aluminum - Anodized Silver			3.1	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
101B	MANI-PEDI LAB	E	0' - 2"	3' - 0"	8' - 0"	ALUM & GLASS	Aluminum - Anodized Gray			3.1	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
101C	SHAMPOO STATIONS	B	0' - 2"	3' - 0"	6' - 10"	HM	PT-3 Door Frames				1	7' - 0"	3' - 4"	HM	PT-3 Door Frames					14
101H	WAITING/LOBBY	F	0' - 2"	3' - 0"	8' - 0"	ALUM & GLASS	Aluminum - Anodized Gray				5	8' - 2"	6' - 4"	ALUM	BLACK ANODIZED					
102B	UNISEX RR	A	0' - 2"	3' - 0"	8' - 0"	SOLID	PT-3 Door Frames			8.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
102C	UNISEX RR	A	0' - 2"	3' - 0"	8' - 0"	SOLID	PT-3 Door Frames			8.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
103	RECEPTION	E	0' - 2"	3' - 0"	8' - 0"	ALUM & GLASS	Aluminum - Anodized Silver			3.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
103A	STAFF OFFICE	A	0' - 2"	3' - 0"	8' - 0"	SOLID	<By Category>			12.0	4	8' - 2"	5' - 4"	ALUM	BLACK ANODIZED					
103B	STAFF OFFICE	A	0' - 2"	3' - 0"	8' - 0"	SOLID	<By Category>			12.0	4	8' - 2"	5' - 4"	ALUM	BLACK ANODIZED					
103C	STAFF OFFICE	A	0' - 2"	3' - 0"	8' - 0"	SOLID	PT-3 Door Frames			12.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
103D	DIRECTORS OFFICE	A	0' - 2"	3' - 0"	8' - 0"	SOLID	PT-3 Door Frames			12.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
103G	FILES	A	0' - 2"	3' - 0"	8' - 0"	WOOD	Black Birch Wood			11.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
104	STORAGE	A	0' - 2"	3' - 0"	8' - 0"	SOLID	PT-3 Door Frames			10.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
105	ESTHETICS LAB	E	0' - 2"	3' - 0"	8' - 0"	ALUM & GLASS	WD-1 (Interior Wood Finish 1)			4.1	4	8' - 2"	4' - 8"	ALUM	BLACK ANODIZED					
106	MECHANICAL	A	0' - 2"	3' - 0"	8' - 0"	SOLID	PT-3 Door Frames			10.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
107	WOMEN'S RR	A	0' - 2"	3' - 0"	8' - 0"	WOOD	Black Birch Wood			13.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
108	IT/IDF	A	0' - 2"	3' - 0"	8' - 0"	SOLID	PT-3 Door Frames			10.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
109	MEN'S RR	A	0' - 2"	3' - 0"	8' - 0"	WOOD	Black Birch Wood			13.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
110	JANITOR	A	0' - 2"	3' - 0"	8' - 0"	SOLID	PT-3 Door Frames			11.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
111	CLASSROOM	A	0' - 2"	3' - 0"	8' - 0"	SOLID	<By Category>			6.0	4	8' - 2"	5' - 4"	ALUM	BLACK ANODIZED					
112	QUIET ROOM	A	0' - 2"	2' - 10"	8' - 0"	SOLID	PT-3 Door Frames			9.0	1T	9' - 8"	3' - 2"	ALUM	BLACK ANODIZED					
113	CLASSROOM	A	0' - 2"	3' - 0"	8' - 0"	SOLID	<By Category>			7.0	4	8' - 2"	5' - 4"	ALUM	BLACK ANODIZED					
113	CLASSROOM	A	0' - 2"	3' - 0"	8' - 0"	WOOD	Black Birch Wood				1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
114	STORAGE	A	0' - 2"	2' - 10"	8' - 0"	SOLID	PT-3 Door Frames			11.0	1T	9' - 8"	3' - 2"	ALUM	BLACK ANODIZED					
115	CLASSROOM	A	0' - 2"	3' - 0"	8' - 0"	SOLID	<By Category>			7.0	4	8' - 2"	5' - 4"	ALUM	BLACK ANODIZED					
116	LAUNDRY	A	0' - 2"	3' - 0"	8' - 0"	WOOD	Default			10.0	1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					
EX101	MANI-PEDI LAB	E	0' - 2"	3' - 0"	7' - 0"	ALUM & GLASS	<By Category>					0' - 0"	0' - 0"							14
EX206	ENTRANCE			6' - 0"	7' - 0"	ALUM & GLASS	<By Category>			1.0										
EX209	ENCLOSED OUTDOOR STUDENT LOUNGE	E	0' - 2"	3' - 0"	8' - 0"	ALUM & GLASS	Aluminum - Anodized Silver				1	8' - 2"	3' - 4"	ALUM	BLACK ANODIZED					15
EX210	ENTRANCE			6' - 0"	7' - 0"	ALUM & GLASS	<By Category>			1.0										
EX 100A		E	0' - 2"	3' - 0"	7' - 0"	ALUM & GLASS	<By Category>					0' - 0"	0' - 0"							



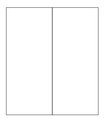
TYPE "A"
SINGLE SOLID CORE
PLASTIC LAMINATE



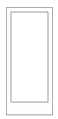
TYPE "B"
SINGLE HOLLOW METAL



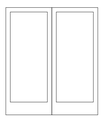
TYPE "C"
DOUBLE SOLID CORE
PLASTIC LAMINATE



TYPE "D"
DOUBLE HOLLOW METAL



TYPE "E"
ALUM. & GLASS



TYPE "F"
ALUM. & GLASS



TYPE "G"
SINGLE SOLID CORE
W/ LITE
PLASTIC LAMINATE

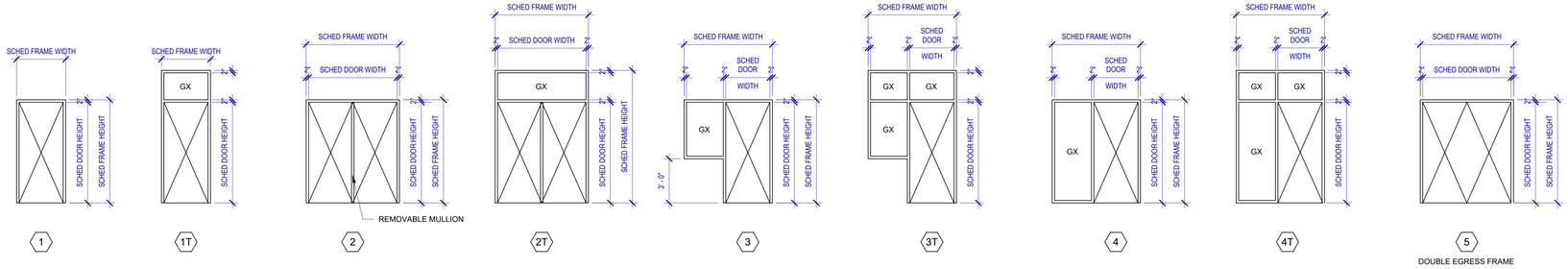


TYPE "H"
SLIDING BARN DOOR



TYPE "I"
OVERHEAD COILING
DOOR

DOOR TYPE ELEVATIONS



FRAME TYPE ELEVATIONS

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

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Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION

Sheet Title
DOOR SCHEDULE & DOOR AND FRAME ELEVATIONS

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,FF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-631

GLAZING TYPES

GL-1 1" INSULATED VISION GLASS, MATCH PPG SOLARBAN 90 CLEAR + CLEAR S SOLAR CONTORL LOW-E GLASS

1/4" CLEAR HS
1/2" AIR SPACE
GREY ANODIZED SPACER
1/4" INTERIOR CLEAR AN
U-VALUE 0.24
SHGC 0.23

GL-3 1/4" SPANDREL GLASS

GL-4 1/4" TEMPERED GLASS (INTERIOR)

SG 1/4" SPANDREL GLASS

MTL METAL PANEL W/ 3/4" REVEAL ALL AROUND

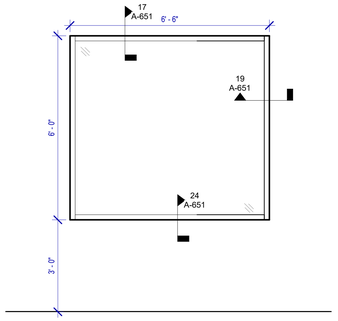
EXTERIOR OPENING GENERAL NOTES

1. FIELD VERIFY ALL DIMENSIONS PRIOR TO SUBMITTING SHOP DRAWINGS
2. EA. PANE OF GLASS SHALL BEAR MANUFACTURER'S MARK W/ TYPE & THICKNESS
3. ALL GLAZING IN HAZARDOUS LOCATIONS (AS DESCRIBED IN SECTION 2406 OF IBC) SHALL BE SAFETY GLAZING.
4. ALL DIMENSIONS ARE TO FINISHED ENDS OR ROUGH OPENING (NOTED AS R.O.)
5. GLAZING W/ TINT OR LOW-E COATING TO BE HEAT STRENGTHENED

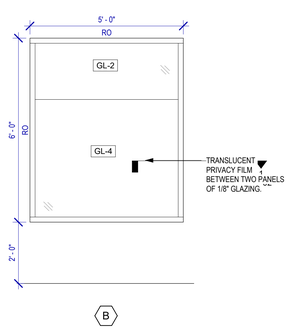
FRAME TYPES

CW 2-1/2" X 6" KAWNEER, 1600 WALL SYSTEM, CURTAIN WALL, BLACK FINISH

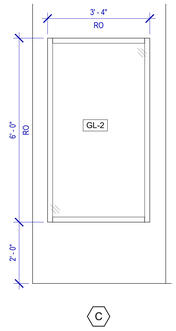
RW 2-1/4" X 6" KAWNEER, 2250 IG, RIBBON WINDOW, BLACK FINISH



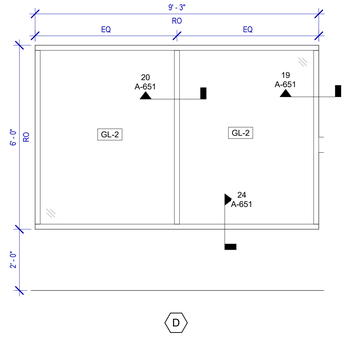
6 GLAZING AT MANI-PEDI LAB
SCALE: 1/2" = 1'-0"



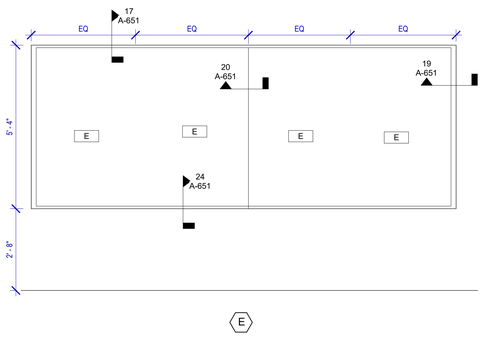
5 GLAZING AT STAFF OFFICE
SCALE: 1/2" = 1'-0"



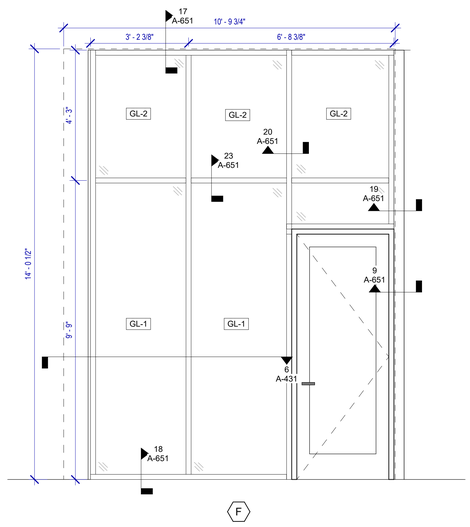
4 GLAZING AT STUDENT LOUNGE
SCALE: 1/2" = 1'-0"



3 GLAZING AT STUDENT LOUNGE.
SCALE: 1/2" = 1'-0"



2 GLAZING AT LOBBY INTO COSMETOLOGY
SCALE: 1/2" = 1'-0"



1 GLAZING AT OFFICE ENTRY
SCALE: 1/2" = 1'-0"

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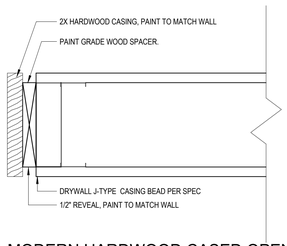
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Sheet Title
INTERIOR WINDOW TYPES AND FRAME ELEVATIONS

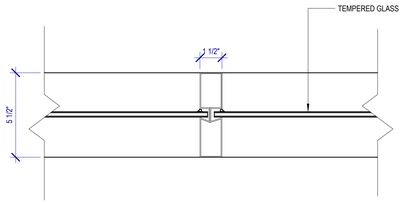
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Designer:	JMD
Drawn By:	SP,KF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-641

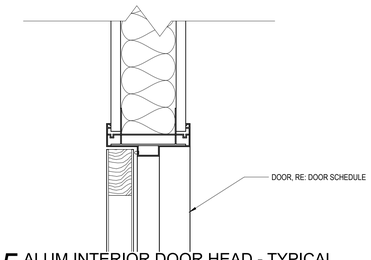
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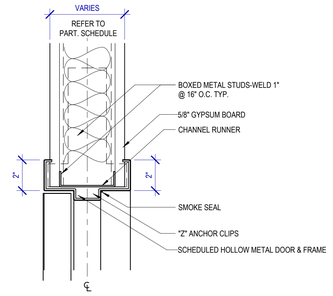
21 MODERN HARDWOOD CASED OPENING
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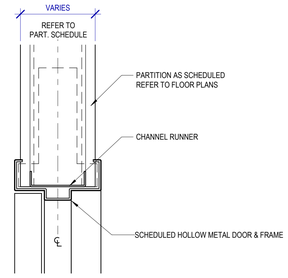
20 ALUMINUM INTERN MULLION DETAIL
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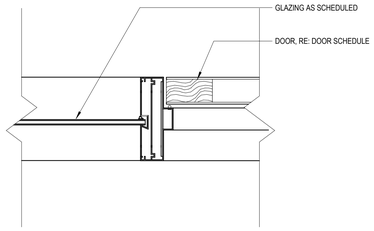
15 ALUM INTERIOR DOOR HEAD - TYPICAL
SCALE: 3" = 1'-0"



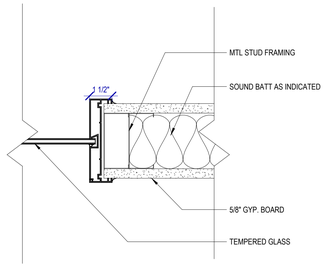
10 DOOR HEAD W/ ACOUS SEAL
SCALE: 3" = 1'-0"



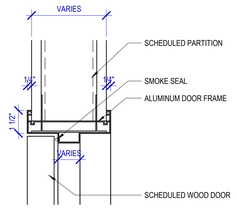
5 DOOR HEAD AT GYP WALL
SCALE: 3" = 1'-0"



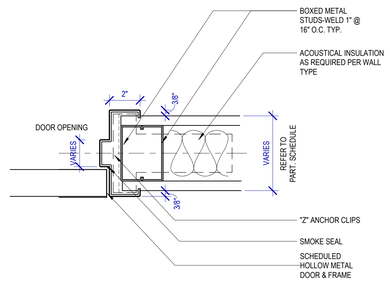
22 ALUM INTERIOR DOOR/WINDOW JAMB
SCALE: 3" = 1'-0"



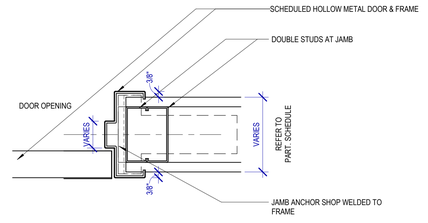
19 ALUM INTERIOR LITE HEAD/JAMB TYPICAL
SCALE: 3" = 1'-0"



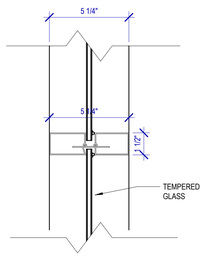
14 HEAD/JAMB DETAIL @ ALUM. DOOR FRAME
SCALE: 3" = 1'-0"



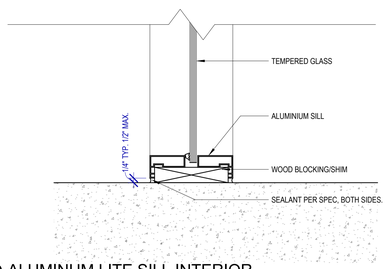
9 DOOR JAMB W/ ACOUS SEAL
SCALE: 3" = 1'-0"



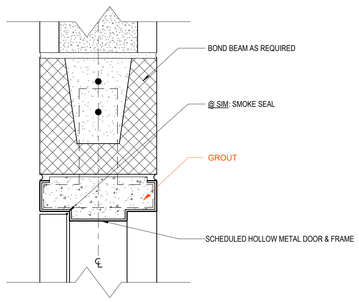
4 DOOR JAMB AT GYP WALL
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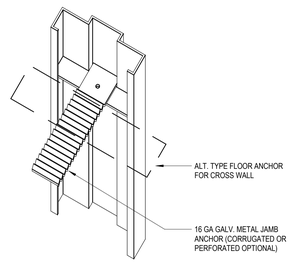
23 ALUMINUM INTERN MULLION DETAIL - VERTICAL
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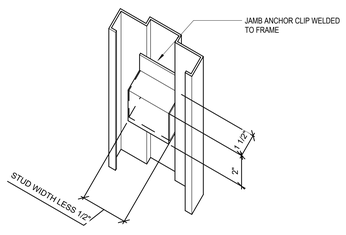
18 ALUMINUM LITE SILL INTERIOR
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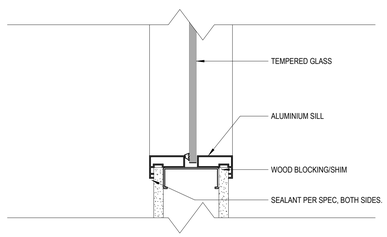
13 DOOR HEAD AT INT CMU
SCALE: 3" = 1'-0"



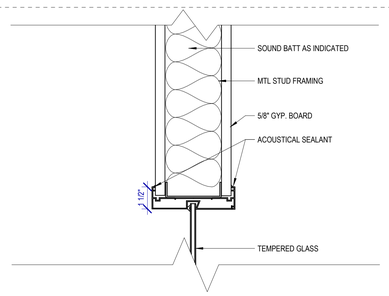
8 TYPICAL MASONRY JAMB NON-RATED FRAME
SCALE: 3" = 1'-0"



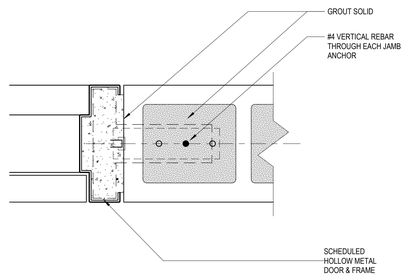
3 TYPICAL JAMB METAL STUD FRAMING
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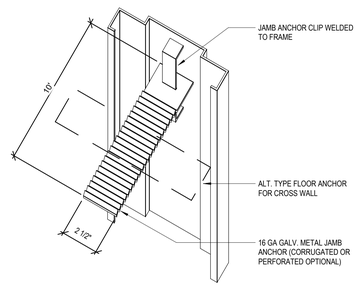
24 ALUMINUM LITE SILL INTERIOR - WINDOW
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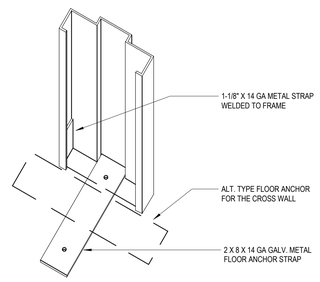
17 ALUM INTERIOR LITE HEAD TYPICAL
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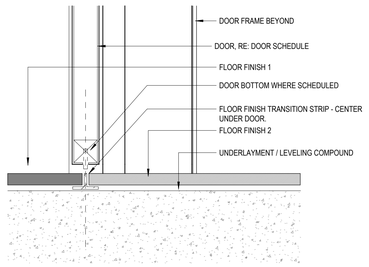
12 DOOR JAMB AT INT CMU
SCALE: 3" = 1'-0"



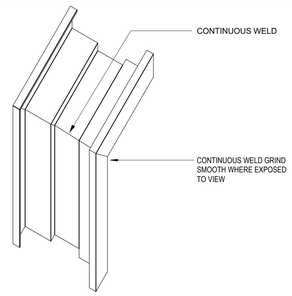
7 TYPICAL MASONRY JAMB ANCHOR RATED FRAME
SCALE: 3" = 1'-0"



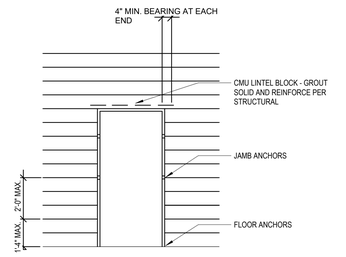
2 TYPICAL FRAME ANCHOR
SCALE: 3" = 1'-0"



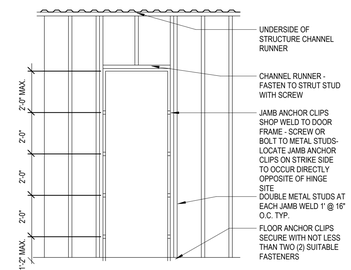
16 INTERIOR DOOR SILL - FLOORING TRANSITION
SCALE: 3" = 1'-0"



11 TYPICAL FRAME CORNER
SCALE: 3" = 1'-0"



6 MASONRY FRAME INSTALLATION
SCALE: 3" = 1'-0"



1 DRYWALL FRAME INSTALLATION
SCALE: 3" = 1'-0"

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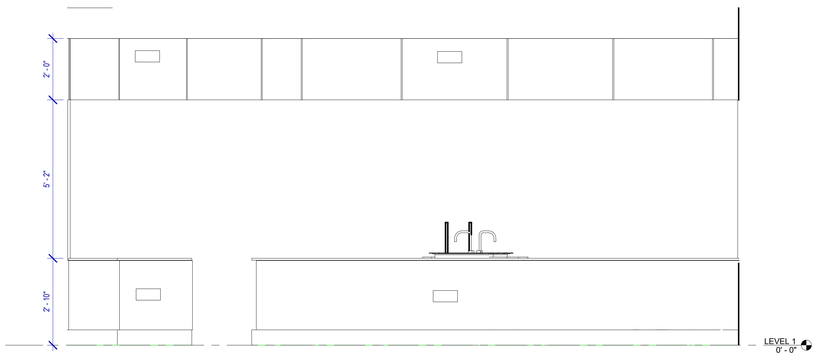
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Sheet Title
INTERIOR DOOR AND WINDOW DETAILS

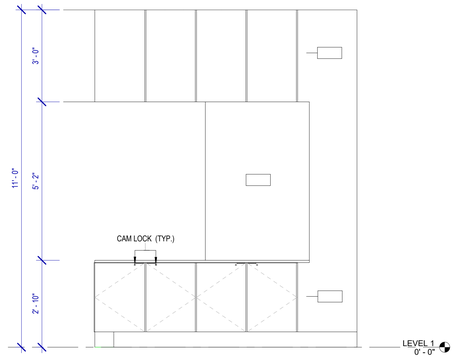
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Designer:	JMD
Drawn By:	KF,SP
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

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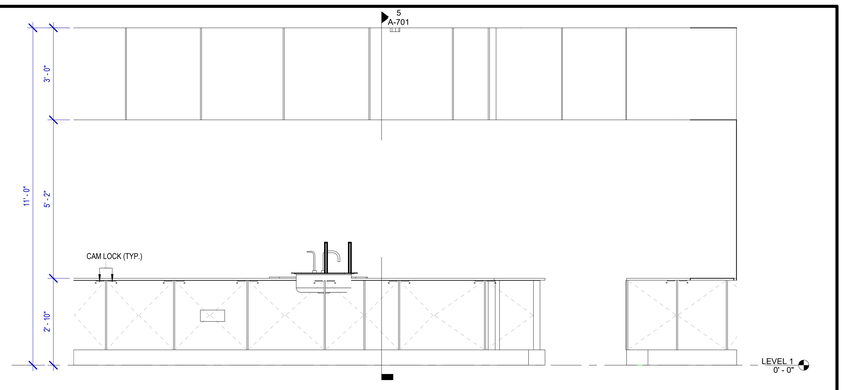
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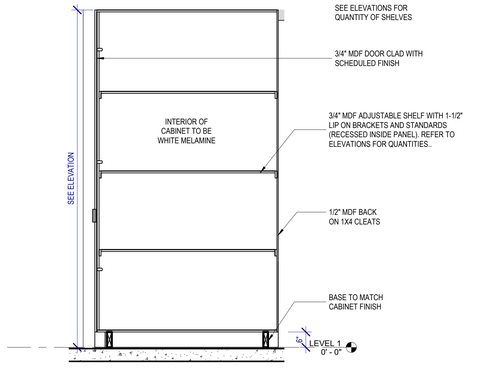
9 COLOR BAR MILLWORK ELEVATION - 4
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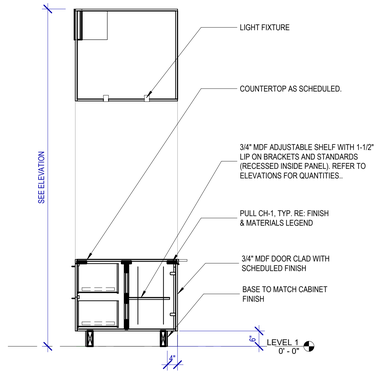
8 COLOR BAR MILLWORK ELEVATION - 3
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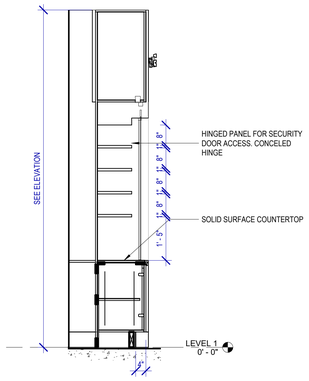
7 COLOR BAR MILLWORK ELEVATION - 2
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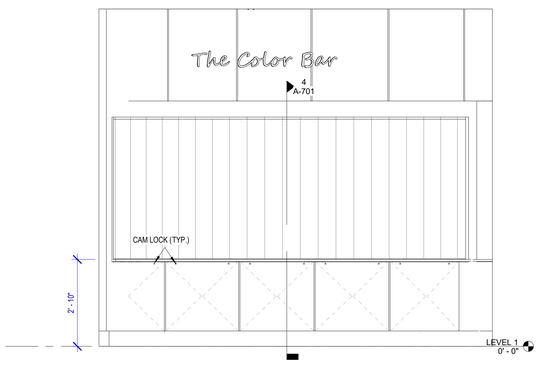
6 COLOR BAR MILLWORK SECTION - 3
SCALE: 1/2" = 1'-0"



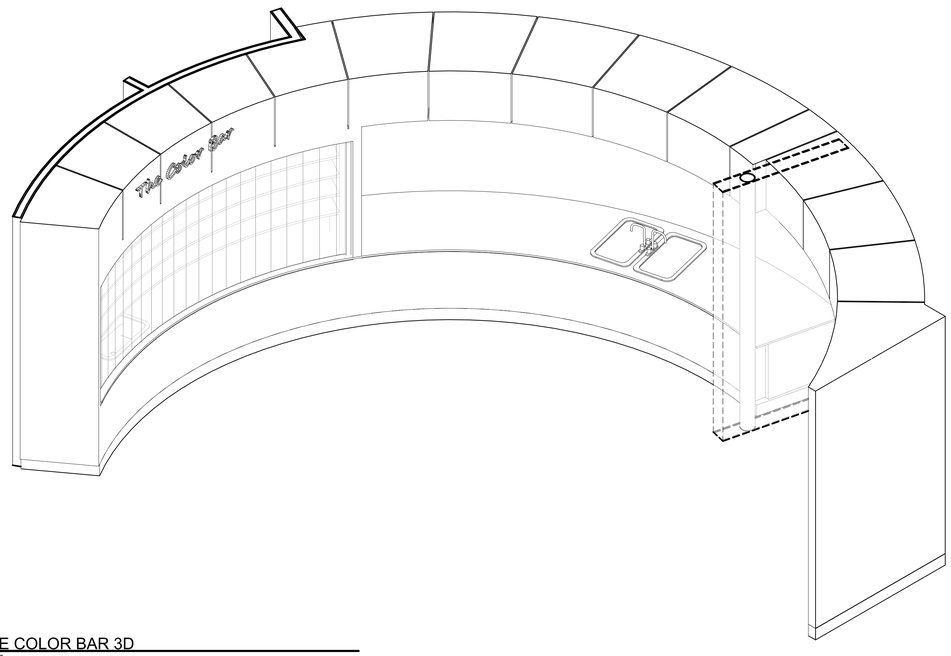
5 COLOR BAR MILLWORK SECTION - 2
SCALE: 1/2" = 1'-0"



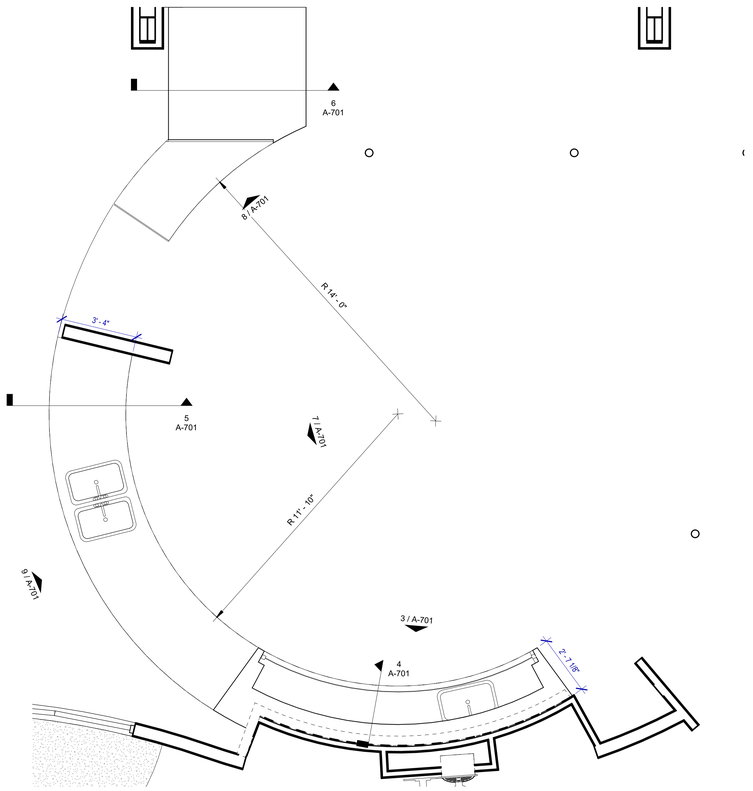
4 COLOR BAR MILLWORK SECTION - 1
SCALE: 1/2" = 1'-0"



3 COLOR BAR MILLWORK ELEVATION - 1
SCALE: 1/2" = 1'-0"



2 THE COLOR BAR 3D
SCALE:



1 COLOR BAR MILLWORK PLAN
SCALE: 3/8" = 1'-0"

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Project Status:
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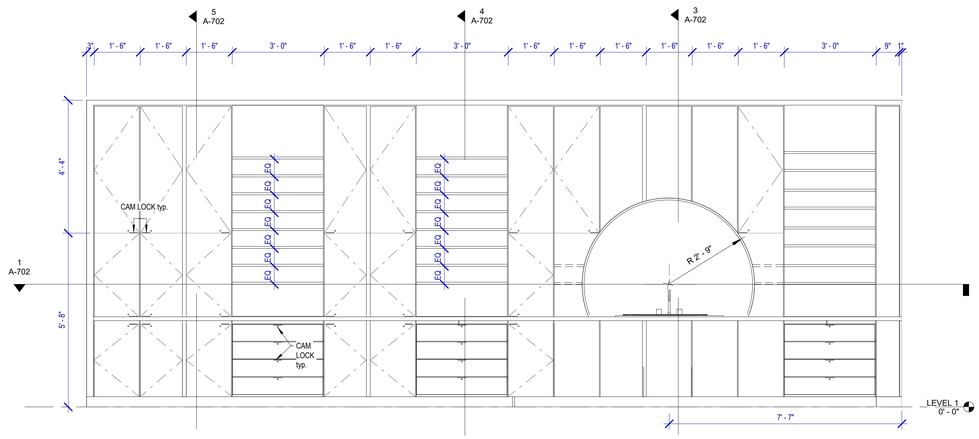
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Sheet Title
ENLARGED MILLWORK PLANS & ELEVATIONS - COLOR BAR

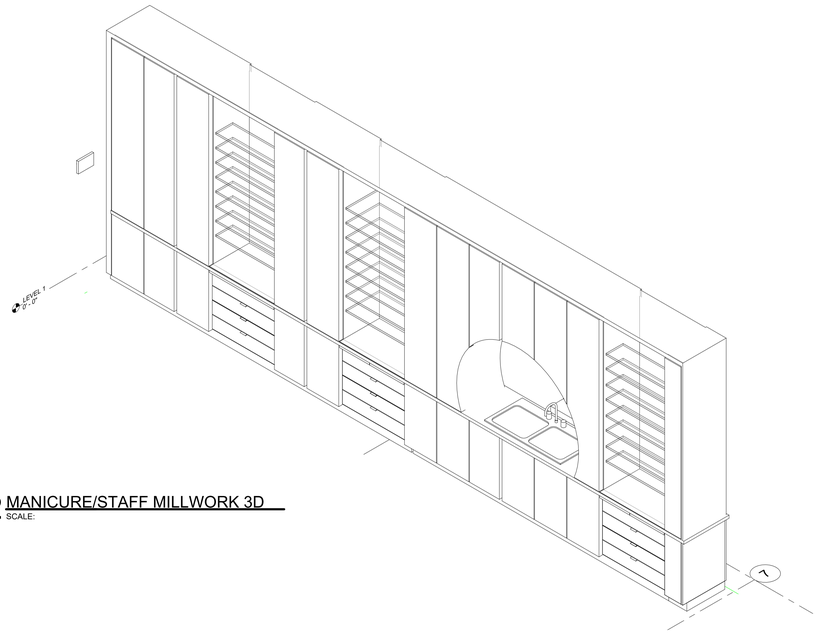
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

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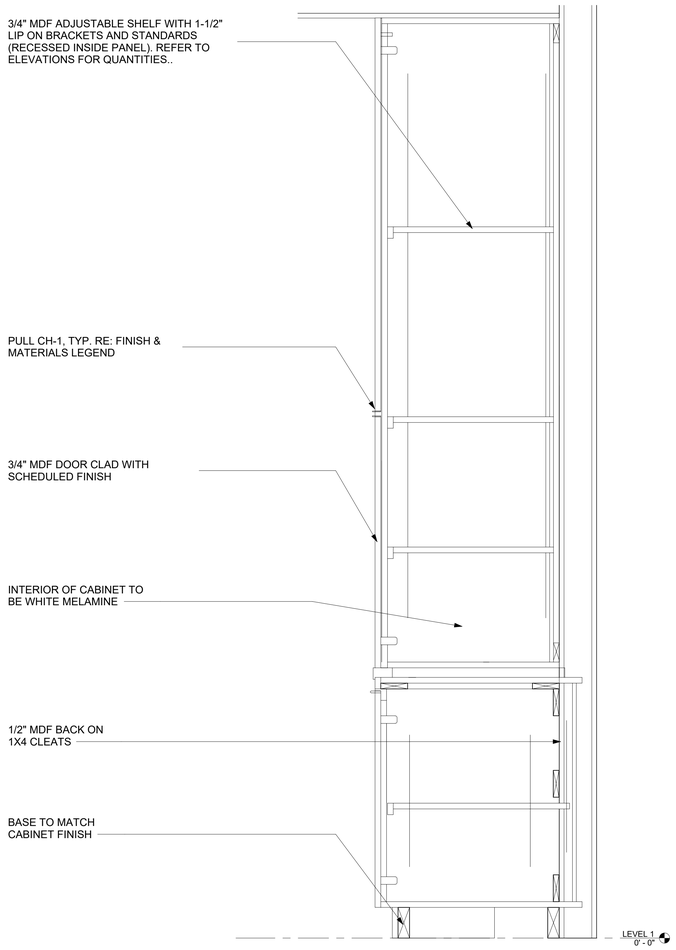


6 MANICURE/STAFF MILLWORK ELEVATION
SCALE: 1/2" = 1'-0"

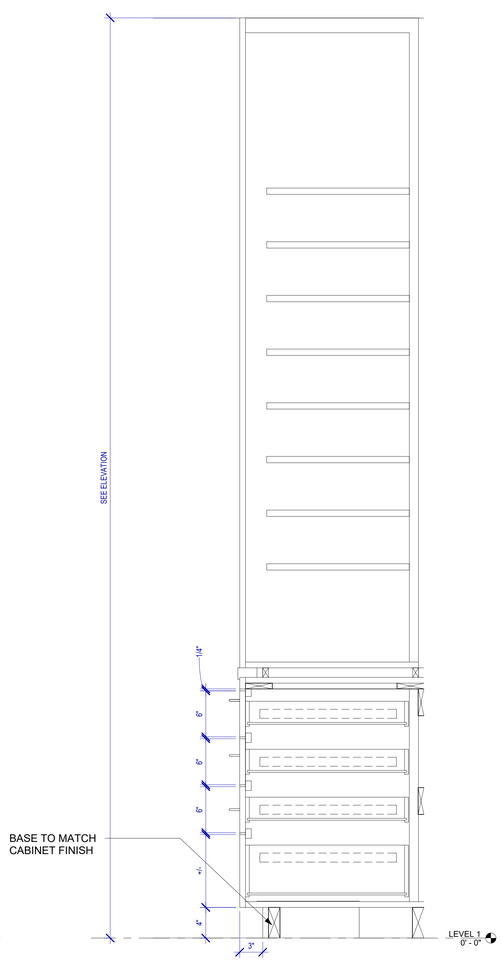


2 MANICURE/STAFF MILLWORK 3D
SCALE:

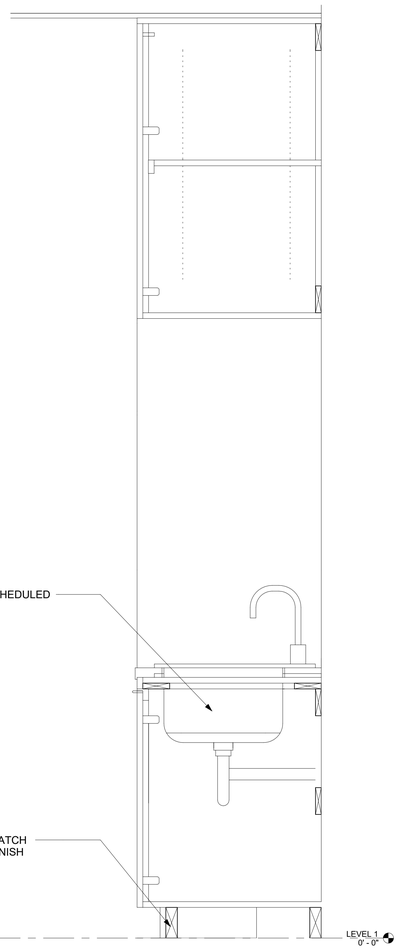
SEE ELEVATIONS FOR QUANTITY OF SHELVES



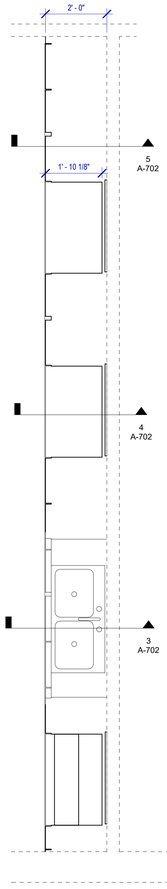
5 MANICURE/STAFF MILLWORK SECTION 3
SCALE: 1 1/2" = 1'-0"



4 MANICURE/STAFF MILLWORK SECTION 2
SCALE: 1 1/2" = 1'-0"



3 MANICURE/STAFF MILLWORK SECTION 1
SCALE: 1 1/2" = 1'-0"



1 MANICURE/STAFF MILLWORK PLAN
SCALE: 1/2" = 1'-0"

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07.22.2025

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346-570-2418

CIVIL ENGINEER
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11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
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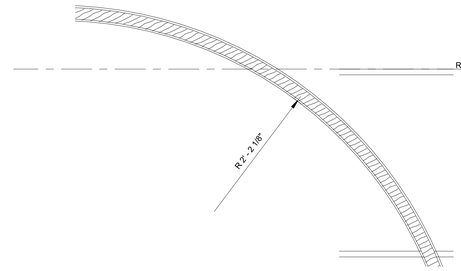
No.	DATE	DESCRIPTION

Sheet Title
ENLARGED MILLWORK PLANS & ELEVATIONS NAIL SALON

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP.KF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-702

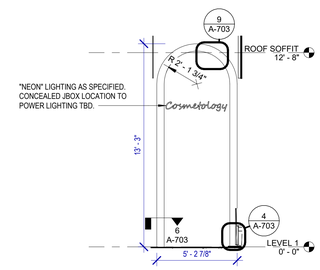
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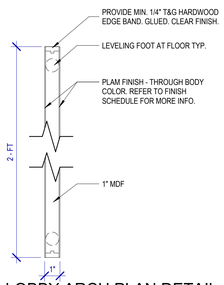
9 LOBBY ARCH ELEVATION DETAIL
SCALE: 3" = 1'-0"



8 LOBBY DRINKING FOUNTAIN AND SEATING
SCALE: 1/2" = 1'-0"



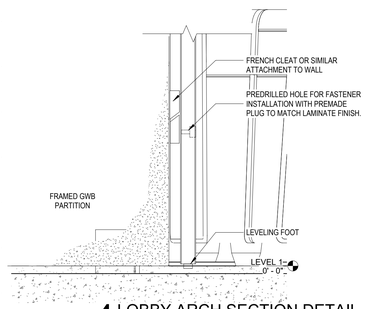
7 LOBBY ARCH ELEVATION
SCALE: 1/4" = 1'-0"



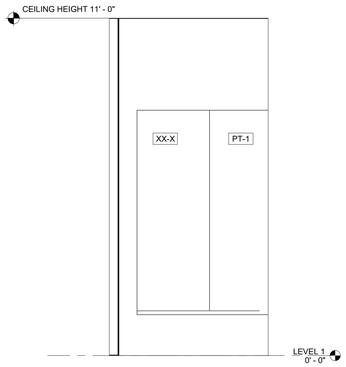
6 LOBBY ARCH PLAN DETAIL
SCALE: 3" = 1'-0"



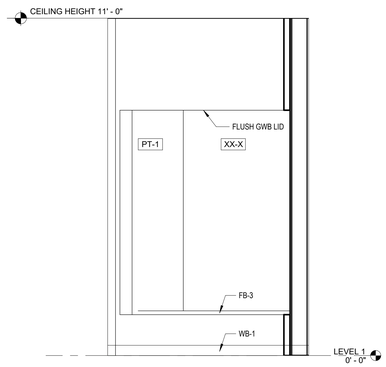
5 RECEPTION DESK ELEVATION
SCALE: 1/2" = 1'-0"



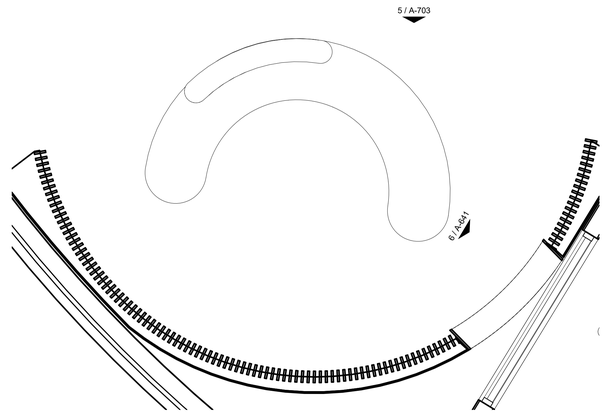
4 LOBBY ARCH SECTION DETAIL
SCALE: 3" = 1'-0"



3 ALCOVE SEATING ELEVATION WEST
SCALE: 1/2" = 1'-0"



2 ALCOVE SEATING ELEVATION SOUTH
SCALE: 1/2" = 1'-0"



1 RECEPTION DESK PLAN
SCALE: 1/2" = 1'-0"

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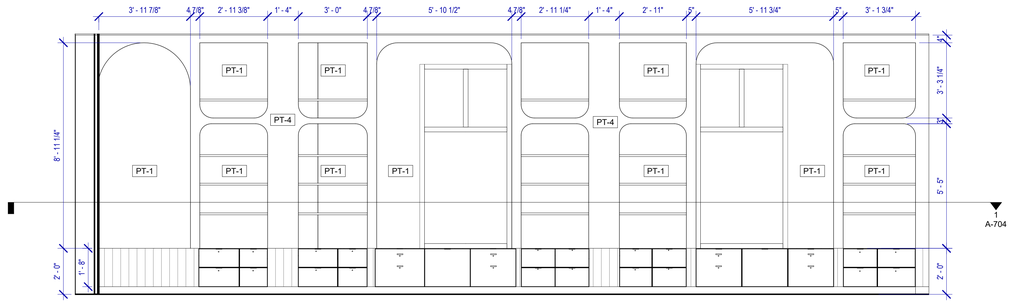
No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement

Sheet Title
ENLARGED MILLWORK PLANS & ELEVATIONS LOBBY AND CORRIDOR

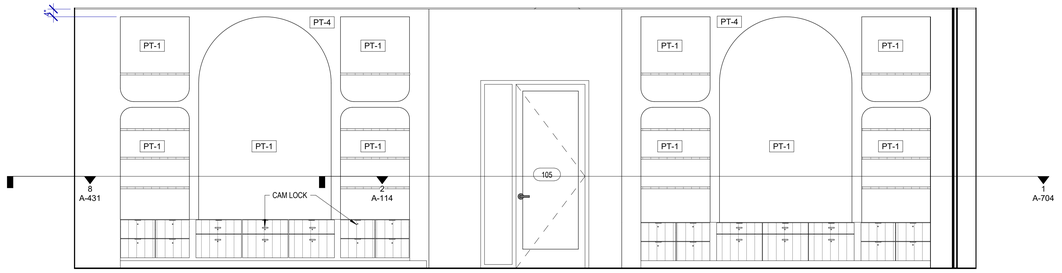
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,KF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-703

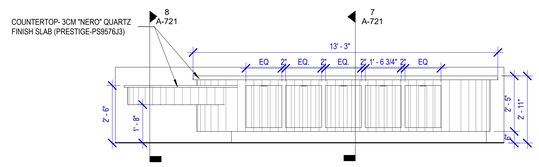
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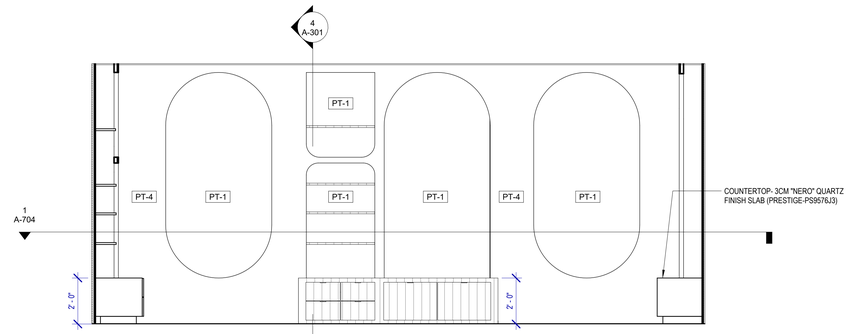
7 ESTHETICS CLASSROOM SOUTH ELEVATION
SCALE: 3/8" = 1'-0"



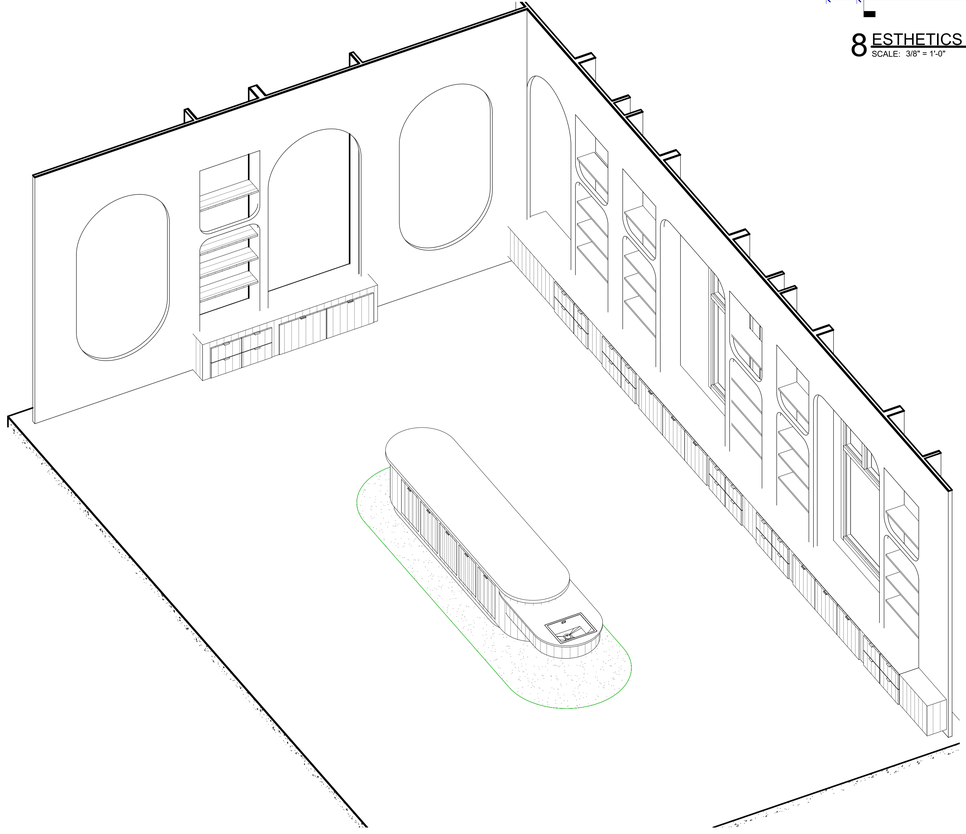
9 ESTHETICS CLASSROOM NORTH ELEVATION
SCALE: 3/8" = 1'-0"



8 ESTHETICS LAB COUNTERTOP ELEVATION
SCALE: 3/8" = 1'-0"

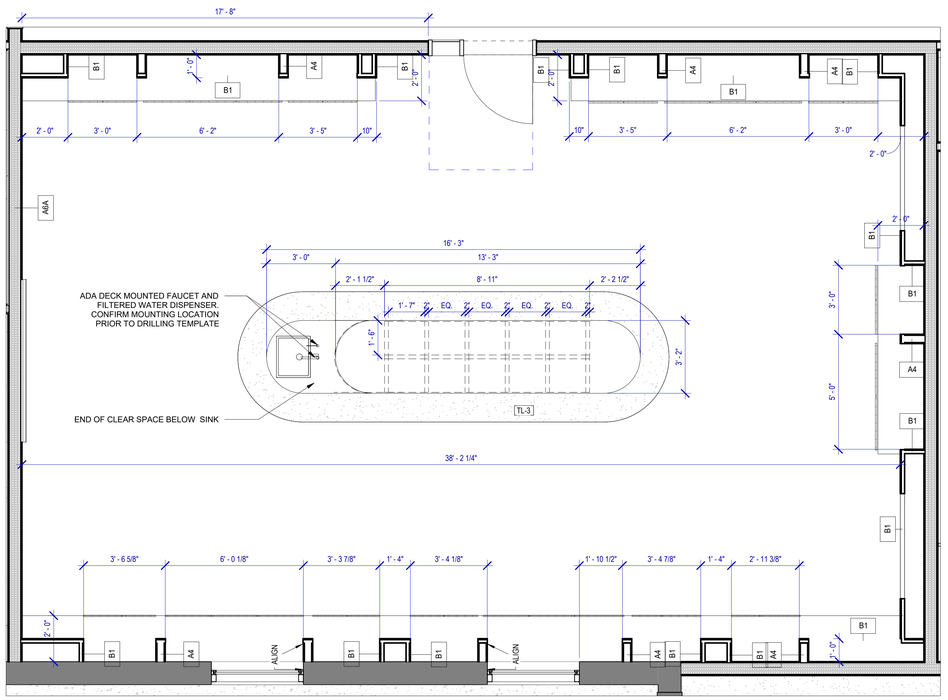


10 ESTHETICS CLASSROOM EAST ELEVATION
SCALE: 3/8" = 1'-0"



2 ESTHETICS CLASSROOM 3D VIEW
SCALE:

NOTE: MAIN CLASSROOM WALLS HIDDEN TO BETTER DEMONSTRATE MILLWORK CONFIGURATION



1 ENLARGED FLOORPLAN - ESTHETICS LAB
SCALE: 3/8" = 1'-0"

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Project Status:
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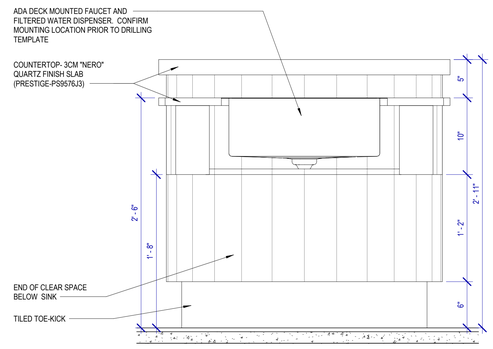
No.	DATE	DESCRIPTION
1	07/02/25	Addendum-2- Cancelled by LSC

Sheet Title
ENLARGED MILLWORK PLANS AND ELEVATIONS - ESTHETICS

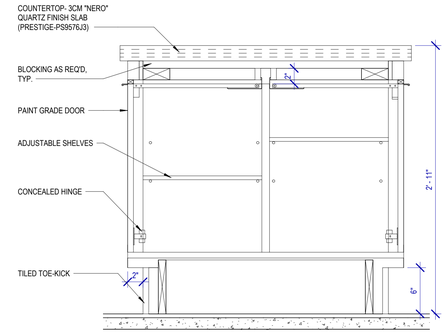
Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,FF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-704

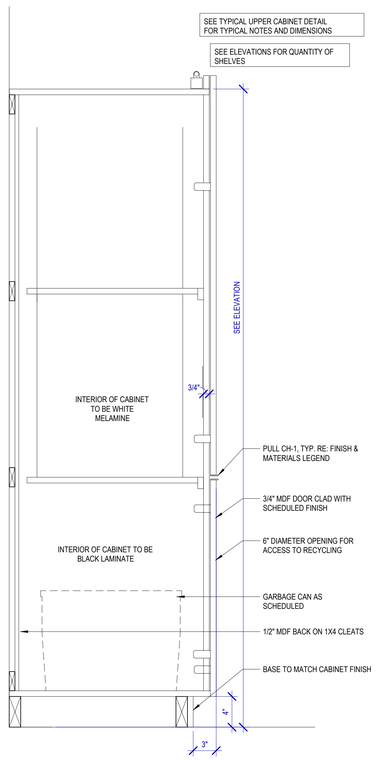
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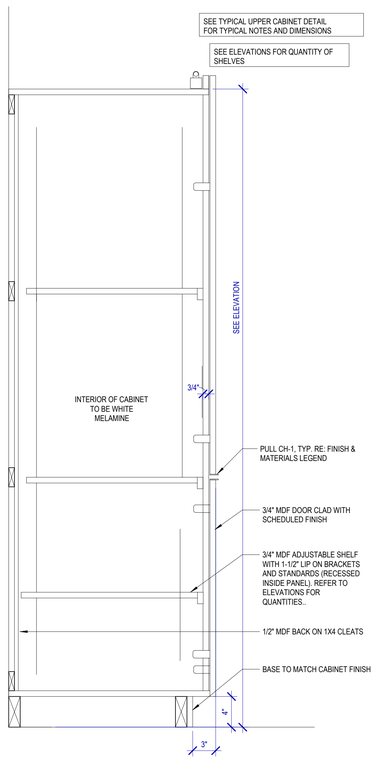
8 ESTHETICS LAB - SINK
SCALE: 1 1/2" = 1'-0"



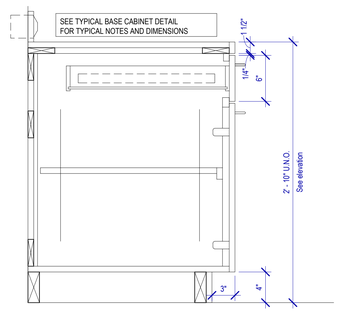
7 ESTHETICS LAB - UNDERNEATH COUNTER STORAGE
SCALE: 1 1/2" = 1'-0"



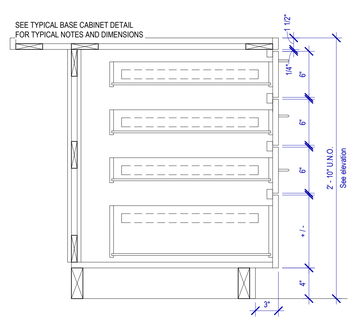
4 FULL HEIGHT CAB. W RECYCLE BIN
SCALE: 1 1/2" = 1'-0"



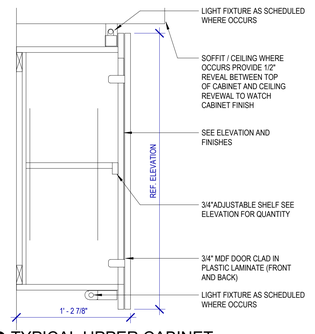
3 FULL HEIGHT CABINET
SCALE: 1 1/2" = 1'-0"



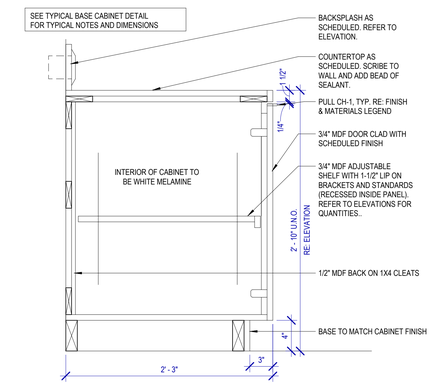
6 BASE CAB. 1 DRAWER
SCALE: 1 1/2" = 1'-0"



5 BASE CAB. 4 DRAWERS
SCALE: 1 1/2" = 1'-0"



2 TYPICAL UPPER CABINET
SCALE: 1 1/2" = 1'-0"



1 TYPICAL BASE CABINET
SCALE: 1 1/2" = 1'-0"

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Project Status:
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No.	DATE	DESCRIPTION
1	07/02/25	Addendum-2- Cancelled by LSC

Sheet Title
MILLWORK AND CASEWORK DETAILS

Project Mgr:	JMD
Designer:	JMD
Drawn By:	SP,FF
Checked By:	DO
Date:	07/22/2025
Job No.:	1503

A-721

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GENERAL

1. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES. THE CODES LISTED SHALL INCLUDE ALL AMENDMENTS AND ADDENDA IN FORCE AT THE DATE OF THE CONTRACT DOCUMENTS.

   2021 EDITION OF THE INTERNATIONAL BUILDING CODE

2. WHERE CONFLICT EXISTS AMONG THE VARIOUS PARTS OF THE STRUCTURAL AND ARCHITECTURAL CONTRACT DOCUMENTS THE STRICTEST REQUIREMENTS SHALL GOVERN.

3. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE JOB SITE AND REPORT ANY DISCREPANCIES OR INCONSISTENCIES FROM ASSUMED CONDITIONS TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.

4. DETAILS LABELED "TYPICAL DETAILS" ON THE DRAWINGS SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS APPLY WHETHER OR NOT THEY ARE CUT AT EACH LOCATION. QUESTIONS REGARDING APPLICABILITY OF TYPICAL DETAILS SHALL BE DETERMINED BY THE ENGINEER.

5. DO NOT SCALE THE DRAWINGS.

6. THE GENERAL CONTRACTOR SHALL COMPARE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND REPORT ANY DISCREPANCY BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS TO THE ARCHITECT AND ENGINEER PRIOR TO THE FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBERS.

7. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS, FABRICATION OF ANY STRUCTURAL MEMBERS, AND ERECTION IN THE FIELD.

8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, BRACING AND SHORING FOR LOADS DUE TO HYDROSTATIC, EARTH, WIND OR SEISMIC FORCES, AND CONSTRUCTION EQUIPMENT. OBSERVATION VISITS TO THE SITE BY THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.

9. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE.

10. IT IS THE DESIGN INTENT FOR ALL CONCRETE POURS TO HAPPEN IN SEQUENTIAL ORDER FROM FOUNDATIONS THROUGH ROOF. THE GENERAL CONTRACTOR SHALL DISCUSS WITH THE A/E TEAM THE FEASIBILITY OF NON-SEQUENTIAL POURING OF CONCRETE AND ITS IMPACT ON THE DESIGN INTENT AND ALLOW SUFFICIENT TIME FOR SUCH SCHEME TO BE INVESTIGATED OR REVIEWED.

11. PERIODIC SITE OBSERVATION BY THE ENGINEER IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN GENERAL ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OF THE WORK, BUT RATHER PERIODIC IN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR.

12. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC., NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN THE STRUCTURAL MEMBERS.

13. DO NOT PENETRATE ANY STRUCTURAL ELEMENTS (BEAMS, COLUMNS, WALLS, SLABS, ETC.) WITHOUT PRIOR WRITTEN APPROVAL OF STRUCTURAL ENGINEER.

14. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

15. SEE THE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:

    SIZE AND LOCATION OF DOOR AND WINDOW OPENINGS,
    SIZE AND LOCATION OF INTERIOR AND EXTERIOR NON-LOAD BEARING PARTITIONS, SIZE AND LOCATION OF CONCRETE CURBS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHAMFERS, GROOVES, INSERTS, ETC., SIZE AND LOCATION OF FLOOR AND ROOF OPENINGS, FLOOR AND ROOF FINISHES, STAIR FRAMING AND DETAILS, DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS, CEILING AND EXTERIOR WALL ASSEMBLIES.

16. SEE THE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:

    PIPES, SLEEVES, HANGERS, TRENCHES, WALL, FLOOR AND ROOF OPENINGS, DUCT PENETRATIONS, ETC., EXCEPT AS SHOWN OR NOTED OTHERWISE. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS. CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL, OR PLUMBING FIXTURES, SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES AND ANCHOR BOLTS FOR MOUNTS.

DESIGN CRITERIA

1. DEAD LOAD MATERIALS ASSUMED IN THE DESIGN ARE SHOWN ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
2. AN ALLOWANCE OF 15 PSF HAS BEEN MADE FOR PARTITIONS AS A UNIFORMLY DISTRIBUTED LIVE LOAD, WHEREVER PARTITIONS ARE USED AND LOCATION SUBJECT TO CHANGE EXCLUDING PUBLIC LOBBIES, CORRIDORS, RESTROOMS, AND PLACES OF PUBLIC ASSEMBLY.
3. LIVE LOADS:

LOCATION	UNIFORM LOAD	CONCENTRATED LOAD
OPERABLE PARTITION	10 PSF	STACKED PARTITION
HANDRAILS AND GUARDRAILS	50 PLF OR 200 LBS APPLIED AT TOP RAIL IN ANY DIRECTION. 50 LBS IN ANY DIRECTION APPLIED AT INTERMEDIATE RAILS.	
GRAB BARS		250 LBS ANY DIRECTION

4. HANDRAILS, GUARDRAILS AND GRAB BARS (INCLUDING ATTACHMENT TO STRUCTURE) SHALL BE DESIGNED BY THE FABRICATOR FOR THE LOADS INDICATED IN THE REFERENCED BUILDING CODE. SHOP DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER IN THE STATE OF WHERE THE PROJECT IS LOCATED, REPRESENTING THE FABRICATOR.

STRUCTURAL STEEL

1. ALL ASPECTS OF WORK RELATING TO THE DESIGN, FABRICATION, DETAILING, AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING CODES AND SPECIFICATIONS:

   AISC 360-16 SPECIFICATION & 15th EDITION OF STEEL CONSTRUCTION MANUAL
   ANSI/AWS D1.1 STRUCTURAL WELDING CODE - STEEL

2. STRUCTURAL STEEL MATERIALS SHALL COMPLY WITH THE FOLLOWING SPECIFICATIONS:

ANGLES, PLATES, BARS, CHANNELS HSS (RECTANGULAR OR SQUARE)	ASTM A36 U.N.O. ASTM A500 GR B (Fy = 46 KSI) OR GR C (Fy = 50 KSI)
ANCHOR RODS HIGH STRENGTH BOLTS	ASTM F1554-36 U.N.O ASTM F3125 GR A325 OR GR F1852 U.N.O.

3. SURFACES WHICH ARE TO BE FIREPROOFED WITH SPRAY-ON FIREPROOFING OR EMBEDDED IN CONCRETE SHALL NOT BE SHOP PAINTED. DO NOT PAINT TOP FLANGES OF COMPOSITE BEAMS NOR SURFACES OF MEMBERS WHERE WELDING OR HIGH STRENGTH FRICTION BOLTING WILL OCCUR. COORDINATE ALL SHOP PAINTING OF STRUCTURAL STEEL WITH ARCHITECT'S PAINTING REQUIREMENTS AS SPECIFIED ON THE ARCHITECTURAL DRAWINGS AND IN THE SPECIFICATIONS.
4. ALL WELDING SHALL COMPLY TO THE AMERICAN WELDING SOCIETY STANDARD (AWS D1.1). ALL WELDED JOINTS SHALL BE DETAILED AS INDICATED BY THE PREQUALIFIED JOINT DETAILS IN THE STRUCTURAL WELDING CODE. WELD LENGTHS CALLED FOR ON THE PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WELD SIZE SHALL BE AISC MINIMUM UNLESS A LARGER SIZE IS NOTED. ALL WELDS SHALL USE MINIMUM E70XX ELECTRODES.
5. ALL WELDING SHALL BE PERFORMED BY A WELDER CERTIFIED IN ACCORDANCE WITH THE AWS STANDARDS.
6. MISCELLANEOUS STEEL CONNECTIONS SHALL BE WELDED ALL AROUND WITH AISC MINIMUM FILLET WELD UNLESS A LARGER WELD IS SPECIFIED. STEEL MEMBERS CONTINUOUSLY ATTACHED SHALL BE STITCH WELDED TOGETHER WITH AISC MINIMUM 2" LONG FILLET WELD AT 12" O.C. UNLESS A LARGER WELD OR DIFFERENT GAGE IS SPECIFIED.
7. ALL BOLTS SHALL BE DESIGNED AS BEARING BOLTS WITH THREADS INCLUDED IN THE SHEAR PLANE. ALL BOLTS SHALL BE NEW AND NOT RE-USED. BOLT HOLES IN STEEL SHALL BE 1/16 INCH LARGER THAN NOMINAL SIZE OF BOLT USED, EXCEPT ANCHOR ROD HOLES. MINIMUM BOLT DIAMETER SHALL BE 3/4 INCH. ALL BOLTS SHALL BE TIGHTENED TO A SNUG-TIGHT POSITION, EXCEPT AT BRACES, MOMENT CONNECTIONS AND CONNECTIONS MARKED AS SLIP CRITICAL (SC) SHALL BE TIGHTENED USING LOAD INDICATING WASHERS OR TENSION BOLTS.
8. ALL STEEL EXPOSED TO WEATHER OR OUTSIDE THE BUILDING'S WATERPROOFING, SUCH AS BRICK SHELF ANGLES, SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION AS SPECIFIED BY THE STEEL STRUCTURES PAINTING COUNCIL (SSPC). THE ZINC COATING FOR STEEL SHAPES AND PLATES SHALL AVERAGE NOT LESS THAN 2.3 OZ. WITH NO INDIVIDUAL THICKNESS LESS THAN 2.0 OZ.
9. GALVANIZE ALL NUTS, BOLTS, AND WASHERS USED IN THE CONNECTION OF GALVANIZED STEEL.
10. GALVANIZED MEMBERS SHALL HAVE "Z.R.C. COLD GALVANIZING COMPOUND OR APPROVED EQUIVALENT APPLIED TO FIELD WELDED CONNECTIONS. SURFACE AREAS TO RECEIVE COLD GALVANIZING COMPOUND SHALL BE CLEAN OF DIRT AND DEBRIS PRIOR TO COMPOUND APPLICATION. SEE MANUFACTURER'S LITERATURE FOR ADDITIONAL RECOMMENDATIONS.
11. THE APPLICATION OF THE FIREPROOFING TO THE STEEL MEMBERS AND STEEL DECK IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR MUST ENFORCE THE REQUIREMENTS OF THE MANUFACTURER AND NOT IMPOSE ADDITIONAL LOADS, INCLUDING CONSTRUCTION LIVE LOADS, DURING THE APPLICATION AND CURING OF THE FIREPROOFING.
12. THE CONTRACTOR SHALL MAKE AN ALLOWANCE FOR THE ADJUSTMENT AND DETAILING OF STEEL DURING THE SHOP DRAWING REVIEW PROCESS.

NON-SHRINK GROUT FOR BASE PLATES AND BEARING PLATES

1. GROUT FOR BASE PLATES AND BEARING PLATES SHALL BE A NON-METALLIC, SHRINKAGE RESISTANT, PREMIXED, NON-CORROSIVE, NON-STAINING PRODUCT CONTAINING PORTLAND CEMENT, SILICA SANDS, SHRINKAGE COMPENSATING AGENTS, AND FLUIDITY IMPROVING COMPOUNDS.
2. GROUT SHALL CONFORM TO CORPS OF ENGINEERS SPECIFICATION FOR NON-SHRINK GROUT, CE-CRD-C621. TWENTY-EIGHT DAY COMPRESSIVE STRENGTH AS DETERMINED BY GROUT CUBE TESTS, SHALL BE 5,000 PSI. MINIMUM THICKNESS OF GROUT UNDER ALL BASE PLATES AND BEARING PLATES SHALL BE 1 INCH, UNLESS SPECIFIED OTHERWISE ON THE DRAWINGS.
3. GROUT SHALL BE PLACED IN A FLUID FLOWABLE STATE UNDER BASE PLATES THAT HAVE A FORM BUILT AROUND THEM FOR GROUT CONFINEMENT. GROUT SHOULD BE CURED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

SUBMITTALS

1. THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS:

   STRUCTURAL STEEL
   MISCELLANEOUS STEEL

   ITEMS MARKED (*) SHALL HAVE SHOP DRAWINGS 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. ITEMS MARKED (^) SHALL HAVE SEALED STRUCTURAL CALCULATIONS SUBMITTED TO ENGINEER FOR OWNER'S RECORD.
2. ALL SHOP DRAWINGS MUST BE REVIEWED AND SEALED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL.
3. CONTRACTOR SHALL SUBMIT ELECTRONIC COPIES (E.G. PDFS) OF ALL SHOP DRAWINGS SPECIFIED TO BE RETURNED BY THE ENGINEER.
4. THE OMISSION FROM THE SHOP DRAWINGS OF ANY MATERIAL REQUIRED BY THE CONTRACT 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.
5. SUBMIT TWO COPIES OF MANUFACTURER'S LITERATURE FOR ALL MATERIALS AND PRODUCTS USED IN CONSTRUCTION ON THE PROJECT.
6. THE USE OF REPRODUCTIONS OF THESE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR 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 ERRORS THAT MAY OCCUR HEREIN.

SPECIAL INSPECTION

1. ALL ASPECTS OF WORK RELATING TO SPECIAL INSPECTION SHALL CONFORM TO THE FOLLOWING CODES AND SPECIFICATIONS:

   2021 INTERNATIONAL BUILDING CODE (CHAPTER 17).

2. THE OWNER'S SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
3. PRIOR TO THE BEGINNING OF CONSTRUCTION, THE ARCHITECT (OR ENGINEER) SHALL CALL A PRE-CONSTRUCTION MEETING WITH THE ARCHITECT, ENGINEER, BUILDING OFFICIAL, CONTRACTOR AND SPECIAL INSPECTORS TO REVIEW THE SPECIAL INSPECTION REQUIREMENTS.
4. DUTIES OF THE OWNER'S SPECIAL INSPECTOR INCLUDE (BUT ARE NOT LIMITED TO):
   A. ACKNOWLEDGE THE SPECIAL INSPECTION AND TESTING AGREEMENT PROVIDED BY THE LOCAL JURISDICTION.
   B. THE OWNER'S SPECIAL INSPECTOR SHALL OBSERVE THE WORK FOR CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND TO THE BUILDING OFFICIAL.
   C. THE OWNER'S SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, ARCHITECT, REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, CONTRACTOR AND (OTHER DESIGNATED PARTIES), IN A TIMELY MANNER, AS ESTABLISHED AT THE PRE-CONSTRUCTION MEETING.
   D. THE OWNER'S SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE.
5. DUTIES OF THE CONTRACTOR INCLUDE (BUT ARE NOT LIMITED TO):
   A. NOTIFY THE SPECIAL INSPECTOR THAT THE WORK IS READY FOR INSPECTION AT LEAST 24 HOURS BEFORE SUCH INSPECTION.
   B. ALL WORK REQUIRING SPECIAL INSPECTION SHALL REMAIN ACCESSIBLE AND EXPOSED UNTIL IT HAS BEEN OBSERVED AND INDICATED TO BE IN CONFORMANCE BY THE SPECIAL INSPECTOR AND APPROVED BY THE BUILDING OFFICIAL.
   C. PROVIDE THE SPECIAL INSPECTOR WITH ACCESS TO APPROVED CONSTRUCTION DOCUMENTS AT JOBSITE.
   D. MAINTAIN AT THE JOBSITE COPIES OF ALL REPORTS SUBMITTED BY THE SPECIAL INSPECTOR.
6. CONTINUOUS SPECIAL INSPECTION REFERS TO INSPECTIONS BY THE SPECIAL INSPECTOR WHO IS CONTINUOUSLY PRESENT WHEN AND WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED.
7. PERIODIC SPECIAL INSPECTION REFERS TO INSPECTIONS BY THE SPECIAL INSPECTOR WHO IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED.
8. SPECIAL INSPECTIONS AND TESTING SHALL BE REQUIRED FOR THE FOLLOWING TYPES OF WORK LISTED BELOW. SPECIAL INSPECTIONS AND TESTING SHALL FOLLOW THE REQUIREMENTS OF THE BUILDING AND MATERIAL CODE REFERENCES AND TABLES. IN THE EVENT OF A CONFLICT BETWEEN REFERENCES, THE OWNER'S SPECIAL INSPECTOR SHALL FOLLOW THE MORE STRINGENT REQUIREMENT.

STEEL	IBC 1705.2 AND TABLE 1705.2.3 AND AISC 360 CHAPTER N AND SDI QA/QC DOCUMENT
SHOP FABRICATION	IBC 1704.2.5 (NOT REQUIRED IF FABRICATOR IS APPROVED IN ACCORDANCE WITH IBC 1704.2.5.1.
SPRAYED FIRE-RESISTANT MATERIALS	IBC 1705.15 AND CONSTRUCTION DOCUMENTS
EXPANSION/EPOXY ANCHORS	MANUFACTURER'S ICC REPORT

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No.	DATE	DESCRIPTION

Sheet Title
GENERAL NOTES

Project Mgr:	KT
Designer:	MFA
Drawn By:	MFA
Checked By:	KT
Date:	07/22/2025
Job No.:	24115

S-101

ABBREVIATIONS

ABBR.	ABBREVIATION
A.F.F.	ABOVE FINISH FLOOR
ADDN'L	ADDITIONAL
AHU	AIR HANDLING UNIT
ALT.	ALTERNATE
ANCH.	ANCHOR
A.B.	ANCHOR BOLT
A.R.	ANCHOR ROD
APPROX.	APPROXIMATELY
ARCH.	ARCHITECT(URAL)
BM.	BEAM
BRG.	BEARING
BTW	BETWEEN
BOT.	BOTTOM
B.F.B.	BOTTOM FLANGE BRACE
B.O.	BOTTOM OF
BRDG.	BRIDGING
BLDG	BUILDING
C	CAMBER
CANT.	CANTILEVER
C.I.P.	CAST IN PLACE
C/C	CENTER TO CENTER
CL	CENTERLINE
CH	CHANNEL
CLR.	CLEAR(ANCE)
CFMF	COLD FORMED METAL FRAMING
COL.	COLUMN
CJP	COMPLETE JOINT PENETRATION
CONC.	CONCRETE
CMU	CONCRETE MASONRY UNIT
CONN.	CONNECTION
CONST.	CONSTRUCTION
C.J.	CONSTRUCTION / CONTRACTION JOINT
CONT.	CONTINUOUS
COORD.	COORDINATE
DL	DEAD LOAD
DBA	DEFORM BAR ANCHOR
D	DEPTH
DET.	DETAIL
DIA. or Ø	DIAMETER
DIM.	DIMENSION
DWL.	DOWEL
D.N.	DOWN
DWG.	DRAWING
EA.	EACH
E.F.	EACH FACE
E.W.	EACH WAY
EL.	ELEVATION
ELEV.	ELEVATOR
EMBED.	EMBEDMENT
ENGR.	ENGINEER
EOR	ENGINEER OF RECORD
EQ.	EQUAL
EQUIP.	EQUIPMENT
EQUIV.	EQUIVALENT
EXIST.	EXISTING
E.J.	EXPANSION JOINT
EXT.	EXTERIOR
f'c=	28 DAY CONCRETE STRENGTH
FAB.	FABRICATE
F.S.	FAR SIDE
FIN	FINISH/FINISHED
FLR	FLOOR
F.D.	FLOOR DRAIN
FTG.	FOOTING
Fy=	YIELD STRENGTH
GALV.	GALVANIZED
GA.	GAUGE
GEN	GENERAL
G.C.	GENERAL CONTRACTOR
GFRC	GLASS FIBER REINFORCED CONCRETE
GR.	GRADE/GRADING
HGR.	HANGER
HSA	HEADED STUD ANCHOR
HI	HIGH
HSS	HOLLOW STRUCTURAL SECTION
HORIZ. OR (H)	HORIZONTAL
H	HORIZONTAL REACTION
IN	INCH
INFO.	INFORMATION
ID	INSIDE DIAMETER
I.F.	INSIDE FACE
INT.	INTERIOR
JT.	JOINT
JST.	JOIST
K	KIPS (1000 LBS)
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
L	ANGLE
Ld	DEVELOPMENT LENGTH
LWC	LIGHTWEIGHT CONCRETE
LL	LIVE LOAD
LLBB	LONG LEG BACK TO BACK
LLV	LONG LEG VERTICAL
LLH	LONG LGE HORIZONTAL
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
LONG	LONGITUDINAL
LO	LOW
LBS	POUNDS
MFR. / MNFR.	MANUFACTURER
MAS.	MASONRY
MAX.	MAXIMUM

MECH.	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MTL.	METAL
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M	MOMENT
M.C.	MOMENT CONNECTION
N.S.	NEAR SIDE
NWC	NORMAL WEIGHT CONCRETE
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
NO.	NUMBER
O.C.	ON CENTER(S)
OPNG.	OPENING
OPP.	OPPOSITE
OPH.	OPPOSITE HAND
OD	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
OA	OVERALL
O.H.	OVERHEAD
OVS.	OVERSIZED HOLE
P	AXIAL LOAD
P.J.	PANEL JOINT
PAR.	PARALLEL
PRKG.	PARKING
PJP	PARTIAL JOINT PENETRATION
PVMT	PAVEMENT
PVG	PAVING
PERP.	PERPENDICULAR
PL.	PLATE
PLBG	PLUMBING
PT	POST-TENSION(ED)
PCF	POUNDS PER CUBIC FOOT/FEET
PLF	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT/FEET
PSI	POUNDS PER SQUARE INCH
P/C	PRECAST CONCRETE
PRELIM.	PRELIMINARY
P.L.	PROPERTY LINE
QTY	QUANTITY
R	RADIUS, REACTION, REMAINDER
REC.	RECESSED
RE:	REFER TO
REF.	REFERENCE
REINF.	REINFORCED / REINFORCING
REBAR	REINFORCING BAR
REQ'D	REQUIRED
REV.	REVISION
R.D.	ROOF DRAIN
RTU	ROOF TOP UNIT
SCHED.	SCHEDULE
SECT.	SECTION
SHT.	SHEET
SLBB	SHORT LEG BACK TO BACK
SIM.	SIMILAR
SC	SLIP CRITICAL, SHEAR CONNECTOR
SPA.	SPACING
SPEC.	SPECIFICATION
SQ.	SQUARE
SF.	SQUARE FOOT/FEET
STD	STANDARD
STL	STEEL
STIFF.	STIFFENER
STIR.	STIRRUP
STRUCT.	STRUCTURE/STRUCTURAL
TEMP.	TEMPERED
THK	THICK(NESS)
t	THICKNESS, TREAD
THD	THREADED
T.O.	TOP OF
T.O.C.	TOP OF CONCRETE
T.O.M.	TOP OF MASONRY
T.O.P.	TOP OF PARAPET
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
V.I.F.	VERIFY IN FIELD
VERT. OR (V)	VERTICAL
WT.	WEIGHT
WWR	WELD WIRE REINF.
WF	WIDE FLANGE
W	WIDTH
WL	WIND LOAD
W.P.	WORK POINT
XXS	DOUBLE EXTRA STRONG
XS	EXTRA STRONG
&	AND
≈	APPROXIMATELY EQUAL
@	AT
°	DEGREE
=	EQUAL
≥	GREATER THAN or EQUAL
≤	LESS THAN or EQUAL
#	NUMBER or POUNDS
/	PER
±	PLUS or MINUS
Ø	ROUND/DIAMETER

SYMBOLS LEGEND

SYMBOLS	DESCRIPTION
N	NORTH ARROW
XX S-X.XX	ENLARGE FLOOR PLAN REFERENCE OR ENLARGE DETAIL REFERENCE
XX S-X.XX	DETAIL SECTION (STRUCTURAL)
XX/SX.XX	BRACING ELEVATION
11 5/8" / 5"	DIMENSIONS
XX/S-X.XX / XX/S-X.XX	MATCHLINE
1	REVISION NUMBER & AFFECTED AREA
LEVEL NAME 0' - 0"	VERTICAL ELEVATION
EX: 152' - 6"	EXISTING ELEVATION
152' - 6"	NEW ELEVATION
	M.C. OR MOMENT CONNECTION
	DEPRESSION
	PANEL WALL TAG
12/36 — BELL DIAMETER (IN) / SHAFT DIAMETER (IN)	BELLED PIER
P1	PILE SHAFT
F3	FOOTING

STRUCTURAL SHEET INDEX

SHEET NUMBER	SHEET NAME	Current Revision
S-101	GENERAL NOTES	
S-102	GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND SHEET INDEX	
S-201	FRAMING PLAN	
S-301	FRAMING DETAILS	
Grand total: 4		

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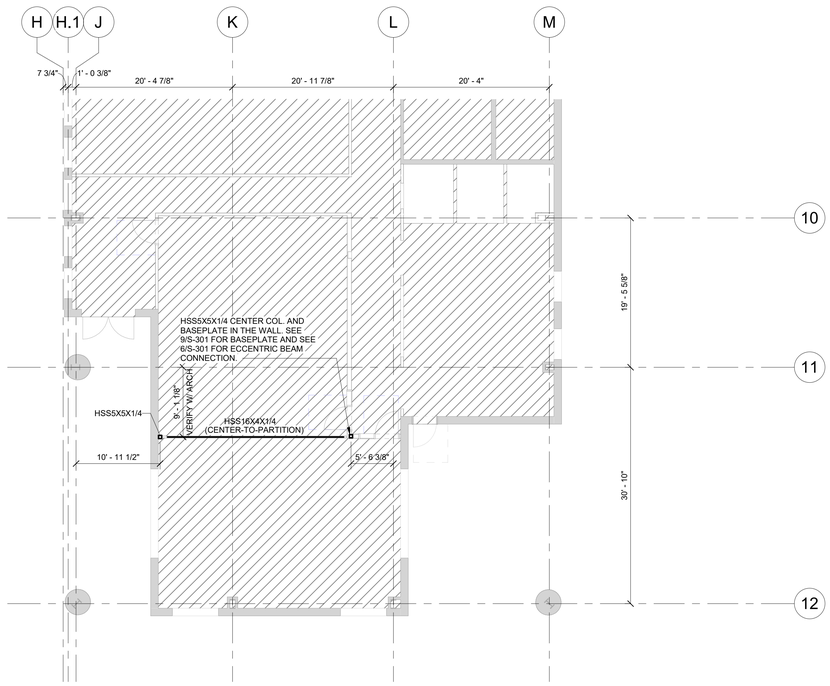
No.	DATE	DESCRIPTION

Sheet Title
GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND SHEET INDEX

Project Mgr:	KT
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Date:	07/22/2025
Job No.:	24115

S-102

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



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

FRAMING PLAN NOTES:

1. SEE 1/S-301 FOR HSS POST SUPPORT AT ROOF.
2. SEE 3/S-301 FOR OPERABLE PARTITION CONNECTION.
3. VERIFY ALL EXISTING DIMENSIONS IN THE FIELD.

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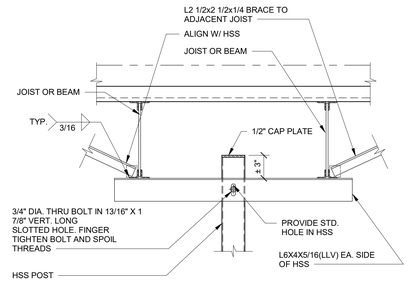
No.	DATE	DESCRIPTION

Sheet Title
FRAMING PLAN

Project Mgr:	KT
Designer:	MFA
Drawn By:	MFA
Checked By:	KT
Date:	07/22/2025
Job No.:	24115

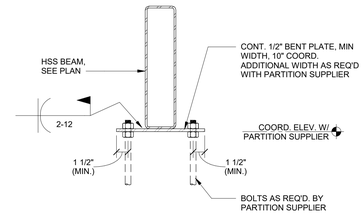
S-201

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ALTERNATE DETAIL
SLIDING CONNECTION AT HSS COLUMN

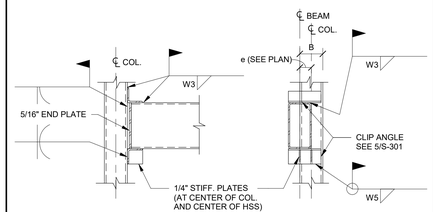
7 SCALE: N.T.S.



TYPICAL DETAIL
TUBE AT OPERABLE PARTITION

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

NOTES :
1. SEE 5/S-301 FOR INFORMATION NOT SHOWN.
2. W5 SHALL BE W1 + 1/16" FOR (e-B/2)<6", and W1+ 1/4" FOR (e-B/2)>6" U.N.O.



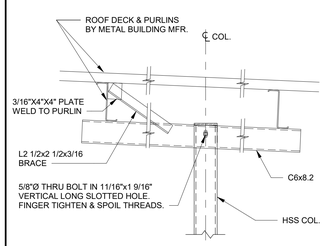
ELEVATION
FOR e ≤ B/2

SECTION
FOR e ≤ B/2

TYPICAL DETAIL OFFSET
TUBE BEAM TO COLUMN OFFSET
CONNECTION

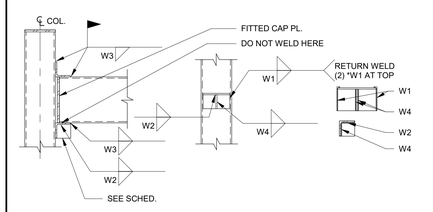
6 SCALE: N.T.S.

NOTE:
1. ADJACENT NOT SHOWN FOR CLARITY.



AT PURLINS

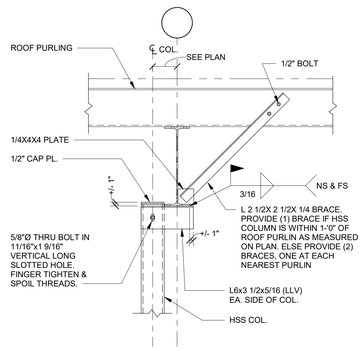
CONNECTION SCHEDULE							
GIRT SIZE	BOTTOM CONN.	STIFF. PL.	TOP ANGLE	W1	W2	W3	W4
HSS16x4	L6x4x3/8	3/8	L3x3x5/16	5/16	1/4	1/4	5/16



NOTES :
1. SEE 6/S-301 FOR OFFSET CONNECTIONS.

TYPICAL DETAIL
TUBE BEAM TO COLUMN

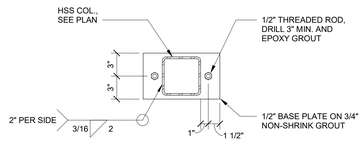
5 SCALE: N.T.S.



AT WIDE FLANGE BEAM

TYPICAL DETAIL
SLIDING CONNECTION AT HSS COLUMN

1 SCALE: N.T.S.



TYPICAL DETAIL
BASE PLATE AT COLUMN POST

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

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MSE - 24115
Matrix Structural Engineers
TBPE Firm Registration No. F-2640

STATE OF TEXAS
KHALIL TABAJA
137127
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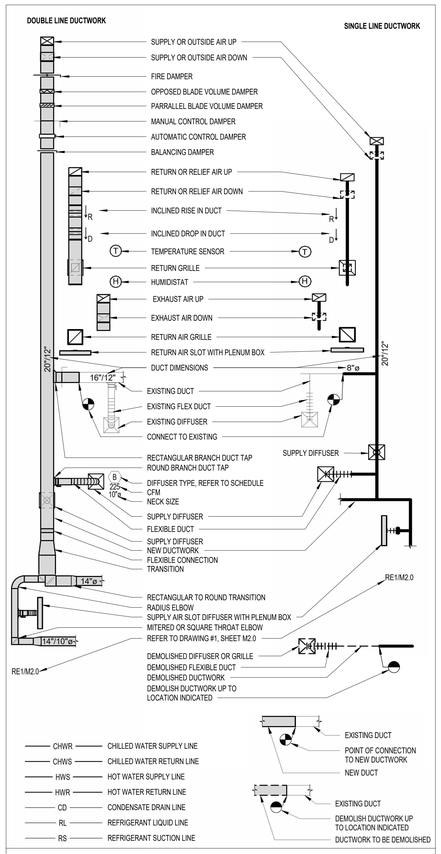
No.	DATE	DESCRIPTION

Sheet Title
FRAMING DETAILS

Project Mgr:	KT
Designer:	MFA
Drawn By:	MFA
Checked By:	KT
Date:	07/22/2025
Job No.:	24115

S-301

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MECHANICAL SYMBOLS LEGEND

ENERGY CODE NOTES:

1. DUCT SEALING: DUCTWORK AND PLENUMS SHALL BE SEALED IN ACCORDANCE WITH THE 2015 IECC AND 2015 IMC.

2. BALANCING: SYSTEM SHALL BE BALANCED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING STANDARDS (NEBB, AABC, OR ASHRAE 111). AIR SYSTEMS SHALL BE IN A MANNER TO FIRST MINIMIZE THROTTLING LOSSES. THEN FOR FANS WITH FAN SYSTEM POWER GREATER THAN 1 HP, FAN SPEED SHALL BE ADJUSTED TO MEET DESIGN FLOW CONDITIONS.

3. ENERGY CODE COMPLETION REQUIREMENTS.

DRAWINGS: CONSTRUCTION DOCUMENTS SHALL REQUIRED THAT WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE RECORD DRAWINGS OF THE ACTUAL INSTALLATION BE PROVIDED TO THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER. RECORD DRAWINGS SHALL INCLUDE AS A MINIMUM THE LOCATION AND PERFORMANCE DATA ON EACH PIECE OF EQUIPMENT, GENERAL CONFIGURATION OF DUCT AND PIPE DISTRIBUTION SYSTEM INCLUDING SIZES,AND THE TERMINAL AIR OR WATER DESIGN FLOW RATES.

MANUALS: CONSTRUCTION DOCUMENTS REQUIRE THAT AN OPERATING MANUAL AND A MAINTENANCE MANUAL BE PROVIDED TO THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE. THESE MANUALS SHALL BE IN ACCORDANCE WITH INDUSTRY ACCEPTED STANDARDS. AND SHALL INCLUDE AT A MINIMUM THE FOLLOWING:
(A) SUBMITTAL DATA STATING EQUIPMENT SIZE AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
(Bi OPERATING MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE, EXCEPT EQUIPMENT NOT FURNISHED AS PART OF THE PROJECT. REQUIRED ROUTINE MAINTENANCE SHALL BE CLEARLY IDENTIFIED.
(C) NAMES AND ADDRESSES OF AT LEAST ONE SERVICE AGENCY.
(D) HVAC CONTROLS SYSTEM MAINTENANCE AND CALIBRATION INFORMATION INCLUDING WIRING DIAGRAMS, SCHEMATICS AND CONTROL SEQUENCE DESCRIPTIONS. DESIRED OR FIELD DETERMINED SET POINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS, AT CONTROL DEVICES OR FOR DIGITAL CONTROL SYSTEMS, IN THE PROGRAMMING COMMENTS.
(E) COMPLETE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING SUGGESTED SETPOINTS.

AUTOMATIC SHUTDOWN
HVAC SYSTEM SHALL BE EQUIPPED WITH CONTROLS THAT CAN START AND STOP THE SYSTEM UNDER DIFFERNT TIME SCHEDULES FOR SEVEN DIFFERENT TIMES PER WEEK, AND BE CAPABLE OF RETAINING PROGRAMMING AND TIME SETTING DURING LOSS OF POWER FOR A PERIOD OF LESS THAN 10 HOURS AND INCLUDE AN ACCESSIBLE MANUAL OVERRIDE, OR EQUIVALENT FUNCTION THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR TWO HOURS.

SHUTOFF DAMPER CONTROLS
BOTH OUTDOOR AIR SUPPLY AND EXHAUST SYSTEMS SHALL BE EQUIPPED WITH MOTORIZED DAMPERS THAT WILL AUTOMATICALLY SHUT WHEN THE SYSTEMS OR SPACES SERVED ARE NOT IN USE. VENTILATION OUTDOOR AIR DAMPERS SHALL BE CAPABLE OF AUTOMATICALLY SHUTTING OFF DURING PREOCCUPANCY BUILDING WARM UP, COOL DOWN AND SETBACK.

NOTES:

1. DUCTWORK WITHIN THE BUILDING ENVELOPE WILL HAVE A MINIMUM INSULATION VALUE OF R-6, DUCTWORK LOCATED OUTSIDE OF THE BUILDING ENVELOPE WILL BE INSULATED WITH A MINIMUM OF R-8. DUCTWORK SHALL HAVE VAPOR RETARDERS WITH A PERM RATING NOT TO EXCEED 0.5 PERM. ALL JOINTS TO BE SEALED.

2. CONSTRUCTION - VENTILATING CEILINGS, SUSPENDED CEILING MATERIAL SHALL HAVE A CLASS 1 FLAME-SPREAD CLASSIFICATION ON BOTH SIDES, DETERMINED IN ACCORDANCE WITH THE BUILDING CODE. CEILING SUPPORTS SHALL BE OF NONCOMBUSTIBLE MATERIALS.
LIGHTING FIXTURES RECESSED INTO VENTILATING CEILINGS SHALL BE OF A TYPE APPROVED FOR THAT PURPOSE.

3. APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE. SUPPORTS FOR APPLIANCES SHALL BE DESIGNED AND CONSTRUCTED TO SUSTAIN VERTICAL AND HORIZONTAL LOADS WITHIN THE STRESS LIMITATIONS SPECIFIED IN THE IBC, SECTION 304.4 - UNIFORM MECHANICAL CODE.

GENERAL MECHANICAL NOTES:

1. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND WERE MADE FROM THE BEST INFORMATION AVAILABLE. CONFIRM ALL LOCATIONS AND DIMENSIONS IN THE FIELD. VISIT THE SITE PRIOR TO BID. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CONDITIONS AS THEY EXIST AND NO ADDITIONAL COSTS WILL BE ALLOWED FOR READILY OBSERVABLE CONDITIONS.

2. GUARANTEE LABOR AND MATERIALS FOR 1 YEAR.

3. COORDINATE THE LOCATION OF ALL AIR DISTRIBUTION DEVICES WITH THE ARCHITECTURAL REFLECTED CEILING PLAN INCLUDING LIGHT FIXTURES AND LIFE SAFETY DEVICES.

4. VERIFY LOCATION OF THERMOSTATS/TEMPERATURE SENSORS WITH THE ARCHITECT/ENGINEER PRIOR TO INSTALLATION TO COORDINATE WITH THE LATEST FURNITURE AND MILLWORK PLANS. INSTALL DEVICES AT 48" AFF, UNLESS NOTED OTHERWISE ON THE PLANS.

5. ALL WORK SHALL COMPLY WITH THE LOCAL BUILDING, PLUMBING, AND MECHANICAL CODES, NFPA 90A, AND ANY OTHER APPLICABLE CODES.

6. ALL LOCATIONS OF DEVICES ARE APPROXIMATE. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.

7. SEAL NEW OR EXISTING PENETRATIONS IN OF FLOORS, RATED PARTITIONS, AND CORRIDOR WALLS.

8. SECURE ALL PERMITS AND PROVIDE ANY REQUIRED TEMPORARY UTILITIES.

9. ALL WORK AND SERVICE INTERRUPTIONS SHALL BE COORDINATED WITH THE OWNER SUCH THAT THE WORK IS PERFORMED AT THE OWNERS CONVENIENCE. THIS MAY BE DURING EVENINGS AND WEEKENDS.

10. CONTRACTOR TO PROVIDE "AS-BUILT" DRAWINGS INDICATING THE CONFIGURATION OF THE CONSTRUCTED WORK.

11. SUBMIT INFORMATION ON ALL NEW EQUIPMENT IN THE FORM OF SHOP DRAWINGS. REFER TO ARCHITECTURAL SPECIFICATIONS FOR THE CORRECT PROCEDURE. PROVIDE AIR BALANCE REPORT AND SUBMIT FOR APPROVAL.

12. PROVIDE 3 COPIES OF THE OPERATION AND MAINTENANCE MANUALS TO THE OWNER. PROVIDE INSTRUCTION ON THE SYSTEM OPERATION TO THE OWNER.

13. FLEX DUCT LENGTH NOT TO EXCEED 6'-0". PROVIDE MANUAL DAMPER AT ALL TAKE-OFFS.

14. ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS. DUCTWORK SHALL BE GALVANIZED STEEL WITH MIN R-8 EXTERNAL FIBERGLASS INSULATION AND FOIL VAPOR BARRIER.

15. ALL DUCTWORK DIMENSIONS ARE CLEAR INSIDE DIMENSIONS.

16. TURNING VANES ARE REQUIRED AT EACH TURN IN THE DUCT. EXTRACTORS ARE REQUIRED AT EACH SPLIT.

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Texas Registered Engineering Firm #F-3811

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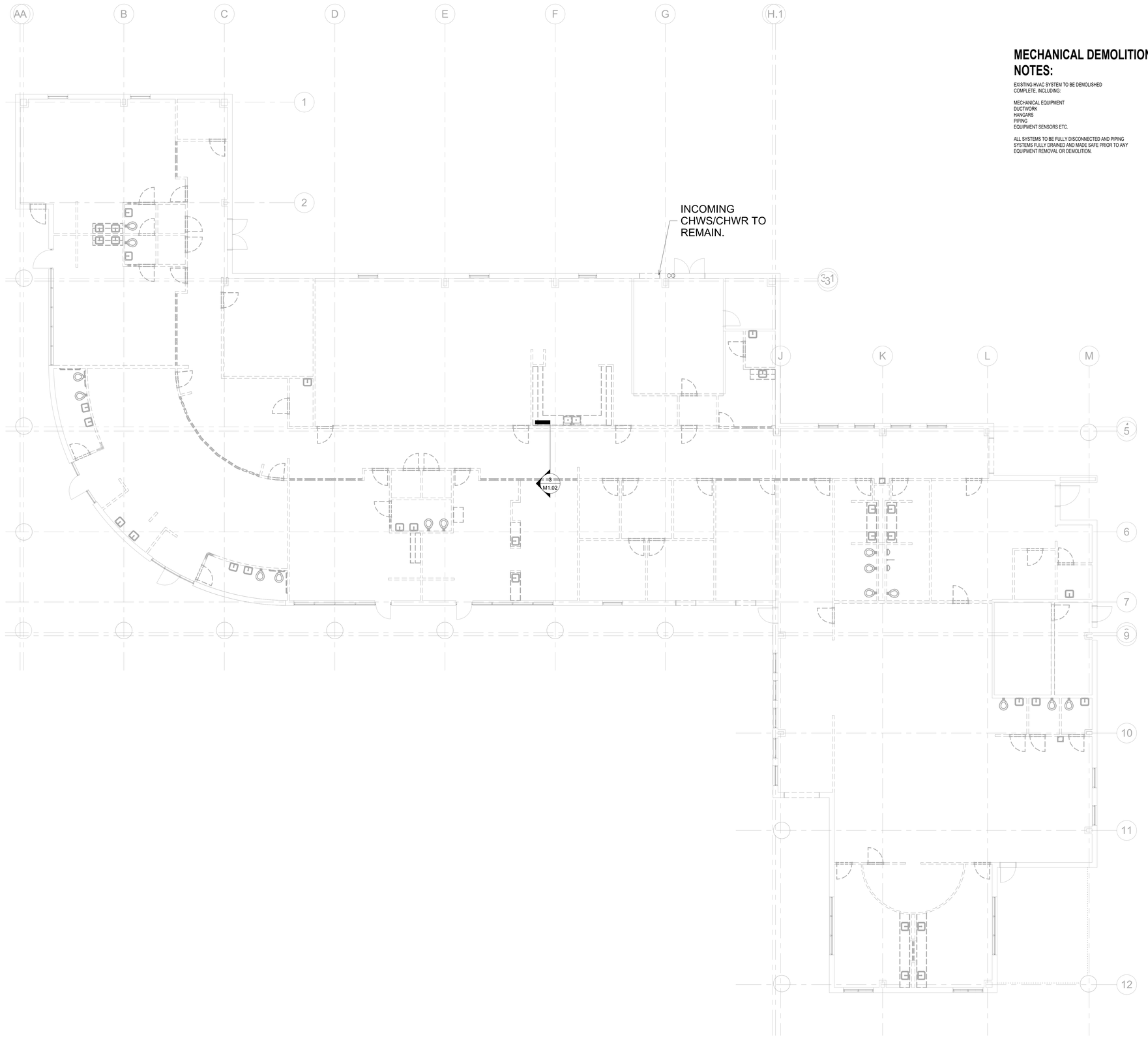
Project Status:
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No.	DATE	DESCRIPTION
	09.12.2024	ISSUE FOR REVIEW

Sheet Title
MECHANICAL SYMBOLS, LEGENDS, NOTES AND ABBREVIATIONS

Project Mgr:
Designer:
Drawn By: JE
Checked By: JE
Date: 10/14/2024
Job No.: 1503

M0.01



MECHANICAL DEMOLITION NOTES:

EXISTING HVAC SYSTEM TO BE DEMOLISHED COMPLETE, INCLUDING:

MECHANICAL EQUIPMENT
DUCTWORK
HANGARS
PIPING
EQUIPMENT SENSORS ETC.

ALL SYSTEMS TO BE FULLY DISCONNECTED AND PIPING SYSTEMS FULLY DRAINED AND MADE SAFE PRIOR TO ANY EQUIPMENT REMOVAL OR DEMOLITION.

1 **MECHANICAL DEMO PLAN**
1/8" = 1'-0"

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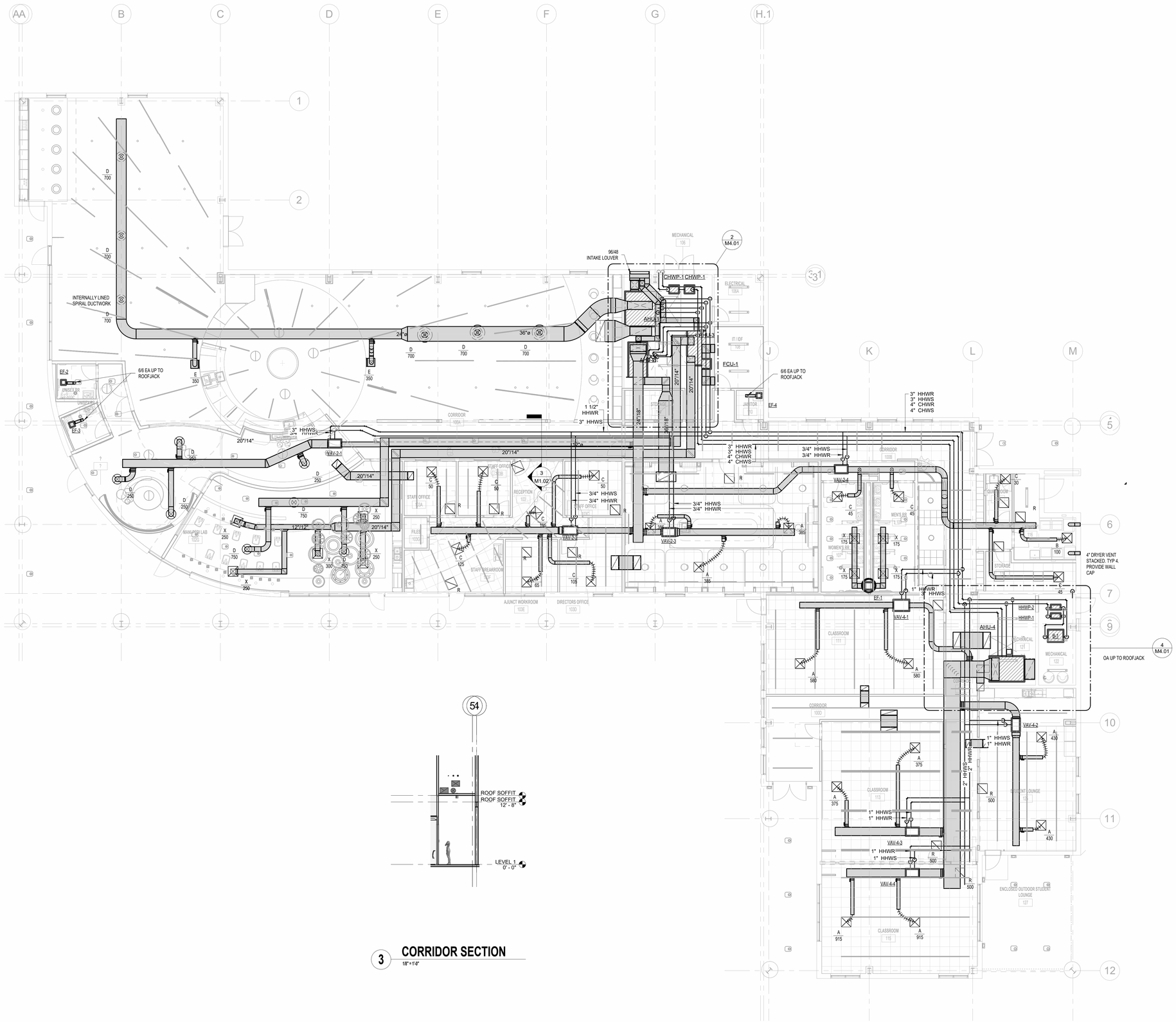
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MECHANICAL DEMO PLAN

Project Mgr:	JE
Designer:	JE
Drawn By:	JE
Checked By:	JE
Date:	10/14/2024
Job No.:	1503

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3 **CORRIDOR SECTION**
1/8" = 1'-0"

1 **MECHANICAL PLAN**
1/8" = 1'-0"

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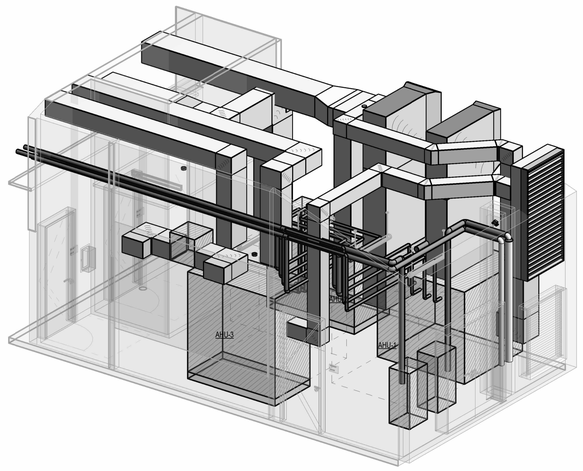
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Project Mgr:	JE
Designer:	JE
Drawn By:	JE
Checked By:	JE
Date:	10/14/2024
Job No.:	1503

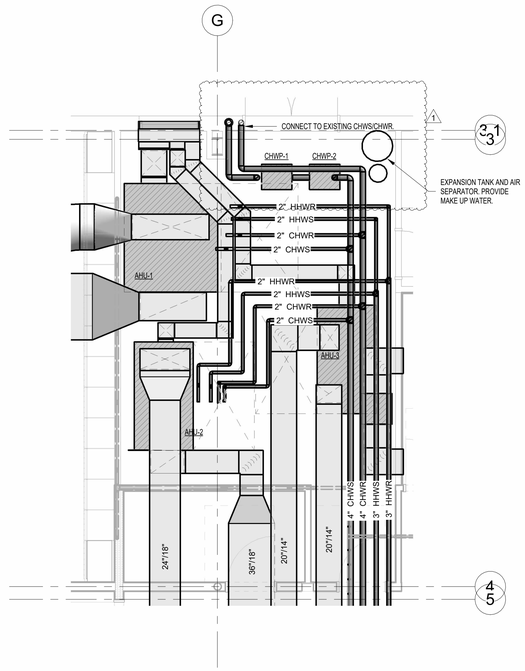
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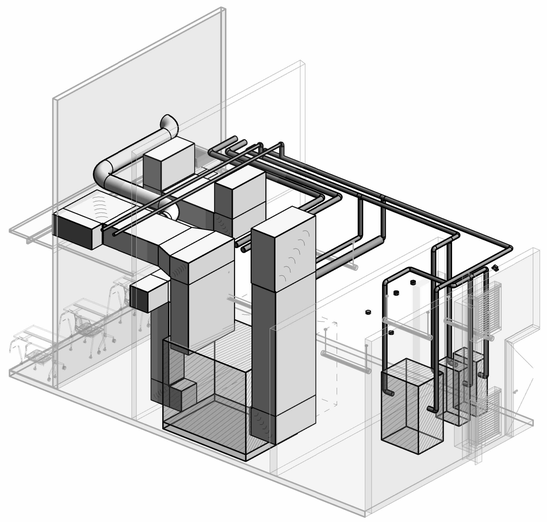


1 ISOMETRIC VIEW - NORTH MECHANICAL ROOM

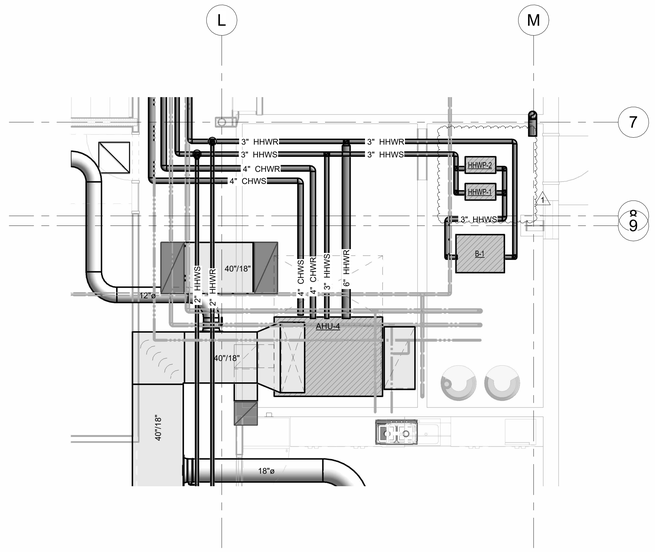


2 ENLARGED MECHANICAL PLAN - NORTH MECHANICAL ROOM

1/4" = 1'-0"



3 ISOMETRIC VIEW - EAST MECHANICAL ROOMS



4 ENLARGED MECHANICAL PLAN - EAST MECHANICAL ROOM

1/4" = 1'-0"

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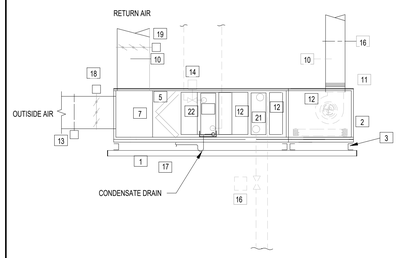
Sheet Title
MECHANICAL ENLARGED PLANS

Project Mgr:	
Designer:	
Drawn By:	Author
Checked By:	Checker
Date:	10/14/2024
Job No.:	1503

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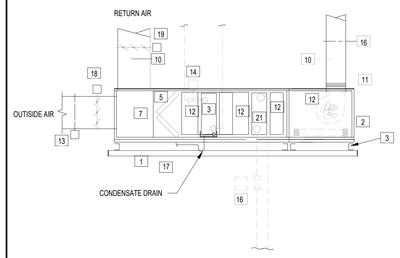
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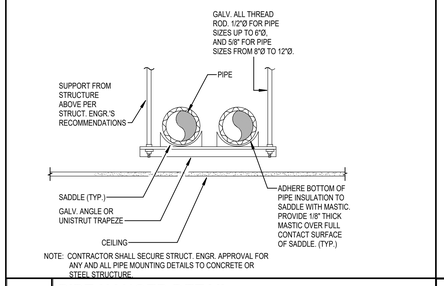
1 APPROVED MANUFACTURERS: TEMTROL
2 BLOWER SECTION
3 SUPPLY AIR COOLING COIL
4 MIXING BOX SECTION
5 FILTER SECTION
6 FREEZE PROTECTION THERMOSTAT
7 BYPASS
8 INTERNAL VIBRATION ISOLATION (EXTERNAL ISOLATORS NOT REQUIRED.)
9 DRAIN PAN: STAINLESS STEEL.
10 PROVIDE SMOKE DETECTORS IN SUPPLY DUCT. INTERLOCK WITH FAN OPERATION.
11 FLEXIBLE DUCT CONNECTOR.
12 PROVIDE HINGED PANEL FOR THIS SECTION.
13 EXTERNAL VIBRATION ISOLATION
14 SUPPLY AIR CONTROL VALVE (CHILLED WATER)
15 SUPPLY AIR CONTROL VALVE (HEATING HOT WATER)
16 AIR FLOW STATION (EBTRON HYBRID SERIES)
17 HOUSEKEEPING PAD
18 OUTSIDE AIR DAMPER (MOTORIZED)
19 RETURN AIR DAMPER (MOTORIZED)
20 OUTSIDE AIR LOUVER & PLENUM.
21 HEATING COIL
22 FACE & BYPASS AHU.

01 CONSTANT VOLUME AIR HANDLER
NOT TO SCALE

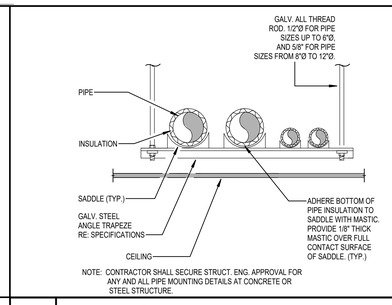


1 APPROVED MANUFACTURERS: TEMTROL
2 BLOWER SECTION
3 SUPPLY AIR COOLING COIL
4 MIXING BOX SECTION
5 FILTER SECTION
6 FREEZE PROTECTION THERMOSTAT
7 BYPASS
8 INTERNAL VIBRATION ISOLATION (EXTERNAL ISOLATORS NOT REQUIRED.)
9 DRAIN PAN: STAINLESS STEEL.
10 PROVIDE SMOKE DETECTORS IN SUPPLY DUCT. INTERLOCK WITH FAN OPERATION.
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19 RETURN AIR DAMPER (MOTORIZED)
20 OUTSIDE AIR LOUVER & PLENUM.
21 HEATING COIL

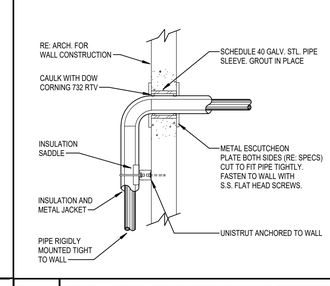
02 VAV AIR HANDLER
NOT TO SCALE



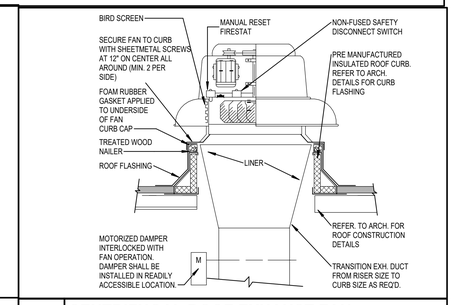
03 PIPE HANGER DETAIL
NOT TO SCALE



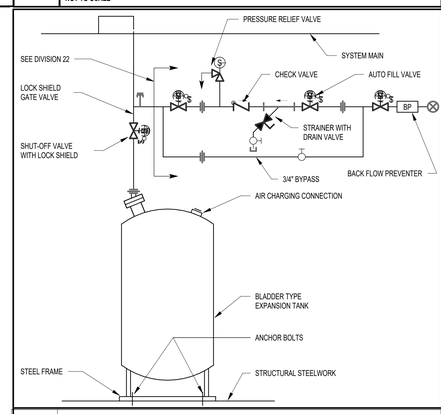
04 PIPE HANGER DETAIL (4 PIPE)
NOT TO SCALE



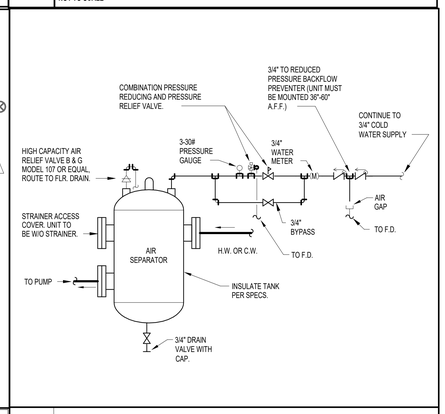
05 PIPE ENTRY THRU EXTERIOR WALL
NOT TO SCALE



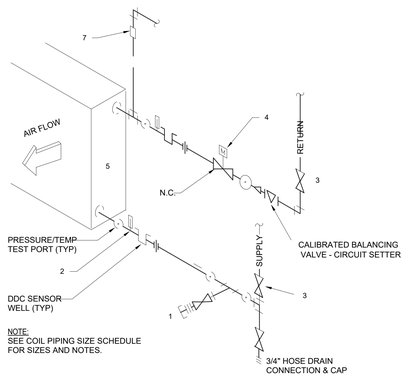
06 CENTRIFUGAL ROOF EXHAUST FAN
NOT TO SCALE



07 TYPICAL DIAPHRAGM EXPANSION TANK DETAIL
NOT TO SCALE



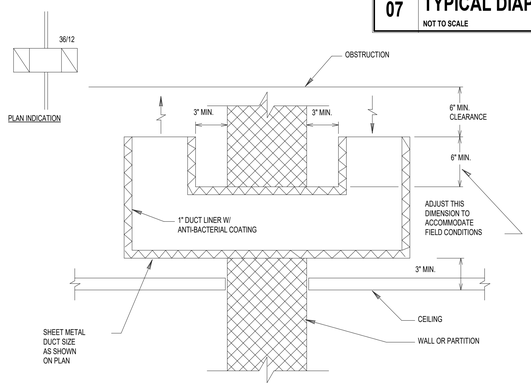
08 TYPICAL AIR SEPARATOR PIPING DETAIL
NOT TO SCALE



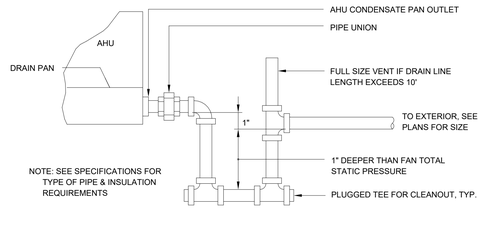
NOTES:

1 STRAINER WITH BLOWDOWN VALVE AND HOSE CONNECTION AND CAP ON DISCHARGE THERMOMETER WELL AND PETES PLUG TO BE INSTALLED FULLY ACCESSIBLE.
3 BALL OR BUTTERFLY ISOLATION VALVE DEPENDING ON SIZE.
4 2-WAY MODULATING VALVE
5 PIPE ALL COILS FOR COUNTER FLOW WATER TO AIR HEAT EXCHANGE.
6 LINE SIZE VALVES AND BYPASSES FOR COIL MAY BE USED AT THE CONTRACTORS OPTION.
7 AUTOMATIC AIR VENT PIPED TO FLOOR DRAIN. PROVIDE WHEN MAINS ARE LOCATED BELOW COIL. IF MAINS ARE ABOVE, MANUAL VENTS ARE ACCEPTABLE

09 MODULATING 2-WAY COIL PIPING DETAIL
12" = 1'-0"



10 RETURN AIR TRANSFER DUCT DETAIL
N.T.S.



11 CONDENSATE DRAIN DETAIL
12" = 1'-0"

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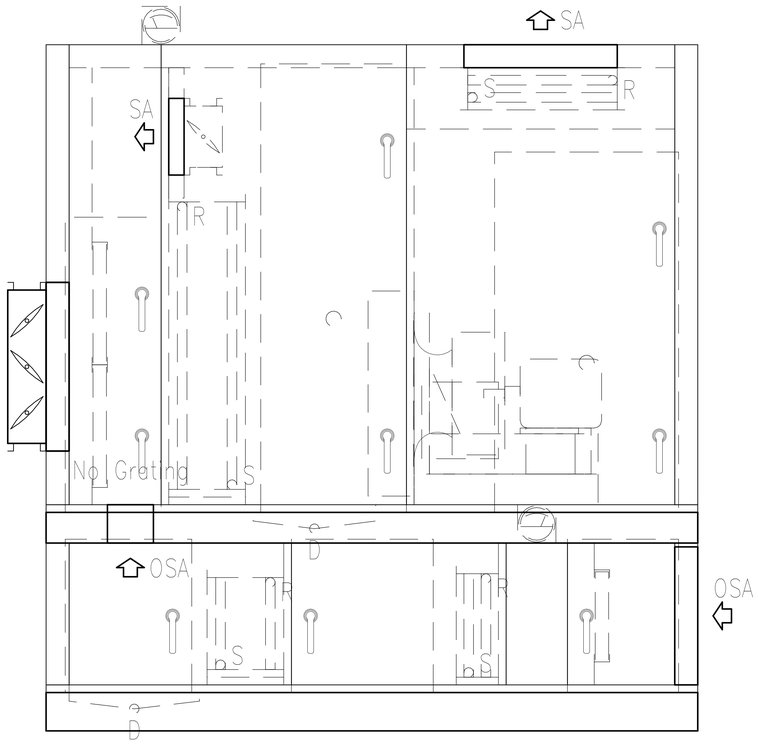
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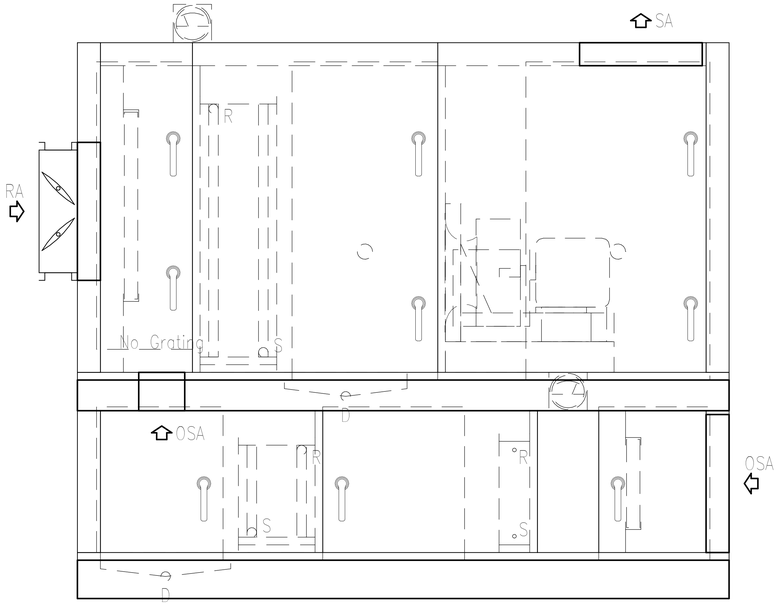
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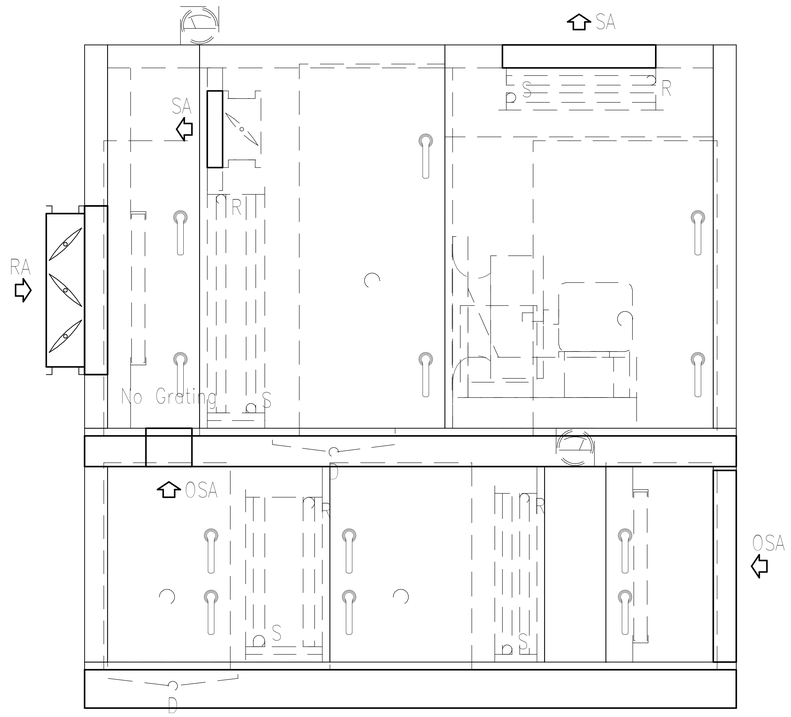
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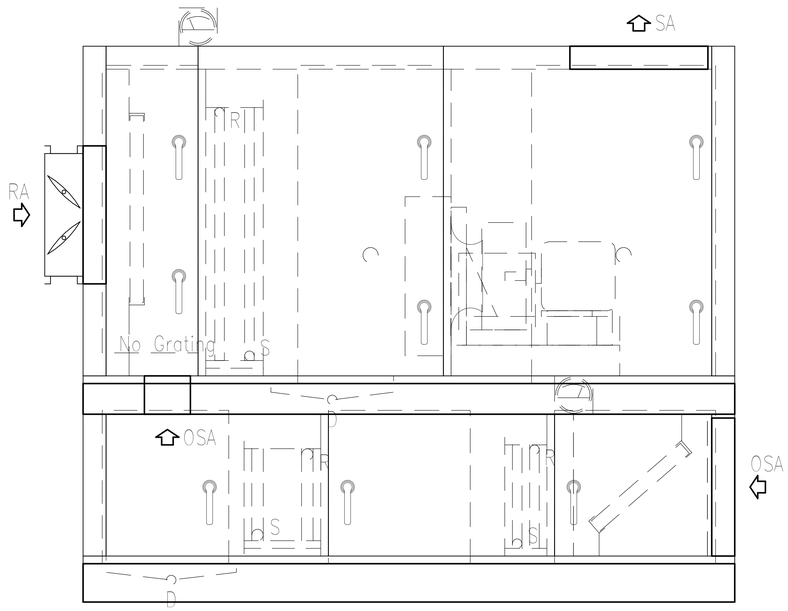
1 **Mechanical units AHU_1**
1 1/2" = 1'-0"



2 **Mechanical units AHU_2**
1 1/2" = 1'-0"



3 **Mechanical units AHU_3**
1 1/2" = 1'-0"



4 **Mechanical units AHU_4**
1 1/2" = 1'-0"

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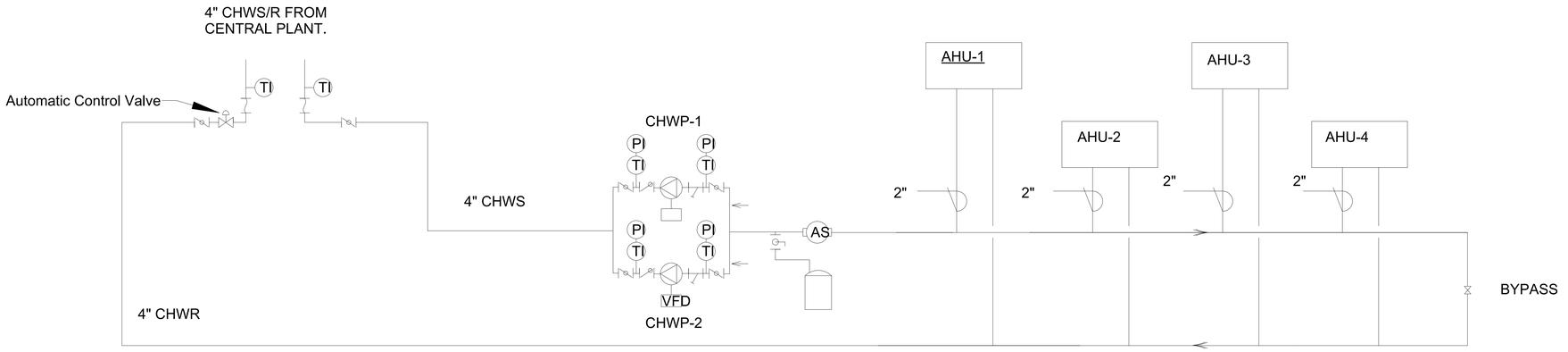
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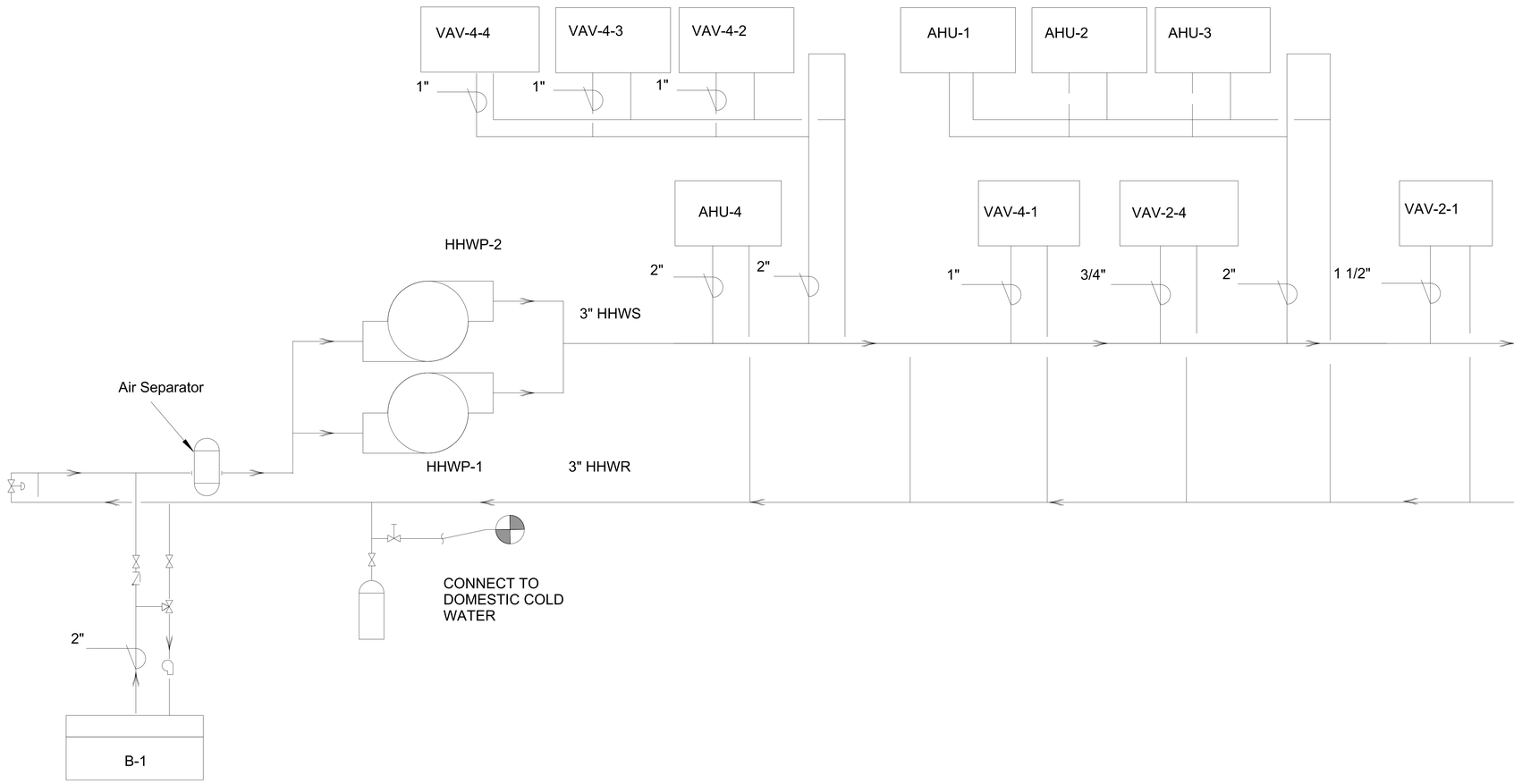
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1 CHILLED WATER RISER

1/16" = 1'-0"



2 HEATING HOT WATER RISER

1/16" = 1'-0"

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STATE OF TEXAS

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MECHANICAL RISERS DIAGRAMS

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AIR HANDLING SCHEDULE

	MARK	AHU-1	AHU-2	AHU-3	AHU-4
GENERAL	SERVES				
	TYPE	HORIZ.	HORIZ.	HORIZ.	HORIZ.
	SUPPLY AIR (CFM)	7,285	3,405	2,715	5,240
	OUTSIDE AIR (CFM)	1,600	825	2,000	2,110
	MINIMUM OUTSIDE AIR (CFM)				
	EXT. SP. (IN. W.G.)	2	2	2	2
	FAN MOTOR HP / QTY FANS	5.5 / 2	3 / 1	3 / 1	3 / 2
	VOLTS/PHASE/HERTZ	480/3/60	480/3/60	480/3/60	480/3/60
	MAX. FAN RPM	2355	3493	3965	3081
	VFD/STARTER BY CONTRACTOR	VFD	VFD	VFD	VFD
OUTSIDE AIR PREHEAT COIL	HEATING COIL CFM	1,600	6,240	2,000	2,110
	ENTERING AIR TEMP. DB (F)	27	27	27	27
	LEAVING AIR TEMP. DB (F)	59.0	62.9	69.6	53.8
	MIN. ROWS/MAX. FINS PER IN.	1/12	1/12	1/12	1/12
	EWT/LWT (F)	180/160	180/160	180/160	180/160
	TOTAL HEATING CAPACITY (MBH)	59	32..1	36.9	61.2
	COIL WATER FLOW (GPM)	6	3.3	3.8	6.3
	MAX. WATER PRESS. DROP (FT.)	15	15	15	15
	CONTROL VALVE (2-WAY/3-WAY)	2-WAY	2-WAY	2-WAY	2-WAY
OUTSIDE AIR COOLING COIL	COIL CFM	1,600	825	2,000	2,110
	TOTAL COOLING (MBH)	134.7	68.9	69.8	173
	SENSIBLE COOLING (MBH)	77.3	39.7	35.7	100.7
	ENTERING AIR TEMP. DB/WB (F)	98/78	98/78	98/78	98/78
	LEAVING AIRTEMP. DB/WB (F)	53.9/53.6	54.1/53.8	54.2/54	54.4/54.4
	MAX. COIL FACE VEL. (FPM)	500	500	500	500
	MAX. AIR PRESS. DROP (IN. W.G.)	1	1	1	1
	WATER FLOW (GPM)	19.1	9.8	9.5	24.6
	EWT/LWT (F)	42/56	42/56	42/56	42/56
	COIL CONNECTION SIZES (IN)	2.5	2.5	1.25	2.5
	MIN. ROWS/MAX. FINS PER IN.	4/11	4/11	4/11	4/11
	MAX. WATER PRESS. DROP (FT.)	15	15	15	15
	CONTROL VALVE (2-WAY/3-WAY)				
COOLING COIL	COIL CFM	7,285	3,405	2,715	5,240
	TOTAL COOLING (MBH)	119.6	80.8	49.1	90.8
	SENSIBLE COOLING (MBH)	119.5	62.7	38.9	72.7
	ENTERING AIR TEMP. DB/WB (F)	69.6 / 58.0	69.6 / 60.9	66.5 / 59.4	68.9/59.6
	LEAVING AIRTEMP. DB/WB (F)	54.7/51.9	53.2/52.5	53.5/52.9	54.3/53.4
	MAX. COIL FACE VEL. (FPM)	500	500	500	500
	MAX. AIR PRESS. DROP (IN. W.G.)	1	1	1	1
	COIL WATER FLOW (GPM)	17	11.5	7	12.9
	EWT/LWT (F)	42/56	42/56	42/56	42/56
	COIL CONNECTION SIZES (IN)	2	1.5	1.25	1.25
	MIN. ROWS/MAX. FINS PER IN.	4/11	4/11	4/11	4/11
	MAX. WATER PRESS. DROP (FT.)	15	15	15	15
	CONTROL VALVE (2-WAY/3-WAY)				
RE-HEAT COIL	HEATING COIL CFM	5,628		1,845	
	ENTERING AIR TEMP. DB (F)	66		66	
	LEAVING AIR TEMP. DB (F)	85.6		85.0	
	MIN. ROWS/MAX. FINS PER IN.	1/12		1/12	
	EWT/LWT (F)	180/160		180/160	
	TOTAL HEATING CAPACITY (MBH)	123.8		52.6	
	COIL WATER FLOW (GPM)	12.7		5.4	
	MAX. WATER PRESS. DROP (FT.)	15		15	
	CONTROL VALVE (2-WAY/3-WAY)				
GENERAL	FLA	14	4	4	8
	MCA	18	5	5	9
	MOCP	20	15	15	15
	MANUFACTURER	TEMTROL	TEMTROL	TEMTROL	TEMTROL
	MODEL	ITF	ITF	ITF	ITF
	MAX UNIT DIMENSIONS L x W x H (INCHES)	85 x 72 x 89.5	86 x 46 x 72.5	85 x 46 x 86.5	85 x 72 x 89.5
	WEIGHT (LBS)	4,550	2,800	3,145	4550
	NOTES	1,2,3,4,5,6,7,8	1,2,3,4,5,6,7	1,2,3,4,5,6,7,8	1,2,4,5,6

NOTES:
1. EXTERNAL STATIC PRESSURE DOES NOT INCLUDE LOSSES DUE TO COILS, FILTERS, AND CASING.
2. PROVIDE UNIT WITH BLOW THROUGH DIRECT DRIVE PLENUM FAN SECTION, HOT WATER RE-HEAT COIL SECTION, COIL ACCESS SECTION, CHILLED WATER COIL SECTION, AND COMBINATION 2" FLAT FILTER AND MIXING SECTION.
3. PROVIDE 100 PERCENT PRE-TREATED OUTSIDE AIR SECTION WITH 2" ANGLE FLAT FILTER, HOT WATER PREHEAT SECTION, ACCESS SECTION, COOLING COIL SECTION AND PLENUM SECTION.
4. PROVIDE DUCT MOUNTED SMOKE DETECTOR IN SUPPLY AIR DUCTWORK FOR UNITS DELIVERING 2,000 CFM OR GREATER AS WELL AS IN THE RETURN AIR DUCTWORK FOR UNITS DELIVERING 15,000 CFM OR GREATER PER NFPA 90A.
5. UNIT SHALL BE FURNISHED WITH FIELD INSTALLED REMOTE VFD. FAN MOTOR SHALL BE NEMA PREMIUM EFFICIENCY TEAO MOTOR AND AUTOMATIC BACKDRAFT DAMPERS. AHU MANUFACTURER TO PROVIDE UNIT WITH INDIVIDUAL MOTOR OVEI
6. AIR HANDLING UNITS SHALL BE MANFUCATURED WITH WELDED BASE RAIL AND MINIMUM 4" BASE INSULATION.
7. PROVIDE UNIT MOUNTED MODULATING MOTORIZED DAMPER AT RETURN AIR CONNECTION. DAMPER SHALL BE PROVIDED BY THE UNIT MANUFACTURER WITH THE DAMPER ACTUATOR PROVIDED BY THE CONTROLS CONTRACTOR.
8. PROVIDE UNIT FACE AND BYPASS DAMPER.

NATURAL GAS FIRED CONDENSING BOILER SCHEDULE

MARK	MANU.	MODEL	INPUT (MBH)	OUTPUT (MBH)	OPERATING PRESSURE (PSI)	FLOW (GPM)	PRESSURE DROP (FT H2O)	EWT (F)	LWT (F)	LOAD (WATTS)	V	PH	HZ	REMARKS	NOTES
B-1	CLEAVER BROOKS	CFC-E-500	500	470	25	100	25	85	105	0	460	3	60	HIGH EFFICIENCY CONDENSING BOILER WITH MANUFACTURER'S CIRCULATING PUMP AND VALVE PACKAGE	

PUMP SCHEDULE

MARK	MANU.	MODEL	TYPE	LOCATION	GPM	TOTAL DYNAMIC HEAD (FT. WG)	HP	RPM	V	PH	HZ	REMARKS	NOTES
CHWP-1	TACO	KV 2009D	INLINE	NW MECH ROOM	150	70	5	1760	460	3	60	VERTICAL INLINE	
CHWP-2	TACO	KV 2009D	INLINE	NW MECH ROOM	150	70	5	1760	460	3	60	VERTICAL INLINE	
HHWP-1	TACO	KV 1509	INLINE	MECH ROOM	65	70	3	1760	460	3	60	VERTICAL INLINE	
HHWP-2	TACO	KV 1509	INLINE	MECH ROOM	65	70	3	1760	460	3	60	VERTICAL INLINE	

NOTES:
1. PROVIDE ELECTRICAL DISCONNECT SWITCH.
2. PROVIDE INVERTER-RATED, PREMIUM-PLUS, HIGH-EFFICIENCY TEFC MOTOR.
3. PROVIDE VARIABLE FREQUENCY DRIVE.

FAN SCHEDULE

MARK	MANU.	MODEL	LOCATION	AREA(S) SERVED	FAN TYPE	CFM	E.S.P. IN. W.G.	ELECTRICAL MOTOR DATA WATTS	HP	RPM	V	PH	HZ	SONES	NOTES
EF-1	GREENHECK	G-160-VG	ROOF	RR	CENT. UPBLAST	750	0.5	0	0.5	1800	460	3	60	0	
EF-2	GREENHECK	SP-A110	ROOF	RR	CEILING	70	0.5	50	0	1800	120	1	60	0	
EF-3	GREENHECK	SP-A110	ROOF	RR	CEILING	70	0.5	50	0	1800	120	1	60	0	
EF-4	GREENHECK	SP-A110	ROOF	RR	CEILING	70	0.5	50	0	1800	120	1	60	0	

VARIABLE AIR VOLUME BOX SCHEDULE

MARK	MANU.	MODEL	INLET NECK SIZE	MAX. DESIGN CFM	MIN. DESIGN CFM	MAXIMUM NOISE CRITERIA (NC)	HEATING COIL CAPACITY (MBH)	EAT (F)	LAT (F)	EWT (F)	LWT (F)	GPM	ELECTRICAL V	PH	HZ	MCA	MOP	REMARKS
VAV-2-1	MANUFACTURER	MODEL	8	645	195	30	12	55	89	180	160	1.2	120	1	60	2	15	
VAV-2-2	MANUFACTURER	MODEL	8	555	170	30	9.75	55	89	180	160	0.975	120	1	60	2	15	
VAV-2-3	MANUFACTURER	MODEL	12	1160	350	30	18	55	89	180	160	1.8	120	1	60	2	15	
VAV-2-4	MANUFACTURER	MODEL	10	945	285	30	25	55	89	180	160	2.5	120	1	60	2	15	
VAV-4-1	MANUFACTURER	MODEL	12	1155	350	30	25	55	89	180	160	2.5	120	1	60	2	15	
VAV-4-2	MANUFACTURER	MODEL	12	1090	330	30	28.65	55	89	180	160	2.865	120	1	60	2	15	
VAV-4-3	MANUFACTURER	MODEL	12	1010	305	30	23.4	55	89	180	160	2.34	120	1	60	2	15	
VAV-4-4	MANUFACTURER	MODEL	14	1830	550	30	40	55	89	180	160	4	120	1	60	2	15	

AIR DEVICE SCHEDULE

MARK	MANU.	MODEL	TYPE	NOMINAL FACE SIZE	MAX CFM	NECK SIZE	NOISE CRITERIA (MAX) NC	NOTES
A	PRICE	ASCD	HIGH PERFORMANCE SQUARE CONE DIFFUSER	24 x 24	1250 CFM	12"ø	25	
B	PRICE	ASCD	HIGH PERFORMANCE SQUARE CONE DIFFUSER	24 x 24	250 CFM	8"ø	25	
C	PRICE	ASCD	HIGH PERFORMANCE SQUARE CONE DIFFUSER	24 x 24	150 CFM	6"ø	25	
D	PRICE	ASCD	HIGH PERFORMANCE SQUARE CONE DIFFUSER	24 x 24	1250 CFM	12"ø	25	
R	PRICE			24 x 24		12"/12"	0	
X	PRICE			24 x 24		12"/12"	0	

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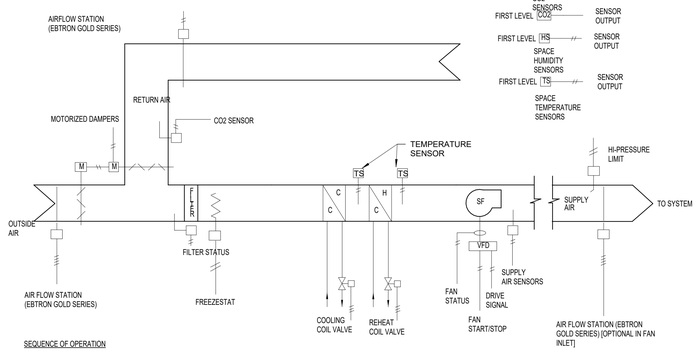
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1



SEQUENCE OF OPERATION

OCCUPIED MODE

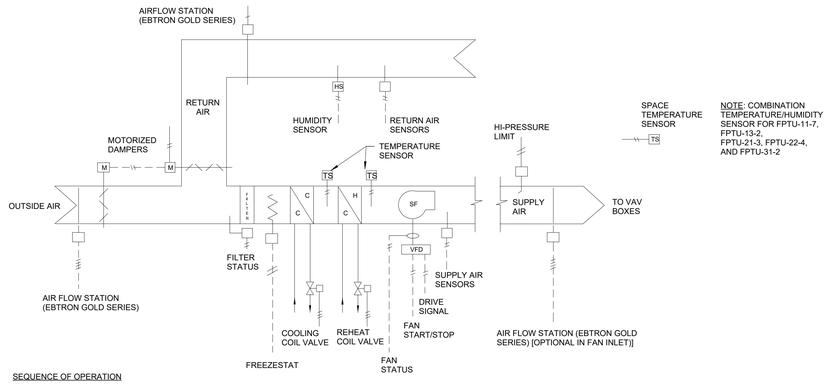
1. THE UNIT SHALL BE STARTED AND STOPPED BY THE DDC CONTROL SYSTEM SCHEDULE.
2. ENERGIZE THE FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE. THE VARIABLE FREQUENCY DRIVE SHALL MODULATE TO MAINTAIN TEMPERATURE SETPOINT OF THE ROOM. IF THE FAN IS AT MINIMUM SPEED AND THE ROOM TEMPERATURE FALLS BELOW THE ROOM SETPOINT, MODULATE THE HW COIL TO MAINTAIN THE ROOM TEMPERATURE.
3. IF THE CO2 CONCENTRATION INCREASES ABOVE SETPOINT (1000 PPM, ADJ.) THE BAS SHALL INCREASE THE OUTSIDE AIRFLOW SETPOINT FROM THE SCHEDULED MINIMUM TOWARD ITS SCHEDULED MAXIMUM TO REDUCE THE SPACE CO2 CONCENTRATION. IT THE OUTSIDE AIR DAMPER IS 100% OPEN AND THE UNIT CANNOT MAINTAIN THE OUTSIDE AIRFLOW SETPOINT, THE RETURN AIR DAMPER POSITION SHALL BE DECREASED UNTIL THE OUTSIDE AIR SETPOINT IS REACHED. ONCE THE CO2 CONCENTRATION DROPS BELOW (1000 PPM, ADJ.) THE OUTSIDE AIR SETPOINT SHALL BE REDUCED TO THE SCHEDULED MINIMUM. IF THE CO2 CONCENTRATION REACHES 1100 PPM, ADJ. AN ALARM SHALL BE GENERATED AT THE BAS.
4. IF THE OUTSIDE TEMPERATURE IS ABOVE 50° F (ADJUSTABLE), THE CHILLED WATER VALVE SHALL MODULATE TO MAINTAIN A CHILLED WATER COIL LEAVING AIR TEMPERATURE SETPOINT OF 53° F (ADJUSTABLE).
5. IF THE OUTSIDE TEMPERATURE IS BELOW 50° F (ADJUSTABLE), THE CHILLED WATER VALVE SHALL MODULATE TO MAINTAIN A CHILLED WATER COIL LEAVING AIR TEMPERATURE SETPOINT OF 60° F (ADJUSTABLE).
6. IF THE HUMIDITY SENSER MEASURES A HUMIDITY LEVEL ABOVE 65%RH, MODULATE THE COOLING VALVE TO 100% AND MODULATE THE HEATING VALVE TO MAINTAIN A LEAVING TEMPERATURE SETPOINT OF 60° F (ADJUSTABLE).
7. IF THE FREEZESTAT TRIPS, CLOSE THE OUTSIDE AIR DAMPER AND MODULATE THE RETURN AIR DAMPER TO THE 100% OPEN POSITION. CONTINUE FANS SPEED AT MINIMUM SPEED AND MODULATE THE HOT WATER VALVE TO MAINTAIN ROOM TEMPERATURE. WHEN THE OUTSIDE AIR TEMPERATURE RISES ABOVE 35 DEG. F., RESUME NORMAL OPERATION.
8. THE BAS SHALL REPORT FILTER STATUS AND PROVIDE A DIRTY INDICATION SHALL BE NOTED AT 0.5" ABOVE CLEAN FILTER SETPOINT.
9. THE BAS SHALL INDICATE ALARMS FOR FREEZESTAT, FAN FAILURE AND HIGH-STATIC.
10. UPON DETECTION OF SMOKE THE AHU SHALL DE-ENERGIZED.

UN-OCCUPIED MODE

1. DURING THE UNOCCUPIED MODE, THE AHU SHALL BE DEENERGIZED.
2. IF THE ROOM TEMPERATURE RISES ABOVE 78° F (ADJUSTABLE), ENABLE THE AHU.
3. ENERGIZE THE FAN TO RUN CONTINUOUSLY AT 50%.
4. THE OUTSIDE AIR DAMPER SHALL BE CLOSED.
5. THE CHILLED WATER VALVE SHALL MODULATE TO 100% OPEN AND THE HOT WATER VALVE IS CLOSED
6. WHEN THE ROOM TEMPERATURE FALLS TO 78° F (ADJUSTABLE), DE-ENERGIZE THE AHU.
7. IF THE ROOM TEMPERATURE FALLS BELOW 55° F (ADJUSTABLE), ENABLE THE AHU.
8. ENERGIZE THE FAN TO RUN CONTINUOUSLY AT 100%.
9. THE OUTSIDE AIR DAMPER SHALL BE CLOSED.
10. THE CHILLED WATER VALVE SHALL BE CLOSED AND THE HOT WATER VALVE IS OPENED.
11. THE HOT WATER VALVE SHALL MODULATE TO 100% OPEN AND THE CHILLED WATER VALVE IS CLOSED
12. WHEN THE ROOM TEMPERATURE RISES TO 60° F (ADJUSTABLE), DE-ENERGIZE THE AHU.

1 CONSTANT VOLUME AIR HANDLER CONTROL SCHEMATIC DIAGRAM

N.T.S.



NOTE: COMBINATION TEMPERATURE/HUMIDITY SENSOR FOR FPTU-11-7, FPTU-13-2, FPTU-21-3, FPTU-22-4, AND FPTU-31-2

SEQUENCE OF OPERATION

Occupied Mode

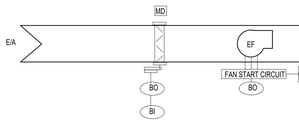
1. THE UNIT SHALL BE STARTED AND STOPPED BY THE DDC CONTROL SYSTEM SCHEDULE.
2. ENERGIZE THE FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE. THE VARIABLE FREQUENCY DRIVE SHALL MODULATE TO MAINTAIN THE DIFFERENTIAL SETPOINT (1.5" W.C. ADJUSTABLE) BASED ON A SIGNAL FROM THE DIFFERENTIAL SETPOINT CONTROLLER. THE PRESSURE TRANSMITTER SHALL BE LOCATED 2/3 OF THE DISTANCE OF THE MAIN DUCT DOWN STREAM FROM THE FAN. THE TRANSMITTER SHALL BE LOCATED IN A STRAIGHT SECTION OF DUCT. A HIGH STATIC LIMIT SWITCH SHALL SHUT THE UNIT DOWN UPON SENSING HIGH DUCT PRESSURE AND GENERATE AN ALARM.
3. THE OUTSIDE AIR DAMPER SHALL MODULATE TO MAINTAIN THE SCHEDULED OUTSIDE AIR SETPOINT. IF THE OUTSIDE AIR DAMPER IS 100% OPEN AND THE UNIT CANNOT MAINTAIN THE OUTSIDE AIR SETPOINT, THE RETURN AIR DAMPER POSITION SHALL BE DECREASED UNTIL THE OUTSIDE AIR SETPOINT IS REACHED.
4. IF THE OUTSIDE TEMPERATURE IS ABOVE 50° F (ADJUSTABLE), THE CHILLED WATER VALVE SHALL MODULATE TO MAINTAIN A CHILLED WATER COIL LEAVING AIR TEMPERATURE SETPOINT OF 53° F (ADJUSTABLE). THE HOT WATER IS CLOSED.
5. IF THE OUTSIDE TEMPERATURE IS BELOW 50° F (ADJUSTABLE), THE CHILLED WATER VALVE SHALL MODULATE TO MAINTAIN A CHILLED WATER COIL LEAVING AIR TEMPERATURE SETPOINT OF 60° F (ADJUSTABLE).THE HOT WATER IS CLOSED.
6. IF THE RETURN AIR TEMPERATURE FALLS BELOW 60° F (ADJUSTABLE), MODULATE THE HEATING COIL TO MAINTAIN A LEAVING AIR TEMPERATURE OF 60 DEGREES. THE CHILLED WATER VALVE IS CLOSED.
7. IF THE FREEZESTAT TRIPS, CLOSE THE OUTSIDE AIR DAMPER AND MODULATE THE RETURN AIR DAMPER TO THE 100% OPEN POSITION, OPEN THE CHILLED AND HOT WATER VALVE 100%. THE FAN WILL DEENERGIZE.
8. THE PRESSURE TRANSMITTER SHALL BE LOCATED 2/3 OF THE DISTANCE OF THE MAIN DUCT DOWN STREAM FROM THE FAN. THE TRANSMITTER SHALL BE LOCATED IN A STRAIGHT SECTION OF DUCT. A HIGH STATIC LIMIT SWITCH SHALL SHUT THE UNIT DOWN UPON SENSING HIGH DUCT PRESSURE AND GENERATE AN ALARM.
9. THE BAS SHALL REPORT FILTER STATUS AND PROVIDE A DIRTY INDICATION SHALL BE NOTED AT 0.5" ABOVE CLEAN FILTER SETPOINT.
10. THE BAS SHALL INDICATE ALARMS FOR FREEZESTAT, FAN FAILURE AND HIGH-STATIC.
11. UPON DETECTION OF SMOKE THE AHU SHALL DE-ENERGIZED.

UN-OCCUPIED MODE

1. DURING THE UNOCCUPIED MODE, THE AHU SHAL BE DEENERGIZED.
2. IF THE AVERAGE OF THE ROOM TEMPERATURE SENSORS RISES ABOVE 80° F (ADJUSTABLE), ENABLE THE AHU.
3. ENERGIZE THE FAN TO RUN CONTINUOUSLY. THE VARIABLE FREQUENCY DRIVE SHALL MODULATE TO MAINTAIN THE DIFFERENTIAL SETPOINT (1.5 "W.C. ADJUSTABLE) BASED ON A SIGNAL FROM THE DIFFERENTIAL SETPOINT CONTROLLER.
4. THE OUTSIDE AIR DAMPER SHALL BE CLOSED.
5. THE CHILLED WATER VALVE SHALL MODULATE TO MAINTAIN A CHILLED WATER COIL LEAVING AIR TEMPERATURE SETPOINT OF 53° F (ADJUSTABLE). HW VALVE IS CLOSED.
6. WHEN THE AVERAGE OF THE ROOM TEMPERATURE SENSORS FALLS TO 78° F (ADJUSTABLE), DE-ENERGIZE THE AHU.
7. IF THE RETURN AIR HUMIDITY SENSOR OR THE ROOM SENSOR MEASURES A HUMIDITY LEVEL ABOVE 65%RH, MODULATE THE COOLING VALVE TO 100% AND MODULATE THE HEATING VALVE TO MAINTAIN A LEAVING TEMPERATURE SETPOINT OF 70° F (ADJUSTABLE). WHEN THE RH FALLS BELOW 55%, DEENERGIZE THE SEQUENCE.
8. IF THE ROOM TEMPERATURE SENSOR FALLS BELOW 65° F (ADJUSTABLE), ENERGIZE THE TERMINAL UNIT FAN AND MODULATE HW COIL TO MAINTAIN ROOM SETPOINT.
9. WHEN THE ROOM TEMPERATURE SENSOR RISES TO 60° F (ADJUSTABLE), DE-ENERGIZE THE TERMINAL UNIT AND CLOSE THE HOT WATER VALVE.
10. IF THE HUMIDITY RISES ABOVE 65% RH (ADJUSTABLE) AS INDICATED BY EITHER THE DUCT OR SPACE HUMIDITY SENSORS: THE AIR HANDLING UNIT SHALL BE ENERGIZED, THE VFD'S SHALL MODULATE TO MAINTAIN 1.5" (ADJUSTABLE) STATIC PRESSURE IN THE SYSTEM, THE CHILLED WATER CONTROL VALVE SHALL OPEN TO ITS MAXIMUM POSITION AND THE HEATING WATER CONTROL VALVE SHALL MODULATE TO MAINTAIN 65° F (ADJUSTABLE) LEAVING AIR TEMPERATURE.
11. WHEN THE HUMIDITY LEVEL DECREASES TO 50% RH (ADJUSTABLE), THE AIR HANDLING UNIT SHALL BE DE-ENERGIZED AND THE HEATING AND CHILLED WATER CONTROL VALVES SHALL CLOSE.

2 VAV AIR HANDLING UNIT CONTROL SCHEMATIC DIAGRAM

N.T.S.

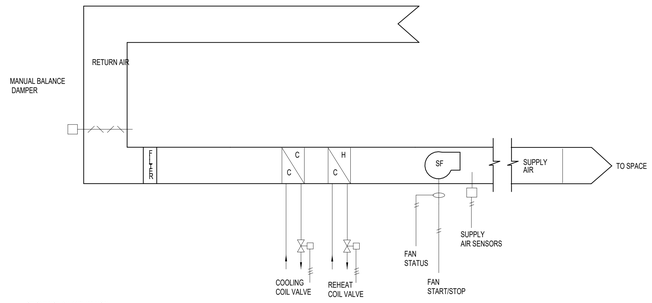


EXHAUST FAN CONTROL SEQUENCE

1. THE UNIT SHALL BE STARTED AND STOPPED BY THE DDC CONTROL SYSTEM SCHEDULE.
2. SYSTEM ALARMS- THE EMCS SHALL GENERATE AN ALARM IF: THE FAN IS COMMANDED TO RUN - BUT THE FAN STATUS IS OFF
3. EF-2 RUNS CONTINUOUSLY

3 EXHAUST FAN CONTROL

N.T.S.



SEQUENCE OF OPERATION

FAN COIL UNITS:

1. THE UNIT SHALL BE STARTED AND STOPPED BY THE DDC CONTROL SYSTEM.
2. ENERGIZE THE FAN TO RUN CONTINUOUSLY DURING OCCUPIED MODE.
3. CONTROLLER SHALL MODULATE THE CHILLED WATER AND HOT WATER CONTROL VALVES IN SEQUENCE WITHOUT OVERLAP TO MAINTAIN SPACE TEMPERATURE SET POINT OF 74° F (ADJUSTABLE).

4 FAN COIL UNIT

N.T.S.

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N. CURTIS JONES, JR. 58428 REGISTERED PROFESSIONAL ENGINEER

JE#4921
07/22/2025

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	09.12.2024	ISSUE FOR REVIEW

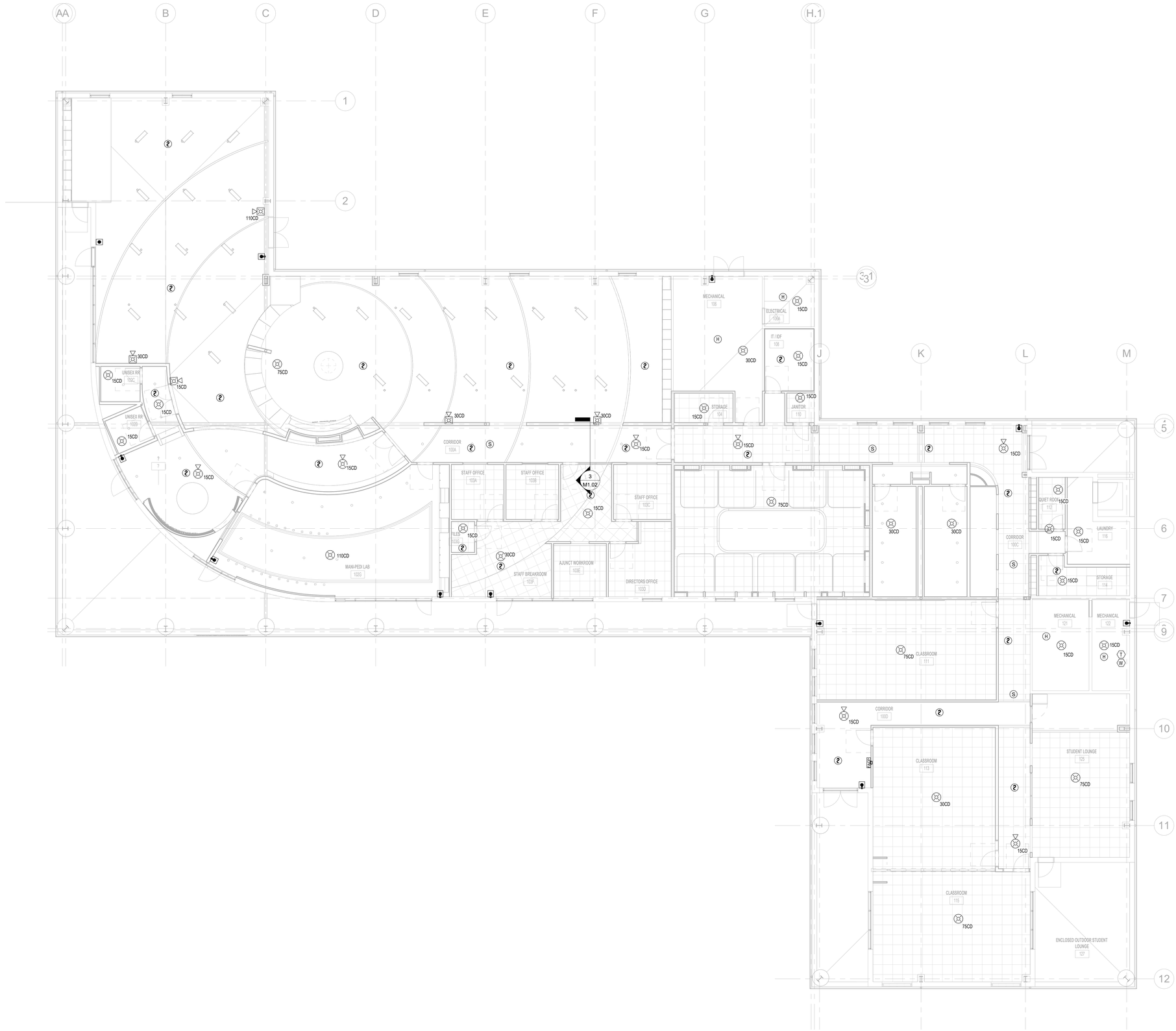
Sheet Title
MECHANICAL CONTROLS

Project Mgr:	JE
Designer:	JE
Drawn By:	JE
Checked By:	JE
Date:	10/14/2024
Job No.:	1503

M7.01

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Texas Registered Engineering Firm #F-3811

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1 FIRE ALARM

1/8" = 1'-0"

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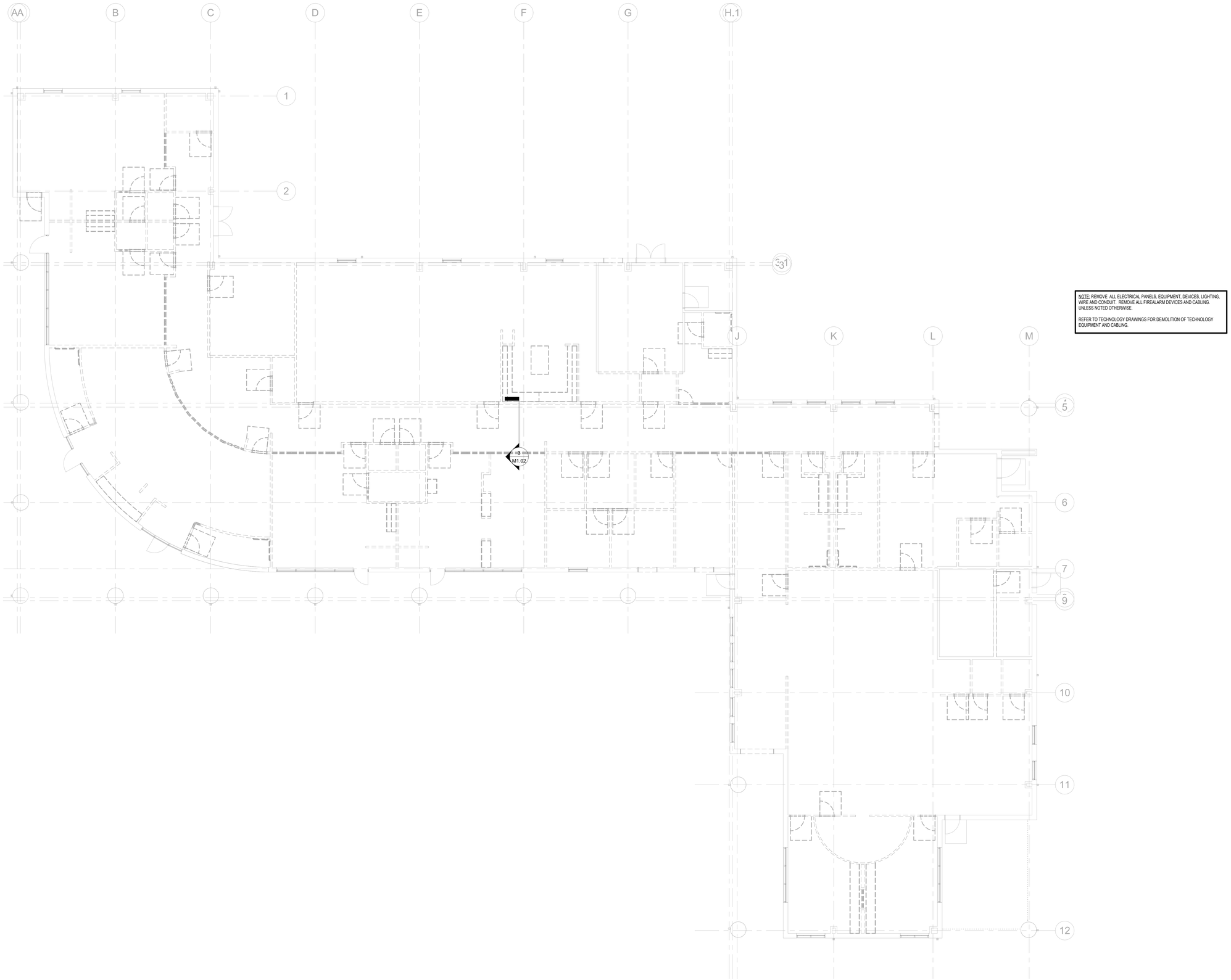
Sheet Title
FIRE ALARM PLAN

Project Mgr:	
Designer:	
Drawn By:	JE
Checked By:	JE
Date:	10/14/2024
Job No.:	1503

FA1.01

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NOTE: REMOVE ALL ELECTRICAL PANELS, EQUIPMENT, DEVICES, LIGHTING, WIRE AND CONDUIT. REMOVE ALL FIREALARM DEVICES AND CABLING. UNLESS NOTED OTHERWISE.

REFER TO TECHNOLOGY DRAWINGS FOR DEMOLITION OF TECHNOLOGY EQUIPMENT AND CABLING.

1 ELECTRICAL POWER DEMO PLAN

1/8" = 1'-0"

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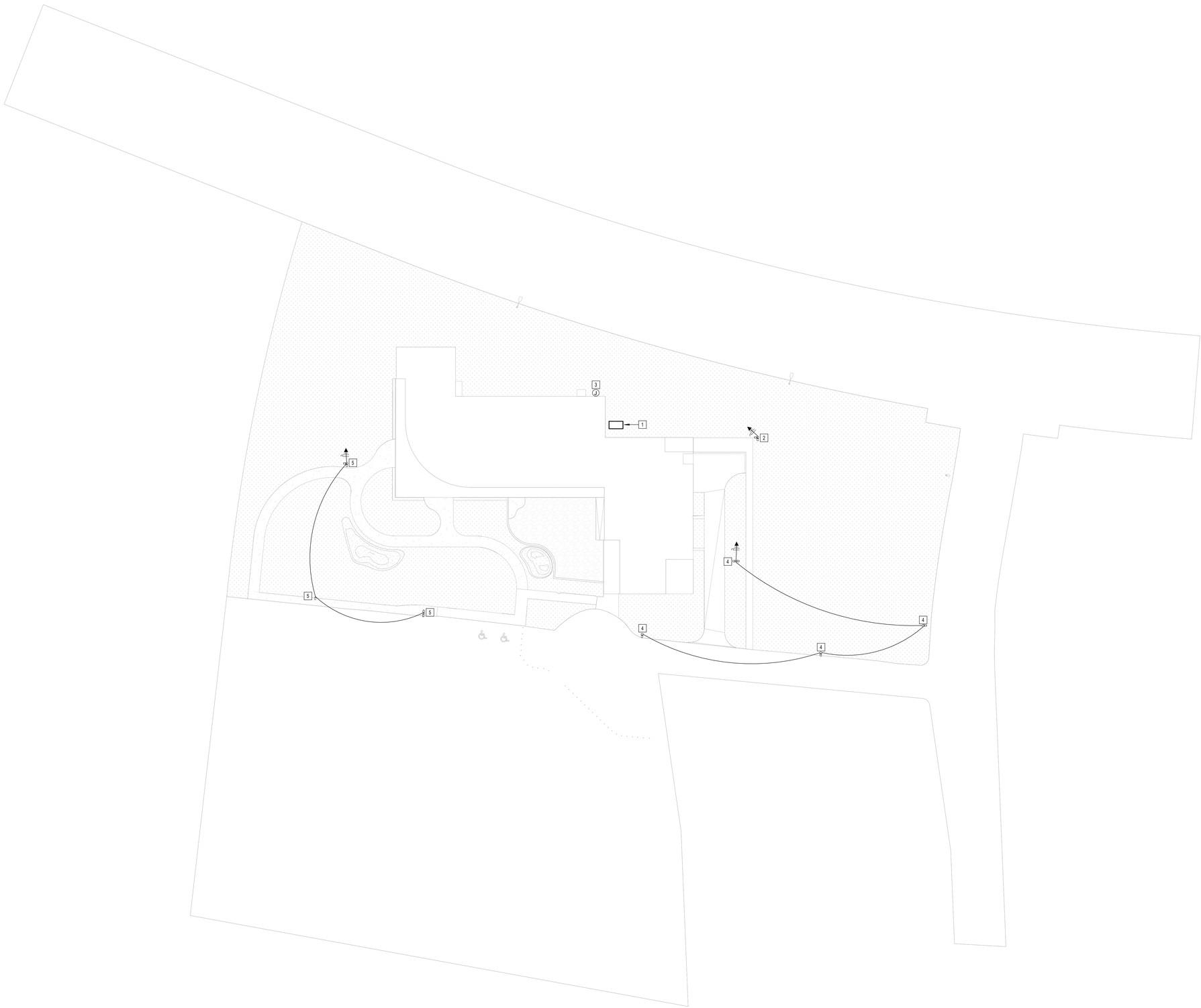
Sheet Title
ELECTRICAL DEMOLITION PLAN

Project Mgr:	
Designer:	
Drawn By:	JE
Checked By:	JE
Date:	10/14/2024
Job No.:	1503

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ELECTRICAL KEYED NOTE

#	KEYNOTE
1	EXISTING ELECTRICAL TRANSFORMER AND BREAKER IN AN ENCLOSURE
2	EXISTING POLE LIGHT TO REMAIN. RECONNECT CIRCUIT TO H1-13
3	EXISTING ELECTRICAL JUNCTION BOX TO BE REPLACED.
4	EXISTING POLE LIGHT TO REMAIN. RECONNECT CIRCUIT TO H1-11
5	EXISTING POLE LIGHT TO REMAIN. RECONNECT CIRCUIT TO H1-9

NOTE: ALL EXISTING POLE LIGHTS ARE EXISTING TO REMAIN. RECONNECT TO NEW PANEL H1

1 **ELECTRICAL SITE PLAN**
1" = 30'-0"

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Sheet Title
ELECTRICAL SITE PLAN

Project Mgr:
Designer:
Drawn By: JE
Checked By: JE
Date: 10/14/2024
Job No.: 1503

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SYMBOL LEGEND

SWITCHES

- S — SWITCH, SPST, 20A, 120/277V
- S 3 — SWITCH, 20A, 120/277V, "2" DENOTES DPST, "3" DENOTES THREE-WAY, "4" DENOTES FOUR-WAY.
- D — DIMMER CONTROL SWITCH, 1000 WATT UNLESS OTHERWISE NOTED
- S M — SWITCH, MOTION SENSOR, NOVITAS #01-133
- S OC — WALL MOUNTED OCCUPANT SENSOR WITH 0-10V DIMMER. PROVIDE ENOUGH SENSORS(CEILING OR WALL MOUNTED) FOR FULL ROOM COVERAGE. CONNECT LIGHT FIXTURES SERVING ROOM THROUGH NEW SENSOR(S). LIGHTS MUST BE TURNED ON MANUALLY (OR OPTIONALLY CAN BE CONFIGURED TO COME ON AUTOMATICALLY TO 50%). EATON #VSW-P-010
- HASH MARKS INDICATE NUMBER OF CONDUCTORS PHASE/NEUTRAL/SWITCH LEG/GROUND FROM LEFT TO RIGHT. NO HASH MARKS INDICATES 2#12, 1#12G, UNLESS OTHERWISE NOTED.
- UNDERGROUND CONDUIT

RECEPTACLES AND OUTLETS

- DUPLEX WALL RECEPTACLE, NEMA 5-15R, 15A, 125V OR NEMA 5-20R, 20A, 125V, RE: SPECIFICATIONS, DOT INDICATES ABOVE COUNTER.
- WP — DUPLEX WALL RECEPTACLE. "WP" DENOTES WEATHERPROOF, "TP" DENOTES SAFETY TYPE. "GFI" DENOTES GROUND FAULT PROTECTION, DOT INDICATES ABOVE COUNTER.
- FOURPLEX WALL RECEPTACLE. NEMA 5-15R, 15A, 125V. DOT INDICATES ABOVE COUNTER.
- SPECIAL RECEPTACLE, NEMA CONFIGURATION AS NOTED. DOT INDICATES ABOVE COUNTER.
- FLOOR OUTLET
- C — DUPLEX CELING RECEPTACLE, NEMA 5-15R, 15A, 125V OR NEMA 5-20R, 20A, 125V, RE: SPECIFICATIONS,C INDICATES CEILING MOUNTING.
- JUNCTION BOX
- DIRECT CONNECTION TO EQUIPMENT
- TELEPHONE WALL OUTLET. PROVIDE 2"X4" OUTLET BOX WITH 3/4" CONDUIT AND PULL STRING TO ABOVE CEILING.
- DATA WALL OUTLET. PROVIDE 2"X4" OUTLET BOX WITH 3/4" CONDUIT AND PULL STRING TO ABOVE CEILING.
- COMBINATION RECEPTACLE/TELEPHONE/DATA FLOOR OUTLET
- HUBBELL #S4333 FLOOR BOX HUBBELL 1 - #S3825 AND 2 - #S3625 COVER HUBBELL, #SB3086 CARPET FLANGE
- HUBBELL #S4233 FLOOR BOX HUBBELL 1 - #S3825 COVER AND 1 - #S3625 COVER HUBBELL, #SB3084 CARPET FLANGE
- HUBBELL #S2436 FLOOR BOX HUBBELL #S3825 COVER HUBBELL, #SB3083 CARPET FLANGE
- C — CATV. PROVIDE 2"x4" OUTLET BOX WITH 3/4" CONDUIT AND PULL STRING TO ABOVE CEILING.

ELECTRICAL EQUIPMENT

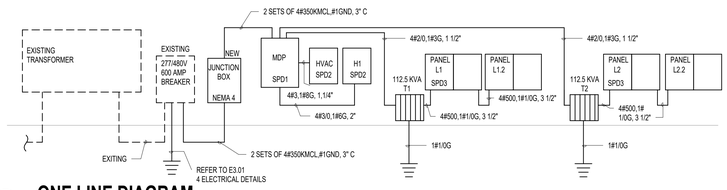
- DISTRIBUTION PANEL
- PLYWOOD TERMINAL BOARD, TYPE AS NOTED, 4' X 8' X 3/4", UNLESS NOTED OTHERWISE
- T — TRANSFORMER

MOTORS AND CONTROLS

- SINGLE OR THREE PHASE MOTOR
- DISCONNECT (SAFETY) SWITCH "200/3/150" DENOTES AMPERES/POLE/FUSE, "NF" DENOTES NON-FUSED
- MOTOR STARTER
- COMBINATION DISCONNECT (SAFETY) SWITCH AND MOTOR STARTER, "30/3/15/60" DENOTES AMPERES/POLES/FUSE/ STARTER SIZE, "NF" DENOTES NON-FUSED.
- M — MANUAL MOTOR STARTING WITH THERMAL OVERLOAD

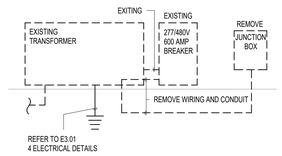
FIRE ALARM

- FACP — FIRE ALARM CONTROL PANEL (FLUSH/SURFACE)
- CEILING SPEAKER/STROBE
- WALL SPEAKER/STROBE
- CEILING STROBE
- WALL STROBE
- S — SPEAKER
- MANUAL PULL STATION
- 2 — AREA SMOKE DETECTOR, "H" HEAT DETECTOR, "DD" DUCT DETECTOR.
- W — SPRINKLER FLOW SWITCH
- T — VALVE SUPERVISORY SWITCH
- NL — NIGHT LIGHT



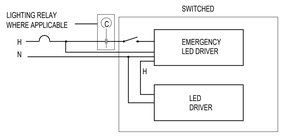
1 ONE LINE DIAGRAM

N.T.S.



2 ONE LINE DIAGRAM DEMO

N.T.S.



3 TYPICAL EMERGENCY LED DRIVER WIRING

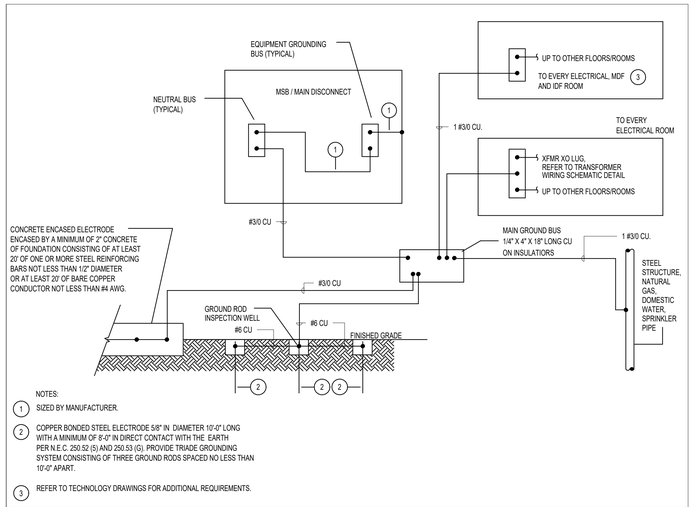
12" = 1'-0"

MARK	TRANSFORMER FEEDER SCHEDULE - HARMONIC MITIGATING - 3 PHASE							
	PRIMARY VOLTAGE				SECONDARY VOLTAGE			
	480V, THREE PHASE				120/208V, THREE PHASE, FOUR WIRE			
	KVA	FEEDER	CONDUIT	BREAKER	FEEDER	CONDUIT	BREAKER	G.E.C. SIZE
	15	3#10, 1#10G.	3/4"	25A/3P	3#6, 1#4N, 1#8G.	1"	60A/3P	#6
	30	3#8, 1#10G.	1"	45A/3	3#3, 1#1/0N, 1#8G.	1 1/4"	100A/3P	#6
	45	3#4, 1#8G.	1"	70A/3P	3#1/0, 1#4/0N, 1#6G.	2"	150A/3P	#6
	75	3#1, 1#6G.	1 1/4"	125A/3P	3#250, 2#3/0N, 1#2G.	3"	250A/3P	#2
	112.5	3#2/0, 1#6G.	1 1/2"	175A/3P	3#600, 2#300N, 1 #1/0G.	4"	400A/3P	#1/0

LOAD ANALYSIS

Load Classification	Connected Load (VA)	Demand Factor	Estimated Demand (VA)	Estimated Demand Current
Lighting	15702 VA	125.00%	19627 VA	24 A
Receptacle	88980 VA	55.62%	49490 VA	60 A
HVAC	85046 VA	100.00%	85046 VA	102 A
Power	92840 VA	100.00%	92840 VA	112 A
25% Largest Motor	16731 VA	125.00%	20914 VA	25 A
Total Connected Load (VA):	299474 VA	**Total Demand Load (VA):**	268136 VA	
		Total Current:	323 A	

480/277 Wye, 3 Phase, 4 Wire Service



NOTES:

1. SIZED BY MANUFACTURER.
2. COPPER BONDED STEEL ELECTRODE 5/8" IN DIAMETER 10'-0" LONG WITH A MINIMUM OF 8'-0" IN DIRECT CONTACT WITH THE EARTH PER N.E.C. 250.52 (5) AND 250.53 (G). PROVIDE TRIADE GROUNDING SYSTEM CONSISTING OF THREE GROUND RODS SPACED NO LESS THAN 10'-0" APART.
3. REFER TO TECHNOLOGY DRAWINGS FOR ADDITIONAL REQUIREMENTS.

GROUNDING ELECTRODE SYSTEM AND BONDING DETAIL
NOT TO SCALE

4 ELECTRICAL DETAILS

12" = 1'-0"

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N. CURTIS JONES, JR. 58428 REGISTERED PROFESSIONAL ENGINEER
JE#4921
07/22/2025
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY N. CURTIS JONES, JR, P.E. 58428

Project Status:
CONSTRUCTION DOCUMENTS

No.	DATE	DESCRIPTION
	09.12.2024	ISSUE FOR REVIEW

Sheet Title
ELECTRICAL DETAILS

Project Mgr:	
Designer:	
Drawn By:	JE
Checked By:	JE
Date:	10/14/2024
Job No.:	1503

E3.01

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Texas Registered Engineering Firm #F-3811

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

BRANCH PANEL: MDP

LOCATION: ELECTRICAL 106A
SUPPLY FROM: SW1
MOUNTING: SURFACE
ENCLOSURE: Type 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING:
MAINS TYPE: MLO
MAINS RATING: 600 A
MCB RATING:

NOTES:

CKT	CIRCUIT DESCRIPTION	WIRE	TRIP	POLES	A	B	C	POLES	TRIP	WIRE	CIRCUIT DESCRIPTION	CKT
1					2624... 7615 VA							2
3	PANEL HVAC		100 A	3		26245... 6743 VA		3	100 A		PANEL H1	4
5							26245 VA 7330...					6
7					2958... 32320 VA							8
9	XFMR T1		175 A	3		29116... 31020...		3	175 A		XFMR T2	10
11							28904 VA 3138...					12
13	SPARE	--	20 A	1	0 VA 0 VA			1	20 A	--	SPARE	14
15	SPARE	--	20 A	1		0 VA 0 VA		1	20 A	--	SPARE	16
17	SPARE	--	20 A	1			0 VA 0 VA	1	20 A	--	SPARE	18
19	SPACE	--	--	1	-- --			1	--	--	SPACE	20
21	SPACE	--	--	1		-- --		1	--	--	SPACE	22
23	SPACE	--	--	1			-- --	1	--	--	SPACE	24
25	SPACE	--	--	1	-- --			1	--	--	SPACE	26
27	SPACE	--	--	1		-- --		1	--	--	SPACE	28
29	SPACE	--	--	1			-- --	1	--	--	SPACE	30
31	SPACE	--	--	1	-- --			1	--	--	SPACE	32
33	SPACE	--	--	1		-- --		1	--	--	SPACE	34
35	SPACE	--	--	1			-- --	1	--	--	SPACE	36
37	SPACE	--	--	1	-- 0 VA							38
39	SPACE	--	--	1		-- 0 VA		3	30 A	--	SPD1	40
41	SPACE	--	--	1			-- 0 VA					42
				TOTAL LOAD:	95760 VA	93124 VA	93859 VA					
				TOTAL AMPS:	346 A	336 A	339 A					

LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
HVAC	85046 VA	100.00%	85046 VA		
Lighting	15702 VA	125.00%	19627 VA	**TOTAL CONN. LOAD:**	282743 VA
Lighting - Exterior	175 VA	125.00%	219 VA	**TOTAL EST. DEMAND:**	247222 VA
Power	92840 VA	100.00%	92840 VA	**TOTAL CONN.:**	340 A
Receptacle	88980 VA	55.62%	49490 VA	**TOTAL EST. DEMAND:**	297 A

NOTES:

BRANCH PANEL: H1

LOCATION: ELECTRICAL 106A
SUPPLY FROM: MDP
MOUNTING: SURFACE
ENCLOSURE: Type 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING:
MAINS TYPE: MLO
MAINS RATING: 100 A
MCB RATING:

NOTES:

CKT	CIRCUIT DESCRIPTION	WIRE	TRIP	POLES	A	B	C	POLES	TRIP	WIRE	CIRCUIT DESCRIPTION	CKT
1	LIGHTING COSMETOLOGY LAB 102F	#12	20 A	1	1142... 1937 VA			1	20 A	#12	LIGHTING LOBBY	2
3	LIGHTING LAB102F	#12	20 A	1			1530 VA 1109 VA	1	20 A	#12	LIGHTING CORRIDOR 100B/100C/100D	4
5	LIGHTING STAFF OFFICES/106/106A/104/105/110	#12	20 A	1			2236 VA 991...	1	20 A	#12	LIGHTING 107/109/112/111/114/116/121/122	6
7	LIGHTING 113/115/125	#12	20 A	1	1150... 483 VA			1	20 A	#12	LIGHTING - EXTERIOR *	8
9	EXISTING LIGHTING EXTERIOR * , **		20 A	1		2000 VA 2104 VA						10
11	EXISTING LIGHTING EXTERIOR * , **		20 A	1			2000 VA 2104...	3	20 A	#10	EF-1	12
13	EXISTING LIGHTING EXTERIOR * , **		20 A	1	800... 2104 VA							14
15	SPARE	--	20 A	1		0 VA 0 VA		1	20 A	--	SPARE	16
17	SPARE	--	20 A	1			0 VA 0 VA	1	20 A	--	SPARE	18
19	SPARE	--	20 A	1	0 VA 0 VA			1	20 A	--	SPARE	20
21	SPACE	--	--	1		-- --		1	--	--	SPACE	22
23	SPACE	--	--	1			-- --	1	--	--	SPACE	24
25	SPACE	--	--	1	-- --			1	--	--	SPACE	26
27	SPACE	--	--	1		-- --		1	--	--	SPACE	28
29	SPACE	--	--	1			-- --	1	--	--	SPACE	30
31	SPACE	--	--	1	-- --			1	--	--	SPACE	32
33	SPACE	--	--	1		-- --		1	--	--	SPACE	34
35	SPACE	--	--	1			-- --	1	--	--	SPACE	36
37	SPACE	--	--	1	-- 0 VA							38
39	SPACE	--	--	1		-- 0 VA		3	30 A	--	SPD2	40
41	SPACE	--	--	1			-- 0 VA					42
				TOTAL LOAD:	7615 VA	6743 VA	7330 VA					
				TOTAL AMPS:	28 A	24 A	27 A					

LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
HVAC	6311 VA	100.00%	6311 VA		
Lighting	15202 VA	125.00%	19002 VA	**TOTAL CONN. LOAD:**	21688 VA
Lighting - Exterior	175 VA	125.00%	219 VA	**TOTAL EST. DEMAND:**	25532 VA
				TOTAL CONN.:	26 A
				TOTAL EST. DEMAND:	31 A

NOTES:
** RECONNECT EXISTING EXTERIOR SIGHT LIGHTING * .
EXTERIOR LIGHTING CONTROL.
AUTO OFF WHEN DAYLIGHT AVAILABLE. FACADE, LANDSCAPE LIGHTS AUTO OFF WITH FUNCTION OF DUSK/DAWN AND OPEN CLOSE TIME.
REDUCE LIGHTING >= 30% NO LATER THAN MIDNIGHT TO 6am, ONE HOUR AFTER CLOSING TO ONE HOUR BEFORE OPENING, OR WHEN NO ACTIVITY FOR > 15 MINUTES....

SPD SCHEDULE

MARK	MODEL	CABLE SIZE
SPD1	160KA PER PHASE, 277/480V, 3 PHASE	5 #10, 1 1/2" C
SPD2	120KA PER PHASE, 277/480V, 3 PHASE	5 #10, 1 1/2" C
SPD3	80KA PER PHASE, 120/208V, 3 PHASE	5 #10, 1 1/2" C

BRANCH PANEL: HVAC

LOCATION: ELECTRICAL 106A
SUPPLY FROM: MDP
MOUNTING: SURFACE
ENCLOSURE: Type 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING:
MAINS TYPE: MLO
MAINS RATING: 200 A
MCB RATING:

NOTES:

CKT	CIRCUIT DESCRIPTION	WIRE	TRIP	POLES	A	B	C	POLES	TRIP	WIRE	CIRCUIT DESCRIPTION	CKT
1					3718... 5577 VA							2
3	AHU-1 (10 HP)	#10	30 A	3		3718 VA 5577 VA		3	30 A	#10	CHWP-1 (15HP)	4
5							3718 VA 5577...					6
7					2018... 5577 VA							8
9	AHU-2 (5 HP)	#10	30 A	3		2018 VA 5577 VA		3	30 A	#10	CHWP-2 (15HP)	10
11							2018 VA 5577...					12
13					2018... 5577 VA							14
15	AHU-3 (5 HP)	#10	30 A	3		2018 VA 5577 VA		3	30 A	#10	HHWP-1 (15HP)	16
17							2018 VA 5577...					18
19					1760... 0 VA			1	20 A	--	SPARE	20
21	AHU-4 (5 HP)	#10	30 A	3		1760 VA 0 VA		1	20 A	--	SPARE	22
23							1760 VA 0 VA	1	20 A	--	SPARE	24
25	SPACE	--	--	1	-- --			1	--	--	SPACE	26
27	SPACE	--	--	1		-- --		1	--	--	SPACE	28
29	SPACE	--	--	1			-- --	1	--	--	SPACE	30
31	SPACE	--	--	1	-- --			1	--	--	SPACE	32
33	SPACE	--	--	1		-- --		1	--	--	SPACE	34
35	SPACE	--	--	1			-- --	1	--	--	SPACE	36
37	SPACE	--	--	1	-- 0 VA							38
39	SPACE	--	--	1		-- 0 VA		3	30 A	--	SPD2	40
41	SPACE	--	--	1			-- 0 VA					42
				TOTAL LOAD:	26245 VA	26245 VA	26245 VA					
				TOTAL AMPS:	95 A	95 A	95 A					

LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
HVAC	78735 VA	100.00%	78735 VA		
				TOTAL CONN. LOAD:	78735 VA
				TOTAL EST. DEMAND:	78735 VA
				TOTAL CONN.:	95 A
				TOTAL EST. DEMAND:	95 A

NOTES:

BRANCH PANEL: L1

LOCATION: ELECTRICAL 106A
SUPPLY FROM: T1
MOUNTING: SURFACE
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING:
MAINS TYPE: MCB
MAINS RATING: 400 A
MCB RATING: 350 A

NOTES:

CKT	CIRCUIT DESCRIPTION	WIRE	TRIP	POLES	A	B	C	POLES	TRIP	WIRE	CIRCUIT DESCRIPTION	CKT
1	PEDICURE CHAIR RECEPTACLE	#8	20 A	1	1080... 360 VA			1	20 A	#8	MANI-PEDI LAB 102G QUAD-RECEPTACLE	2
3	PEDICURE CHAIR RECEPTACLE	#8	20 A	1		1080 VA 360 VA		1	20 A	#8	MANI-PEDI LAB 102G QUAD-RECEPTACLE	4
5	PEDICURE CHAIR RECEPTACLE	#8	20 A	1			1080 VA 360...	1	20 A	#8	MANI-PEDI LAB 102G QUAD-RECEPTACLE	6
7	PEDICURE CHAIR RECEPTACLE	#8	20 A	1	1080... 360 VA			1	20 A	#8	MANI-PEDI LAB 102G QUAD-RECEPTACLE	8
9	PEDICURE CHAIR RECEPTACLE	#8	20 A	1		1080 VA 360 VA		1	20 A	#8	MANI-PEDI LAB 102G QUAD-RECEPTACLE	10
11	PEDICURE CHAIR RECEPTACLE	#8	20 A	1			1080 VA 360...	1	20 A	#8	MANI-PEDI LAB 102G QUAD-RECEPTACLE	12
13	PEDICURE CHAIR RECEPTACLE	#8	20 A	1	1080... 360 VA			1	20 A	#8	MANI-PEDI LAB 102G QUAD-RECEPTACLE	14
15	PEDICURE CHAIR RECEPTACLE	#8	20 A	1		1080 VA 360 VA		1	20 A	#8	MANI-PEDI LAB 102G QUAD-RECEPTACLE	16
17	PEDICURE CHAIR RECEPTACLE	#8	20 A	1			1080 VA 360...	1	20 A	#10	MANI-PEDI LAB 102G QUAD-RECEPTACLE	18
19	PEDICURE CHAIR RECEPTACLE	#8	20 A	1	1080... 360 VA			1	20 A	#10	MANI-PEDI LAB 102G QUAD-RECEPTACLE	20
21	M 106 / S 104 RECEPTACLES	#12	20 A	1		540 VA 360 VA		1	20 A	#10	MANI-PEDI LAB 102G QUAD-RECEPTACLE	22
23	RECEPTACLES	#10	20 A	1			360 VA 180...	1	20 A	#12	IT/IDF 108 RECEPTACLES	24
25	RECEPTACLES SHAMPOO STATION 102D	#12	20 A	1	540... 180 VA			1	20 A	#12	RECEPTACLE 110	26
27	JUNCTION BOX IT EQUIPMENT 108	#12	30 A	1		1000 VA 900 VA		1	20 A	#10	TV RECEPTACLES	28
29	JUNCTION BOX IT EQUIPMENT 108	#12	20 A	1			1000 VA 1000...	1	20 A	#12	DDC CONTROLS	30
31	JUNCTION BOX IT EQUIPMENT 108	#12	30 A	1	1000... 1000 VA			1	20 A	#12	MOTORIZED DAMPER	32
33	JUNCTION BOX IT EQUIPMENT 108	#12	30 A	1		1000 VA 540 VA		1	20 A	#12	RECEPTICALS ESTETICS LAB 105	34
35	JUNCTION BOX IT EQUIPMENT 108	#12	20 A	1			1000 VA 540...	1	20 A	#10	RECEPTICALS ESTETICS LAB 105	36
37	JUNCTION BOX IT EQUIPMENT 108	#12	20 A	1	1000... 720 VA			1	20 A	#12	RECEPTICALS ESTETICS LAB 105	38
39	STAFF OFFICE 103A	#10	20 A	1		720 VA 540 VA		1	20 A	#10	RECEPTICALS ESTETICS LAB 105	40
41	STAFF OFFICE 103B	#10	20 A	1			720 VA 720...	1	20 A	#12	QUAD RECEPTICALS ESTETICS LAB 105	42
43	STAFF OFFICE 103C	#12	20 A	1	720... 720 VA			1	20 A	#12	QUAD RECEPTICALS ESTETICS LAB 105	44
45	DIRECTORS OFFICE 103D	#10	20 A	1		720 VA 720 VA		1	20 A	#12	QUAD RECEPTICALS ESTETICS LAB 105	46
47	AJUNCT WORKROOM 103E	#10	20 A	1			540 VA 720...	1	20 A	#10	QUAD RECEPTICALS ESTETICS LAB 105	48
49	AJUNCT WORKROOM 103E	#10	20 A	1	540... 360 VA			1	20 A	#10	REFRIDGERATOR SB103F	50
51	STAFF BREAKROOM 103F	#10	20 A	1		360 VA 720 VA		1	20 A	#12	QUAD RECEPTICALS ESTETICS LAB 105	52
53	RECEPTACLE EL105	#12	20 A	1			540 VA 540...	1	20 A	#10	RECEPTACLES L102E AND MPL102G	54
55	STAFF BREAKROOM 103F	#10	20 A	1	360... 500 VA			1	20 A	#10	WATER FOUNTAIN	56
57	SMART SIGNAGEL L102E	#10	20 A	1		1200 VA 180 VA		1	20 A	#10	VAV-2-1	58
59	SMART SIGNAGEL C100C	#12	20 A	1			1200 VA 180...	1	20 A	#12	VAV2-4	60
61	VAV-2-3	#12	20 A	1	180... 180 VA			1	20 A	#12	VAV-2-2	62
63	IT/IDF 108 RECEPTACLES	#12	20 A	1		180 VA 180 VA		1	20 A	#12	IT/IDF 108 RECEPTACLES	64
65	IT/IDF 108 RECEPTACLES	#12	20 A	1			180 VA 500...	1	20 A	#12	FIRE ALARM CONTROL PANEL	66
67	IT/IDF 108 RECEPTACLES	#12	20 A	1	180... 360 VA			1	20 A	#10	RECEPTION 103F RECEPTACLE	68
69	IT/IDF 108 RECEPTACLES	#12	20 A	1		180 VA 180 VA		1	20 A	#12	IT/IDF 108 RECEPTACLES	70
71	STAFF BREAKROOM 103F RECEPTACLE	#10	20 A	1			180 VA 50 VA	1	20 A	#12	FAN JANITOR 110	72
73	FCU-1	#12	20 A	1	506... 0 VA			1	20 A	--	SPARE	74
75	SPARE	--	20 A	1		0 VA 0 VA		1	20 A	--	SPARE	76
77	SPARE	--	20 A	1			0 VA 0 VA	1	20 A	--	SPARE	78
79					1477... 0 VA							80
81	PANEL L1.2 (1)		200 A	3		14576... 0 VA		3	30 A	--	SPD3	82
83							14434 VA 0 VA					84
				TOTAL LOAD:	29580 VA	29116 VA	28904 VA					
				TOTAL AMPS:	247 A	243 A	241 A					

LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Lighting	500 VA	125.00%	625 VA		
Power	28900 VA	100.00%	28900 VA	**TOTAL CONN. LOAD:**	87600 VA
Receptacle	58200 VA	58.59%	34100 VA	**TOTAL EST. DEMAND:**	63625 VA
				TOTAL CONN.:	243 A
				TOTAL EST. DEMAND:	177 A

NOTES:

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07/22/2025
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY N. CURTIS JONES, JR, P.E. 59428

Project Status:
CONSTRUCTION DOCUMENTS

No.	DATE	DESCRIPTION
	09.12.2024	ISSUE FOR REVIEW
1	07.22.2025	ADDENDUM-4- PRE BID REVISION

Sheet Title
ELECTRICAL SCHEDULES

Project Mgr:
Designer:
Drawn By: JE
Checked By: JE
Date: 10/14/2024
Job No.: 1503

E3.02

JONES ENGINEERS, L.P.
Consulting Mechanical/Electrical/Plumbing Engineers
9820 Whithorn Dr. Houston, Texas 77095 (713)222-7766
Texas Registered Engineering Firm #F-3811

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

BRANCH PANEL: L1.2

LOCATION: LAUNDRY 116
SUPPLY FROM: L1
MOUNTING: SURFACE
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING:
MAINS TYPE: MLO
MAINS RATING: 200 A
MCB RATING:

NOTES:

CKT	CIRCUIT DESCRIPTION	WIRE	TRIP	POLES	A	B	C	POLES	TRIP	WIRE	CIRCUIT DESCRIPTION	CKT
1	RECEPTACLES SL125	#12	20 A	1	180... 540 VA			1	20 A	#12	RECEPTACLES CR112 / L116	2
3	RECEPTACLES SL125	#12	20 A	1		540 VA 720 VA		1	20 A	#12	QUAD RECEPTACLES CR111	4
5	RECEPTACLES SL125	#12	20 A	1			180 VA 720...	1	20 A	#12	QUAD RECEPTACLES CR111	6
7	QUAD RECEPTACLES CR115	#10	20 A	1	720... 720 VA			1	20 A	#12	QUAD RECEPTACLES CR111	8
9	QUAD RECEPTACLES CR115	#10	20 A	1		720 VA 360 VA		1	20 A	#12	QUAD RECEPTACLES CR111	10
11	QUAD RECEPTACLES CR115	#10	20 A	1			720 VA 720...	1	20 A	#12	QUAD RECEPTACLES CR111	12
13	QUAD RECEPTACLES CR115	#10	20 A	1	720... 720 VA			1	20 A	#12	QUAD RECEPTACLES CR111	14
15	RECEPTACLES CR115	#10	20 A	1		360 VA 360 VA		1	20 A	#12	RECEPTACLES C111	16
17	RECEPTACLE CORRIDOR	#12	20 A	1			180 VA 500...	1	20 A	#12	GWH-1 PUMP	18
19	QUAD RECEPTACLES CR113	#12	20 A	1	720... 540 VA			1	20 A	#12	RECEPTACLES S114	20
21	QUAD RECEPTACLES CR113	#12	20 A	1		720 VA 720 VA		1	20 A	#12	QUAD RECEPTACLES CR113	22
23	SINK SENSORS RR107	#12	20 A	1			540 VA 1000...	1	20 A	#12	DDC CONTROLS	24
25	RECEPTACLES RR 107/109	#12	20 A	1	360... 360 VA			1	20 A	#12	RECEPTACLES C100C	26
27	RECEPTACLES CR113 / C100D	#12	20 A	1		540 VA 500 VA		1	20 A	#12	BOILER CONTROLS	28
29	VENDING MACHINE RECEPTACLES SL125	#12	20 A	1			1200 VA 1000...	1	20 A	#12	MOTORIZED DAMPER	30
31	WATER FOUNTAIN	#12	20 A	1	500... 180 VA			1	20 A	#12	REFRIGERATOR RECEPTACLE SL125	32
33	SINK SENSORS RR109	#12	20 A	1		540 VA 1200 VA		1	20 A	#12	MICROWAVE RECEPTACLES SL125	34
35	WASHER	#12	20 A	1			1800 VA 778...	2	20 A	#12	DRYER	36
37	WASHER	#12	20 A	1	1800... 778 VA							38
39	GWH CONTROLS	#12	20 A	1		1000 VA 778 VA		2	20 A	#12	DRYER	40
41	VAV-4-2	#12	20 A	1			180 VA 778...					42
43	VAV-4-1	#12	20 A	1	180... 778 VA			2	20 A	#12	DRYER	44
45	RECEPTACLE CORRIDOR 100C	#12	20 A	1		180 VA 778 VA						46
47	VAV-4-3	#12	20 A	1			180 VA 778...	2	20 A	#12	DRYER	48
49	SMART SIGNAGE	#10	20 A	1	1200... 778 VA							50
51	WASHER	#12	20 A	1		1800 VA 1200 VA		1	20 A	#10	SMART SIGNAGE	52
53	VAV-4-4	#10	20 A	1			180 VA 600...	1	20 A	#12	SLIDING DOOR	54
55	WASHERS	#12	20 A	1	1800... 1200 VA			1	20 A	#12	VENDING MACHINE RECEPTACLES SL125	56
57	RECEPTACLES M121 / M122	#12	20 A	1		360 VA 1200 VA		1	20 A	#10	EXTERIOR BIG ASS FAN	58
59	MICROWAVE RECEPTACLES SL125	#12	20 A	1			1200 VA 1200...	1	20 A	#12	MICROWAVE RECEPTACLES SL125	60
61	SPARE	--	20 A	1	0 VA 0 VA			1	20 A	--	SPARE	62
63	SPARE	--	20 A	1		0 VA 0 VA		1	20 A	--	SPARE	64
65	SPARE	--	20 A	1			0 VA 0 VA	1	20 A	--	SPARE	66
67	SPACE	--	--	1	-- --			1	--	--	SPACE	68
69	SPACE	--	--	1		-- --		1	--	--	SPACE	70
71	SPACE	--	--	1			-- --	1	--	--	SPACE	72
73	SPACE	--	--	1	-- --			1	--	--	SPACE	74
75	SPACE	--	--	1		-- --		1	--	--	SPACE	76
77	SPACE	--	--	1			-- --	1	--	--	SPACE	78
79	SPACE	--	--	1	-- --			1	--	--	SPACE	80
81	SPACE	--	--	1		-- --		1	--	--	SPACE	82
83	SPACE	--	--	1			-- --	1	--	--	SPACE	84
					TOTAL LOAD: 14774 VA	14576 VA	14434 VA					
					TOTAL AMPS: 123 A	122 A	120 A					

LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Power	16724 VA	100.00%	16724 VA		
Receptacle	27060 VA	68.48%	18530 VA	**TOTAL CONN. LOAD:**	43784 VA
				TOTAL EST. DEMAND:	35254 VA
				TOTAL CONN.:	122 A
				TOTAL EST. DEMAND:	98 A

NOTES:

BRANCH PANEL: L2

LOCATION: COSMETOLOGY LAB 102F
SUPPLY FROM: T2
MOUNTING: SURFACE
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING:
MAINS TYPE: MCB
MAINS RATING: 400 A
MCB RATING: 350 A

NOTES:
FEED THROUGH LUGS

CKT	CIRCUIT DESCRIPTION	WIRE	TRIP	POLES	A	B	C	POLES	TRIP	WIRE	CIRCUIT DESCRIPTION	CKT
1	RECEPTACLES 102F	#12	20 A	1	540... 1200 VA			1	20 A	#12	HAIRDRYER RECEPTACLE 102F	2
3	RECEPTACLES 102F	#12	20 A	1		540 VA 1200 VA		1	20 A	#12	HAIRDRYER RECEPTACLE 102F	4
5	RECEPTACLES 102F	#12	20 A	1			540 VA 1200...	1	20 A	#12	HAIRDRYER RECEPTACLE 102F	6
7	RECEPTACLES 102F	#12	20 A	1	540... 1200 VA			1	20 A	#12	HAIRDRYER RECEPTACLE 102F	8
9	RECEPTACLES 102F	#12	20 A	1		540 VA 1200 VA		1	20 A	#12	HAIRDRYER RECEPTACLE 102F	10
11	RECEPTACLES 102F	#12	20 A	1			540 VA 1200...	1	20 A	#12	HAIRDRYER RECEPTACLE 102F	12
13	RECEPTACLES 102F	#12	20 A	1	540... 1200 VA			1	20 A	#12	HAIRDRYER RECEPTACLE 102F	14
15	RECEPTACLES 102F	#12	20 A	1		540 VA 1200 VA		1	20 A	#12	HAIRDRYER RECEPTACLE 102F	16
17	RECEPTACLES 102F	#12	20 A	1			540 VA 1200...	1	20 A	#12	HAIRDRYER RECEPTACLE 102F	18
19	RECEPTACLES 102F	#12	20 A	1	540... 1200 VA			1	20 A	#12	HAIRDRYER RECEPTACLE 102F	20
21	RECEPTACLES 102F	#12	20 A	1		540 VA 1200 VA		1	20 A	#12	HAIRDRYER RECEPTACLE 102F	22
23	RECEPTACLES 102F	#12	20 A	1			540 VA 1200...	1	20 A	#12	HAIRDRYER RECEPTACLE 102F	24
25	RECEPTACLES 102F	#12	20 A	1	540... 1200 VA			1	20 A	#12	HAIRDRYER RECEPTACLE 102F	26
27	RECEPTACLES 102F	#12	20 A	1		540 VA 1200 VA		1	20 A	#12	HAIRDRYER RECEPTACLE 102F	28
29	RECEPTACLES 102F	#12	20 A	1			540 VA 1200...	1	20 A	#12	HAIRDRYER RECEPTACLE 102F	30
31	RECEPTACLES 102F	#12	20 A	1	540... 1200 VA			1	20 A	#12	HAIRDRYER RECEPTACLE 102F	32
33	RECEPTACLES 102F	#12	20 A	1		540 VA 1200 VA		1	20 A	#12	HAIRDRYER RECEPTACLE 102F	34
35	RECEPTACLES 102F	#12	20 A	1			540 VA 1200...	1	20 A	#12	HAIRDRYER RECEPTACLE 102F	36
37	RECEPTACLES 102F	#12	20 A	1	540... 1200 VA			1	20 A	#12	HAIRDRYER RECEPTACLE 102F	38
39	RECEPTACLES 102F	#12	20 A	1		540 VA 1200 VA		1	20 A	#12	HAIRDRYER RECEPTACLE 102F	40
41	RECEPTACLES 102F	#12	20 A	1			540 VA 1200...	1	20 A	#12	HAIRDRYER RECEPTACLE 102F	42
43	RECEPTACLES 102F	#12	20 A	1	540... 1200 VA			1	20 A	#12	HAIRDRYER RECEPTACLE 102F	44
45	RECEPTACLES 102F	#12	20 A	1		540 VA 1200 VA		1	20 A	#12	HAIRDRYER RECEPTACLE 102F	46
47	RECEPTACLES 102F	#12	20 A	1			540 VA 1200...	1	20 A	#12	HAIRDRYER RECEPTACLE 102F	48
49	RECEPTACLES 102F	#12	20 A	1	540... 1200 VA			1	20 A	#12	HAIRDRYER RECEPTACLE 102F	50
51	RECEPTACLES 102F	#12	20 A	1		540 VA 1200 VA		1	20 A	#12	HAIRDRYER RECEPTACLE 102F	52
53	RECEPTACLES 102F	#12	20 A	1			540 VA 1200...	1	20 A	#12	HAIRDRYER RECEPTACLE 102F	54
55	RECEPTACLES 102F	#12	20 A	1	540... 1200 VA			1	20 A	#12	HAIRDRYER RECEPTACLE 102F	56
57	RECEPTACLES 102F	#10	20 A	1		540 VA 1200 VA		1	20 A	#10	HAIRDRYER RECEPTACLE 102F	58
59	RECEPTACLES 102F	#10	20 A	1			540 VA 1200...	1	20 A	#10	HAIRDRYER RECEPTACLE 102F	60
61	RECEPTACLES 102F	#10	20 A	1	540... 1200 VA			1	20 A	#10	HAIRDRYER RECEPTACLE 102F	62
63	RECEPTACLES 102F	#10	20 A	1		540 VA 0 VA		1	20 A	--	SPARE	64
65	SPARE	--	20 A	1			0 VA 1200...	1	20 A	#10	HAIRDRYER RECEPTACLE 102F	66
67	SPARE	--	20 A	1	0 VA 0 VA			1	20 A	--	SPARE	68
69	SPARE	--	20 A	1		0 VA 0 VA		1	20 A	--	SPARE	70
71	SPACE	--	--	1			-- --	1	--	--	SPACE	72
73	SPACE	--	--	1	-- --			1	--	--	SPACE	74
75	SPACE	--	--	1		-- --		1	--	--	SPACE	76
77	SPACE	--	--	1			-- --	1	--	--	SPACE	78
79	SPACE	--	--	1	-- 0 VA			1	--	--	SPACE	80
81	SPACE	--	--	1		-- 0 VA		3	30 A	--	SPD3	82
83	SPACE	--	--	1			-- 0 VA					84
					TOTAL LOAD: 32320 VA	31020 VA	31380 VA					
					TOTAL AMPS: 270 A	259 A	262 A					

LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Power	63940 VA	100.00%	63940 VA		
Receptacle	30780 VA	66.24%	20390 VA	**TOTAL CONN. LOAD:**	94720 VA
				TOTAL EST. DEMAND:	84330 VA
				TOTAL CONN.:	263 A
				TOTAL EST. DEMAND:	234 A

NOTES:

BRANCH PANEL: L2.2

LOCATION: COSMETOLOGY LAB 102F
SUPPLY FROM: L2
MOUNTING: SURFACE
ENCLOSURE: Type 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING:
MAINS TYPE: MLO
MAINS RATING: 400 A
MCB RATING:

NOTES:

CKT	CIRCUIT DESCRIPTION	WIRE	TRIP	POLES	A	B	C	POLES	TRIP	WIRE	CIRCUIT DESCRIPTION	CKT
1	RECEPTACLES 102F	#10	20 A	1	540... 1200 VA			1	20 A	#10	HAIRDRYER RECEPTACLE 102F	2
3	RECEPTACLES 102F	#10	20 A	1		540 VA 1200 VA		1	20 A	#10	HAIRDRYER RECEPTACLE 102F	4
5	RECEPTACLES 102F	#10	20 A	1			540 VA 1200...	1	20 A	#10	HAIRDRYER RECEPTACLE 102F	6
7	RECEPTACLES 102F	#10	20 A	1	540... 1200 VA			1	20 A	#10	HAIRDRYER RECEPTACLE 102F	8
9	RECEPTACLES 102F	#8	20 A	1		540 VA 1200 VA		1	20 A	#10	HAIRDRYER RECEPTACLE 102F	10
11	RECEPTACLES 102F	#10	20 A	1			540 VA 1200...	1	20 A	#10	HAIRDRYER RECEPTACLE 102F	12
13	RECEPTACLES 102F	#10	20 A	1	540... 1200 VA			1	20 A	#10	HAIRDRYER RECEPTACLE 102F	14
15	RECEPTACLES 102F	#10	20 A	1		540 VA 1200 VA		1	20 A	#10	HAIRDRYER RECEPTACLE 102F	16
17	RECEPTACLES 102F	#10	20 A	1			540 VA 1200...	1	20 A	#10	HAIRDRYER RECEPTACLE 102F	18
19	RECEPTACLES 102F	#10	20 A	1	540... 1200 VA			1	20 A	#10	HAIRDRYER RECEPTACLE 102F	20
21	RECEPTACLES 102F	#10	20 A	1		540 VA 1200 VA		1	20 A	#10	HAIRDRYER RECEPTACLE 102F	22
23	RECEPTACLES 102F	#10	20 A	1			540 VA 1200...	1	20 A	#10	HAIRDRYER RECEPTACLE 102F	24
25	RECEPTACLES 102F	#10	20 A	1	540... 1200 VA			1	20 A	#10	HAIRDRYER RECEPTACLE 102F	26
27	RECEPTACLES 102F	#10	20 A	1		540 VA 1200 VA		1	20 A	#10	HAIRDRYER RECEPTACLE 102F	28
29	RECEPTACLES 102F	#10	20 A	1			540 VA 1200...	1	20 A	#10	HAIRDRYER RECEPTACLE 102F	30
31	RECEPTACLES 102F	#10	20 A	1	540... 1200 VA			1	20 A	#10	HAIRDRYER RECEPTACLE 102F	32
33	RECEPTACLES 102F	#10	20 A	1		540 VA 1200 VA		1	20 A	#12	HAIRDRYER RECEPTACLE 102F	34
35	RECEPTACLES 102F	#12	20 A	1			540 VA 1200...	1	20 A	#10	HAIRDRYER RECEPTACLE 102F	36
37	RECEPTACLES 102F	#10	20 A	1	540... 1200 VA			1	20 A	#10	HAIRDRYER RECEPTACLE 102F	38
39	RECEPTACLES 102F	#10	20 A	1		540 VA 1200 VA		1	20 A	#10	HAIRDRYER RECEPTACLE 102F	40
41	QUAD RECEPTACLES 102F	#12	20 A	1			720 VA 720...	1	20 A	#10	QUAD RECEPTACLES 102F	42
43	RECEPTACLES COSMETOLOGY LAB 102F	#12	20 A	1	540... 360 VA			1	20 A	#10	RECEPTACLES L102E	44
45	RECEPTACLES SHAMPOO STATION 102A	#12	20 A	1		540 VA 360 VA		1	20 A	#12	RESTROOM 102C RECEPTACLES	46
47	LIGHTED SIGNAGE & RECEPTACLE	#12	20 A	1			180 VA 720...	1	20 A	#12	TV RECEPTACLES	48
49	RESTROOM FAN RR102C	#12	20 A	1	50 VA 50 VA			1	20 A	#12	RESTROOM FAN RR102B	50
51	SPARE	--	20 A	1		0 VA 0 VA		1	20 A	--	SPARE	52
53	SPARE	--	20 A	1			0 VA 0 VA	1	20 A	--	SPARE	54
55	SPARE	--	20 A	1	0 VA 0 VA			1	20 A	--	SPARE	56
57	SPACE	--	--	1		-- --		1	--	--	SPACE	58
59	SPACE	--	--	1			-- --	1	--	--	SPACE	60
61	SPACE	--	--	1	-- --			1	--	--	SPACE	62
63	SPACE	--	--	1		-- --		1	--	--	SPACE	64
65	SPACE	--	--	1			-- --	1	--	--	SPACE	66
67	SPACE	--	--	1	-- --			1	--	--	SPACE	68
69	SPACE	--	--	1		-- --		1	--	--	SPACE	70
71	SPACE	--	--	1			-- --	1	--	--	SPACE	72
73	SPACE	--	--	1	-- --			1	--	--	SPACE	74
75	SPACE	--	--	1		-- --		1	--	--	SPACE	76
77	SPACE	--	--	1			-- --	1	--	--	SPACE	78
79	SPACE	--	--	1	-- --			1	--	--	SPACE	80
81	SPACE	--	--	1		-- --		1	--	--	SPACE	82
83	SPACE	--	--	1			-- --	1	--	--	SPACE	84
					TOTAL LOAD: 13180 VA	13080 VA	12780 VA					
					TOTAL AMPS: 110 A	109 A	107 A					

LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Power	25540 VA	100.00%	25540 VA		
Receptacle	13500 VA	87.04%	11750 VA	**TOTAL CONN. LOAD:**	39040 VA
				TOTAL EST. DEMAND:	37290 VA
				TOTAL CONN.:	108 A
				TOTAL EST. DEMAND:	104 A

NOTES:

LIGHT FIXTURE SCHEDULE

Mark	Description	Mounting	Lamps/ Watts	Type	Volts	Remarks
C1	HE WILLIAMS #4DR-TL-L15-840-DIM-UNV-OW-OF-CS	RECESSED	13.9	LED	UNV	
C1E	HE WILLIAMS #4DR-TL-L15-840-DIM-UNV-OW-OF-CS-EM/10W	RECESSED	13.9	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
C1E-M	HE WILLIAMS #4DR-TL-L20-840-DIM-UNV-OW-OF-CS-EM/10W	RECESSED	19.8	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
C1H	HE WILLIAMS #4DR-TL-L30-840-DIM-UNV-OW-OF-CS	RECESSED	27.8	LED	UNV	
C1HE	HE WILLIAMS #4DR-TL-L30-840-DIM-UNV-OW-OF-CS-EM/10W	RECESSED	27.8	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
FP1	SKYLIGHT	SURFACE	160	LED	UNV	
FP2	HALO-XX-XX-XX-XX-XX-XX	SURFACE	33	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
FP3	BACKLIGHT #MAGIC CLOUD CUSTOM SIZING - STANDARD BRIGHT	RECESSED	664.4	LED	UNV	
H1	WALL PACK	SURFACE	25	LED	UNV	
J1	EXTERIOR RECESSED CAN	RECESSED	22	LED	UNV	
J1E	EXTERIOR RECESSED CAN	RECESSED	22	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
L4	ELECTRIX #S2-4R-N-S- -_-00-940-00-S (downlight)	PENDANT	26	LED	UNV	
L4E	ELECTRIX #S2-4R-N-S- -_-00-940-00-S (downlight)-EM/10W	PENDANT	26	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
L4R-L	ELECTRIX #R2-4R-L- -_-00-940-00-S(downlight)	RECESSED	18	LED	UNV	
L4R-S	ELECTRIX #R2-4R-L- -_-00-940-00-S(downlight)	RECESSED	26	LED	UNV	
L4RE-L	ELECTRIX #R2-4R-L- -_-00-940-00-S(downlight)	RECESSED	18	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
L4RE-S	ELECTRIX #R2-4R-S- -_-00-940-00-S(downlight)	RECESSED	26	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
L5	HE WILLIAMS #7SR-4-L30-840-DIM-UNV	PENDANT	19.7	LED	UNV	
L5E	HE WILLIAMS #7SR-4-L30-840-DIM-UNV-EM/19W	PENDANT	19.7	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
L6	ELECTRIX #S2-6R-N-S- -_-00-940-00-S (downlight)	PENDANT	39	LED	UNV	
L6E	ELECTRIX #S2-6R-N-S- -_-00-940-00-S-EM/10W (downlight)	PENDANT	39	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
L6R-L	ELECTRIX #R2-6R-L- -_-00-940-00-S (downlight)	PENDANT	26	LED	UNV	
L6RE-L	ELECTRIX #R2-6R-L- -_-00-940-00-S-EM/10W (downlight)	PENDANT	26	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
L8	ELECTRIX #S2-8R-N-S- -_-00-940-00-S (downlight)	PENDANT	52	LED	UNV	
L8E	ELECTRIX #S2-8R-N-S- -_-00-940-00-S-EM/10W (downlight)	PENDANT	52	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
L8R-L	ELECTRIX #R2-8R-L- -_-00-940-00-S (downlight)	PENDANT	37	LED	UNV	
L8RE-L	ELECTRIX #R2-8R-L- -_-00-940-00-S-EM/10W (downlight)	PENDANT	60	LED	UNV	WITH 90 MINUTE BATTERY BACKUP
N-1	LED LINEAR #AMOR SV1PR7 HD10-W9-XX-XX-XX	SURFACE	31	LED	UNV	
N-2	VARIOLED FLEX-AMOR-HD10-W9-XX-XX-XX-XX	SURFACE	31	LED	UNV	
P1	C.A.L. #GLB-3110	PENDANT	11.7	LED	UNV	
P2	C.A.L. #GLB-3114	PENDANT	11.7	LED	UNV	
P3	C.A.L. #GLB-3220	PENDANT	11.7	LED	UNV	
P4	C.A.L. #GLB-3224	PENDANT	11.7	LED	UNV	
P5	LUXX BOX # LX-SK-X-XX-X0-UNV	RECESSED	25.9	LED	UNV	
P6	LUXX BOX #LX-WPD-M	PENDANT	23.8	LED	UNV	
P7	LUXX BOX #LX-WPD-L	PENDANT	23.8	LED	UNV	
P8	LUXX BOX #LX-WPD-L	PENDANT	23.8	LED	UNV	
P9	LUXX BOX #LX-WPD-XLB	PENDANT	23.8	LED	UNV	
P10	LUXX BOX #LX-WPD-XLA 3.75	PENDANT	48.6	LED	UNV	
PU8	LUXX BOX #LX-WPU-M	PENDANT	23.8	LED	UNV	
PU9	LUXX BOX #LX-WPU-XL	PENDANT	48.3	LED	UNV	
X	EXIT LIGHT	UNV	2.5			WITH 90 MINUTE BATTERY BACKUP
X2	EXIT LIGHT	UNV	2.5			WITH 90 MINUTE BATTERY BACKUP

1

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N. CURTIS JONES, JR. 58428 REGISTERED PROFESSIONAL ENGINEER
JE#4921
07/22/2025
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY N. CURTIS JONES, JR, P.E. 58428

Project Status:
CONSTRUCTION DOCUMENTS

No.	DATE	DESCRIPTION
	09.12.2024	ISSUE FOR REVIEW
1	07.22.2025	ADDENDUM-4- PRE BID REVISION

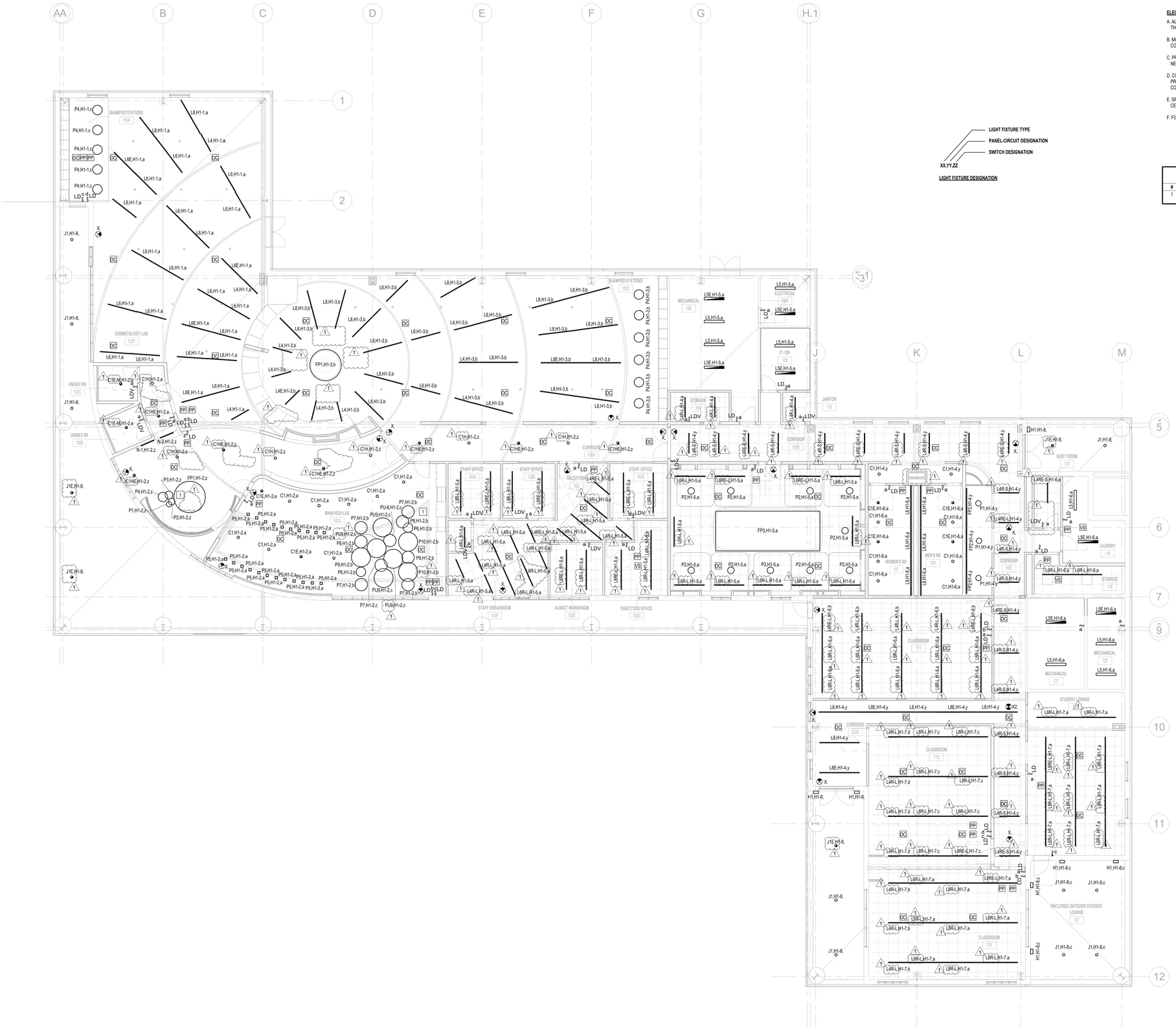
Sheet Title
ELECTRICAL SCHEDULES

Project Mgr:
Designer:
Drawn By: JE
Checked By: JE
Date: 10/14/2024
Job No.: 1503

E3.03

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Texas Registered Engineering Firm #F-3811

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



ELECTRICAL GENERAL NOTES:

A. ALL CEILING MOUNTED DEVICES LOCATED IN LAY-IN CEILINGS SHALL BE CENTERED IN THE CEILING TILE.

B. MULTIPLE SWITCHES SHOWN TOGETHER SHALL BE GANGED TOGETHER UNDER A COMMON COVER PLATE.

C. PROVIDE UNSWITCHED CIRCUIT TO ALL EXIT SIGNS ORIGINATING FROM CIRCUIT NEAREST EMERGENCY CIRCUIT.

D. CONTRACTOR SHALL INDICATE LIGHTING CIRCUIT SERVING EACH SWITCH BY PROVIDING TYPE WRITTEN LABELING LOCATED ON INSIDE FACE OF EACH SWITCH COVER PLATE.

E. SPRINKLER CONTRACTOR SHALL COORDINATE SPRINKLER HEAD LOCATIONS WITH CEILING MOUNTED LIGHTING FIXTURES.

F. FIXTURES DESIGNATED "NL" SHALL BE UNSWITCHED NIGHTLIGHTS.

LIGHT FIXTURE TYPE
PANEL-CIRCUIT DESIGNATION
SWITCH DESIGNATION
XX,YY,ZZ

LIGHT FIXTURE DESIGNATION

KEYED NOTES

#	KEYNOTE
1	ELEVATION AND POSTION OF LIGHTING FIXTURES IN AREA TO BE COORDINATED IN FEILD.

LIGHTING CONTROL LEGEND

OC	CEILING MOUNTED OCCUPANT SENSOR. PROVIDE FULL ROOM COVERAGE. CONNECT LIGHT FIXTURES SERVING ROOM THROUGH NEW SENSOR(S). AUTO OFF / AUTO ON.
VC	CEILING MOUNTED OCCUPANT SENSOR. PROVIDE FULL ROOM COVERAGE. CONNECT LIGHT FIXTURES SERVING ROOM THROUGH NEW SENSOR(S). LIGHTS MUST BE TURNED ON MANUALLY (OR OPTIONALLY CAN BE CONFIGURED TO COME ON AUTOMATICALLY TO 50%).
PP	LIGHTING CONTROL POWER PACK.
^{LD}	LOW VOLTAGE SWITCH(S) (0-10V DIMMER).
^{LDV}	WALL MOUNTED OCCUPANT SENSOR WITH 0-10V DIMMER. PROVIDE FULL ROOM COVERAGE. CONNECT LIGHT FIXTURES SERVING ROOM THROUGH NEW SENSOR(S). LIGHTS MUST BE TURNED ON MANUALLY (OR OPTIONALLY CAN BE CONFIGURED TO COME ON AUTOMATICALLY TO 50%).
^{LDO}	WALL MOUNTED OCCUPANT SENSOR WITH 0-10V DIMMER. PROVIDE FULL ROOM COVERAGE. CONNECT LIGHT FIXTURES SERVING ROOM THROUGH NEW SENSOR(S). AUTO OFF / AUTO ON.
$	LINE VOLTAGE SWITCH

1 ELECTRICAL LIGHTING PLAN

1/8" = 1'-0"

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Texas Registered Engineering Firm #F-3811

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JE#4921
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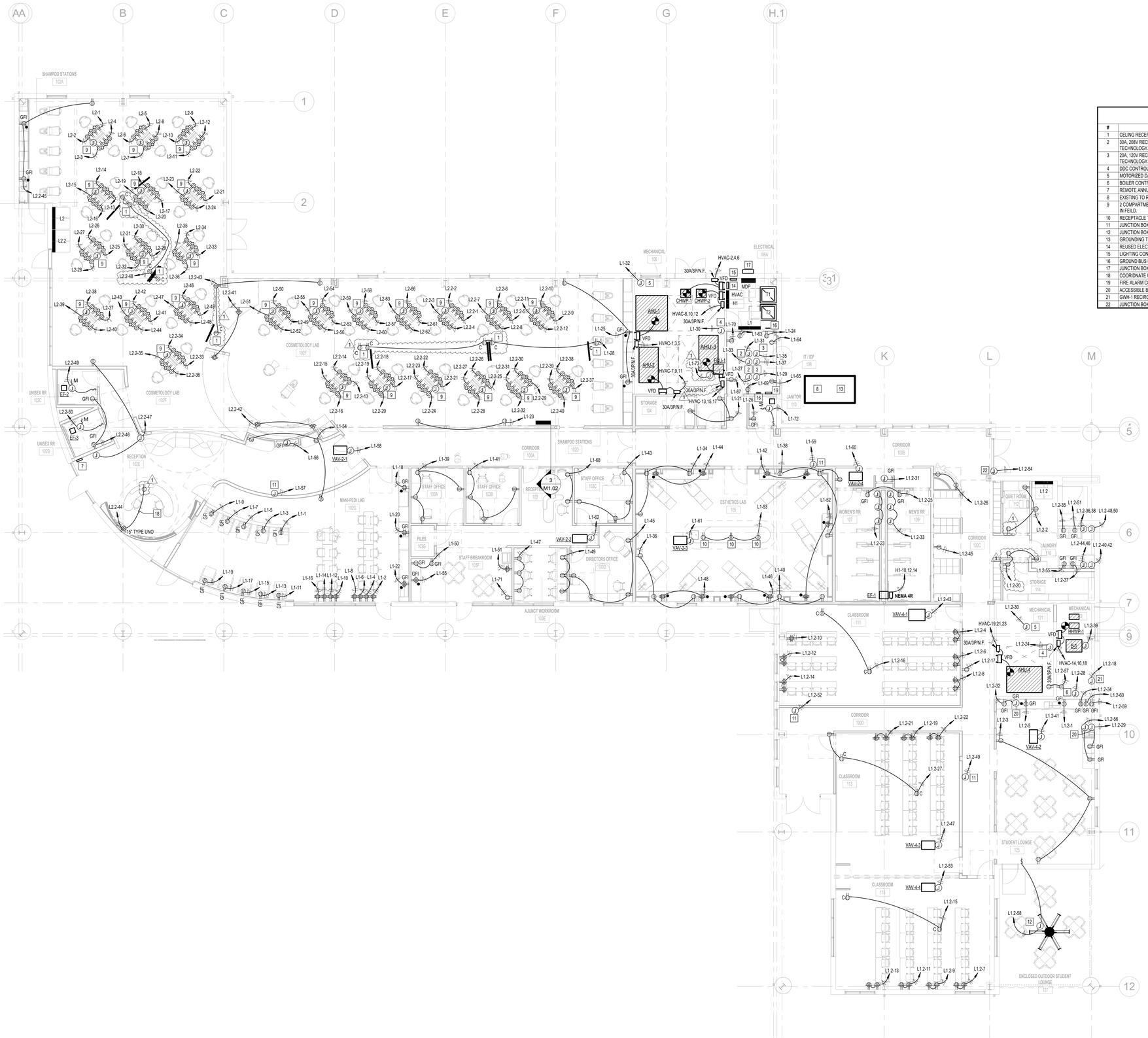
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	09.12.2024	ISSUE FOR REVIEW
1	07.22.2025	ADDENDUM-4- PRE BID REVISION

Sheet Title
ELECTRICAL LIGHTING PLAN

Project Mgr:	
Designer:	
Drawn By:	JE
Checked By:	JE
Date:	10/14/2024
Job No.:	1503

EL1.01



KEYED NOTES

#	KEYNOTE
1	CEILING RECEPTACLS FOR MONITOR DISPLAYS.
2	30A, 208V RECEPTACLE. COORDINATE RECEPTACLE TYPE AND LOCATION WITH TECHNOLOGY.
3	20A, 120V RECEPTACLE. COORDINATE RECEPTACLE TYPE AND LOCATION WITH TECHNOLOGY.
4	DDC CONTROLS.
5	MOTORIZED DAMPER.
6	BOILER CONTROLS.
7	REMOTE ANNUNCIATOR.
8	EXISTING TO REMAIN TRANSFORMER AND BREAKER.
9	2 COMPARTMENT POWER POLE, 1 POWER AND 1 DATA. COORDINATE EXACT REQUIRMENTS IN FEILD.
10	RECEPTACLE TO BE SET IN COUNTERTOP. COORDINATE EXACT REQUIRMENTS IN FIELD.
11	JUNCTION BOX FOR SMART SIGNAGE.
12	JUNCTION BOX FOR FAN POWER.
13	GROUNDING TO BE INSTALLED WITH NEW WIRING.
14	REUSED ELECTRICAL METER.
15	LIGHTING CONTROLS PANEL.
16	GROUND BUS BAR.
17	JUNCTION BOX TO BE REMOVED AND TO BE REPLACED.
18	COORDINATE UNDERGROUND CONDUIT
19	FIRE ALARM CONTROL PANEL
20	ACCESSIBLE BLANK FACE GFI RECEPTICAL FOR EASE OF ACCESS
21	GWH-1 RECIRCULATION PUMP.
22	JUNCTION BOX FOR AUTOMATIC DOORS

1 ELECTRICAL POWER PLAN

1/8" = 1'-0"

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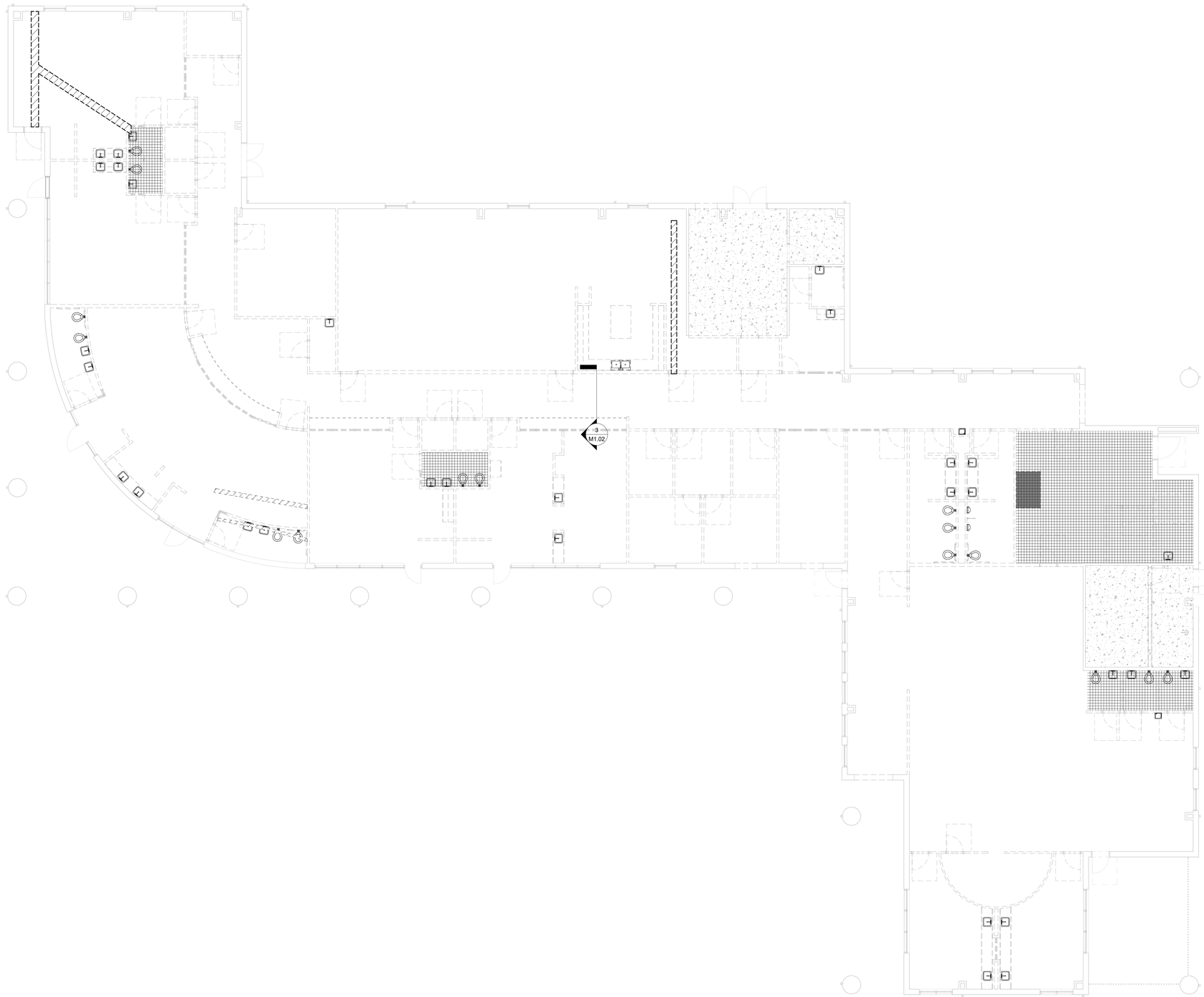
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ELECTRICAL POWER PLAN

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PLUMBING DEMO NOTES:

1. EXISTING PLUMBING SYSTEMS TO BE DEMOLISHED COMPLETE, INCLUDING:

   DOMESTIC WATER PIPING
   STORM PIPING
   SANITARY AND VENT PIPING
   ALL FIXTURES, HANGERS AND SUPPORTS, HEATERS, PUMPS AND ASSOCIATED EQUIPMENT, FIRE PROTECTION PIPING AND COMPONENTS

2. CAP AND SEAL ANY PIPING TO BELOW GRADE AS REQUIRED.

3. PURGE AND CAP GAS LINE AT GAS METER. COORDINATE REQUIREMENTS WITH CENTERPOINT ENERGY.

4. DRAIN AND CAP BUILDING WATER ENTRY.

5. ALL PIPING TO BE FULLY DECOMMISSIONED/DRAINED BEFORE ANY REMOVAL. COORDINATE EXACT REQUIREMENTS WITH OTHER TRADES.

6. FIELD VERIFY EXACT LOCATIONS.

1 **PLUMBING DEMO PLAN**
1/8" = 1'-0"

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PLUMBING DEMO PLAN

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ABBREVIATIONS

A

A	AIR (COMPRESSED)
ABV	ABOVE
A|C	AIR CONDITIONING
AC	ALTERNATING CURRENT, AIR COMPRESSOR
ACI	AMERICAN CONCRETE INSTITUTE
AD	ACCESS DOOR, AREA DRAIN
ADJ	ADJUSTABLE
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
AMB	AMBIENT
AP	ACCESS PANEL, ALARM PANEL
ARCH	ARCHITECT, ARCHITECTURAL
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
ATS	AUTOMATIC TRANSFER SWITCH
AV	ACID VENT, AIR VENT, AREA VALVE
AVG	AVERAGE
AW	ACID WASTE
AWS	AMERICAN WELDING SOCIETY
AUX	AUXILIARY

B

BC	BELOW COUNTER
B|C	BACK OF CURB
BFV	BUTTERFLY VALVE
BH	BOX HYDRANT
BLDG	BUILDING
BM	BENCHMARK
BOF	BOTTOM OF FOOTING
BOS	BOTTOM OF STRUCTURE
BT	BATH TUB, BREAK TANK
BTU	BRITISH THERMAL UNIT
BV	BALL VALVE
BWV	BACK WATER VALVE

C

C	CELSIUS
CAB	CABINET
CB	CATCH BASIN
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
CI	CAST IRON
CIRC	CIRCULATING
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMP	CORRIGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CPI	CAST IRON PIPE INSTITUTE
CPVC	CHLORINATED POLYVINYL CHLORIDE
CO	CLEAN OUT
COL	COLUMN
COMB	COMBINATION
COMP	COMPRESSOR
CON	CONVERTER
CONC	CONCRETE, CONCENTRIC
COND	CONDENSER, CONDENSATE
CONN	CONNECTION
CONT	CONTINUOUS, CONTINUATION
CONTR	CONTROLLER, CONTRACTOR
CRP	CORROSION RESISTANT PIPE
CRT	CATHODE RAY TUBE
CT	COOLING TOWER
CTR	CENTER
CU	COPPER
CW	COLD WATER
C_I	CAPACITY INDEX
CV	CHECK VALVE

D

D	DEPTH, DRAIN
DC	DIRECT CURRENT
DDC	DIRECT DIGITAL CONTROL
DE	DEIONIZED WATER SUPPLY
DEP	DEIONIZED WATER PUMP
DER	DEIONIZED WATER RETURN
DESIG	DESIGNATION
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DN	DOWN
DS	DOWNSPOUT, DOUBLE SUCTION
DW	DISHWASHER
DWG	DRAWING
DWH	DOMESTIC WATER HEATER
DWP	DOMESTIC WATER PUMP

E

EA	EACH
EC	ELECTRICAL CONTRACTOR
ECC	ECCENTRIC
EDF	ELECTRIC DRINKING FOUNTAIN
EFF	EFFICIENCY
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMERG	EMERGENCY
ENCL	ENCLOSURE
ENGR	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
ES	END SUCTION, EMERGENCY SHOWER
ET	EXPANSION TANK
ETR	EXISTING TO REMAIN
EVAP	EVAPORATOR
EWT	ENTERING WATER TEMPERATURE
EX	EXPLOSION-PROOF
EXT	EXTERNAL
EXTG	EXISTING

F

F	FARENHEIT, FIRE
FBO	FURNISHED BY OTHERS
FCO	FLOOR CLEAN OUT
FCS	FLOOR CONTROL STATION
FD	FLOOR DRAIN
FDS	FIRE DEPARTMENT SIAMESE
FDV	FIRE DEPARTMENT VALVE
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FHR	FIRE HOSE RACK
FHV	FIRE HOSE VALVE
FIXT	FIXTURE
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
FL	FLOW LINE
FLR	FLOOR
FOP	FUEL OIL PUMP
FOR	FUEL OIL RETURN

F (Cont)

FOS	FUEL OIL SUPPLY
FOV	FUEL OIL VENT
FP	FIRE PUMP
FRZR	FREEZER
FS	FLOW SWITCH, FIRE SPRINKLER
FT	FOOT, FEET
FUT	FUTURE

G

G	GAS
GA	GAGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GLV	GLOBE VALVE
GND	GROUND
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GV	GATE VALVE

H

H	HEIGHT
HB	HOSE BIBB
HD	HEAD, HUB DRAIN
HE	HEAT EXCHANGER
HORIZ	HORIZONTAL
HP	HORSEPOWER, HALON PANEL
HKP	HOUSEKEEPING PAD
HSC	HORIZONTAL SPLIT CASE
HTG	HEATING
HTR	HEATER
HW	HOT WATER
HWC	HOT WATER CIRCULATOR
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HZ	HERTZ

I

ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCH
INSUL	INSULATION
INT	INTERNAL, INTERIOR
IW	INDIRECT WASTE

J

JB	JUNCTION BOX
JP	JOCKEY PUMP

K

KEC	KITCHEN EQUIPMENT CONTRACTOR
KO	KNOCKOUT
KVA	KILOVOLT-AMPS
KW	KILOWATT

L

L	LENGTH, LAVATORY
LA	LABORATORY AIR
LAV	LAVATORY
LF	LINEAR FEET
LRA	LOCKED ROTOR AMPS
LV	LABORATORY VACUUM
LVL	LEVEL
LWCO	LOW WATER CUT OFF
LWT	LEAVING WATER TEMPERATURE

M

MA	MEDICAL AIR
M	METER
MAP	MASTER ALARM PANEL
MAX	MAXIMUM
MBH	THOUSAND OF BTU'S
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MFR	MANUFACTURER
MG	MEDICAL GAS OUTLET
MH	MANHOLE
MI	MALLEABLE IRON
MIN	MINIMUM
MP	MEDICAL AIR PURIFIER
MS	MOP SINK
MTD	MOUNTED
MU	MAKE-UP
MV	MEDICAL VACUUM

N

N	NITROGEN
NO	NITROUS OXIDE
N.C.	NORMALLY CLOSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NO.	NUMBER
NTS	NOT TO SCALE

O

O	OXYGEN
OC	ON CENTER
OD	OUTSIDE DIAMETER, OVERFLOW DRAIN
OE	ORAL EVACUATION
OPG	OPENING
OS&Y	OPEN STEM AND YOLK

P

P	PUMP, PLUMBING EQUIPMENT
PC	PLUMBING CONTRACTOR
PCR	PUMPED CONDENSATE RETURN
PD	PRESSURE DROP, PLANTER DRAIN
PH	PHASE
PIV	POST INDICATOR VALVE
PLBG	PLUMBING
PNEU	PNEUMATIC
PNL	PANEL
PNTH	PENTHOUSE
PP	POLYPROPYLENE
PPM	PARTS PER MILLION
PRI	PRIMARY
PRS	PRESSURE REDUCING STATION
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT

P Cont)

PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PT	PLUMBING TRIM
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
PW	PROCESS WASTE

Q

QTY	QUANTITY

R

R	RISER
RAD	REFRIGERATED AIR DRYER
RCP	REFLECTED CEILING PLAN, REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RE:	REFERENCE, REFER
RECIRC	RECIRCULATE
RED	REDUCER
REFR	REFRIGERATOR
REINF	REINFORCING
REQD	REQUIRED
REV	REVISION, REVISE
RH	RELATIVE HUMIDITY
RKVA	RUNNING KILOVOLT-AMPS
RKW	RUNNING KILOWATTS
RLA	RUNNING LOAD AMPS
RM	ROOM, REFRIGERATION MACHINE
RPM	REVOLUTIONS PER MINUTE
RV	RELIEF VALVE

S

SAN	SANITARY SEWER
SC	STEAM CONVERTER
SCHED	SCHEDULED
SCR	SILICON CONTROLLED RECTIFIER
SD	STORM DRAIN
SE	SEWAGE EJECTOR
SEC	SECONDARY
SECT	SECTION
SF	SQUARE FEET
SFCS	SPRINKLER FLOOR CONTROL STATION
SH	SHOWER
SHT	SHEET
SIM	SIMILAR
SK	SINK
SKVA	STARTING KILOVOLT-AMPS
SKW	STARTING KILOWATTS
SP	SUMP PUMP
SPEC	SPECIFICATION
SPR	SPRINKLER
SQ	SQUARE
SS	SERVICE SINK
SSD	SUBSURFACE DRAIN
SSFU	SANITARY SEWER FIXTURE UNITS
STD	STANDARD
STL	STEEL
STR	STRAINER
SURF	SURFACE
SUSP	SUSPEND
SV	SANITARY VENT

T

TCC	TEMPERATURE CONTROL COMPRESSOR
TD	TRENCH DRAIN
TDH	TOTAL DYNAMIC HEAD
TH BLK	THRUST BLOCK
TOC	TOP OF CURB
TP	TRAP PRIMER
TSTAT	THERMOSTAT
TW	TEMPERED WATER
TYP	TYPICAL

U

U	URINAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES, INC.
UON	UNLESS OTHERWISE NOTED
U|F	UNDERFLOOR
U|S	UNDERSLAB

V

V	VOLT, VENT, VACUUM
VA	VOLT-AMPERE
VAC	VACUUM
VB	VALVE BOX
VCP	VITRIFIED CLAY PIPE
VEL	VELOCITY
VP	VACUUM PUMP
VERT	VERTICAL
VIB	VALVE IN BOX
VOV	VALVE ON VERTICAL
VTR	VENT THRU ROOF

W

W	WATT, WASTE, WIDTH
W|	WITH
W|O	WITHOUT
WC	WATER CLOSET
WCO	WALL CLEANOUT
WH	WALL HYDRANT
WM	WATER METER
WP	WEATHERPROOF
WPD	WATER PRESSURE DROP
WS	WATER SOFTENER
WT	WATERTIGHT, WEIGHT
WWF	WELDED WIRE FABRIC

Y

YH	YARD HYDRANT

Z

Z	ZONE
ZV	ZONE VALVE

PIPING TYPES

- SANITARY DRAIN BELOW FLOOR
- SANITARY DRAIN ABOVE FLOOR (NOTED)
- SANITARY VENT
- SD — STORM DRAIN
- OD — OVERFLOW DRAIN
- COLD WATER
- HOT WATER
- HOT WATER RECIRCULATION
- G — NATURAL GAS
- F — FIRE STANDPIPE, FIRE LINE
- FS — FIRE SPRINKLER
- TP — TRAP PRIMER
- D — DRAIN LINE
- GW — GREASE WASTE
- DCWF — FILTERED DOMESTIC COLD WATER
- AIR — COMPRESSED AIR
- S/O — SAND/OIL SEPARATOR WASTE

(ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS)

PIPING SYMBOLS

- ELBOW UP
- ELBOW DOWN
- VALVE IN DROP
- VALVE IN RISE
- DIRECTION OF FLOW
- DIRECTION OF SLOPE DOWN
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- TEE OUTLET UP
- TEE OUTLET DOWN
- UNION
- PIPE ANCHOR
- EXPANSION JOINT
- STRAINER WITH BLOWDOWN VALVE
- GATE VALVE
- GLOBE VALVE
- BALL VALVE
- THERMOSTATIC BALANCING VALVE
- HOT WATER RECIRCULATION PUMP
- CHECK VALVE
- PRESSURE REDUCING VALVE
- FCS — SPRINKLER FLOOR CONTROL STATION
- F — GAS VALVE
- MANUAL AIR VENT
- AUTOMATIC AIR VENT
- T&P RELIEF VALVE
- VACUUM BREAKER
- LINE CLEANOUT
- FLOOR CLEANOUT
- PRESSURE GAUGE WITH GAUGE COCK
- THERMOMETER
- FLEXIBLE CONNECTION
- DOUBLE CHECK REDUCED PRESSURE BACKFLOW PREVENTER

MISCELLANEOUS

- FLOOR DRAIN
- FLOOR SINK
- ROOF DRAIN OR OVERFLOW DRAIN
- HB — HOSE BIBB
- WALL HYDRANT
- PLUMBING FIXTURES
- POINT OF NEW CONNECTION TO EXISTING PIPING
- POINT OF DEMOLITION TO EXISTING PIPING
- 1 — DRAWING NOTE REFERENCE
- OWNER OR CONTRACTOR FURNISHED EQUIPMENT REFERENCE
- aaabb — PLUMBING EQUIPMENT REFERENCE. "aaa" DENOTES TYPE, "bb" DENOTES NUMBER.
- P / 1 — RISER DESIGNATION. "P" DENOTES WASTE\|VENT OR WASTE\|VENT\|WATER. "W" DENOTES WATER, "DS" DENOTES DOWNSPOUT, "F" DENOTES FIRE.
- FIRE DEPARTMENT SIAMESE CONNECTION

GENERAL NOTE:
BUILDING TO BE 100% SPRINKLERED, PER NFPA 13.

PLUMBING GENERAL NOTES:

A. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES. COORDINATE WITH OTHER TRADES PRIOR TO BEGINNING CONSTRUCTION. COORDINATE WITH CIVIL DRAWINGS FOR ADJACENT UTILITIES.

B. ALL WORK, METHODS, AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE PREVAILING BUILDING CODE, INSPECTION REGULATIONS AND ALL OFFICIALS HAVING JURISDICTION. ALL WORK SHALL BE ACCORDING TO AND COORDINATED WITH DIVISIONS 00 AND 01.

C. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE OWNER'S MOST RECENT RULES AND REGULATIONS FOR CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH SUCH RULES AND REGULATIONS.

D. COORDINATE ALL FIRE PIPING SYSTEM SHUTDOWN WITH LSC.

E. COORDINATE ALL UTILITY SHUTDOWNS WITH LSC AND FOLLOW LSC PROCEDURES BEFORE SHUTDOWN.

F. DUE TO THE SCALE OF DRAWINGS, NOT ALL PIPING AND APPURTENANCES TO BE PROVIDED ARE SHOWN. CONTRACTOR SHALL PROVIDE SERVICES INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING: PIPING INSIDE WALLS AND CHASES TO SERVE ADJACENT PLUMBING FIXTURES AND EQUIPMENT, INDIVIDUAL FIXTURE SUPPLIES AND DRAINS, PIPING OFFSETS, VALVES, TRAPS, GAUGES, STRAINERS, AND UNIONS TO ENSURE THE COMPLETE AND FUNCTIONING INSTALLATION OF FIXTURES AND EQUIPMENT.

G. ALL EXISTING SYSTEMS SHOWN ARE TO REMAIN UNLESS NOTED OTHERWISE. OTHER DISCIPLINES EQUIPMENT SHOWN FOR REFERENCE PURPOSES ONLY. COORDINATE FOR EXACT LOCATIONS.

H. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.

I. DO NOT ROUGH-IN BASED UPON THESE DRAWINGS. REFER TO LATEST DRAWINGS PREPARED BY THE ARCHITECT. THE FINAL LOCATIONS OF ALL PIPING SHALL ALLOW INSTALLATION OF FIXTURES WITHOUT THE NEED TO FURR-OUT WALLS.

J. VERIFY EXACT LOCATION OF EQUIPMENT PRIOR TO ROUGH-IN OF DRAINS AND CLEANOUTS. PROVIDE CLEANOUTS IN ADDITION TO THOSE SHOWN AS REQUIRED BY CODE.

K. NO PIPING IS TO BE INSTALLED OPEN TO PUBLIC VIEW UNLESS NOTED OTHERWISE.

L. DO NOT INSTALL PIPING AT LOCATIONS THAT INTERFERE WITH SERVICE ACCESSIBILITY TO EQUIPMENT.

M. ALL PENETRATIONS THROUGH FLOOR SLABS AND EXTERIOR WALLS SHALL BE SEALED WATERTIGHT.

N. PROVIDE NFPA APPROVED FIRE STOPPING WHERE PIPES PENETRATE FIRE RATED FLOORS AND WALLS. ALL PENETRATIONS THROUGH RATED PARTITIONS AND FLOOR SLABS SHALL BE SEALED TO PROVIDE A FIRE/SMOKE RATING EQUAL TO OR GREATER THAN THE RATING OF THE PARTITION OR FLOOR SLAB. REFER TO ARCHITECTURAL DRAWINGS FOR RATINGS.

O. INSTALL FIXTURES ACCORDING TO ADA/TAS REQUIREMENTS. COORDINATE DEVICE MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS. PROVIDE NEW ACCESS PANELS FOR ANY VALVES ABOVE NEW HARD CEILING, NEW OR EXISTING.

P. EXISTING WATER, WASTE, AND VENT UTILITIES SHALL BE MODIFIED AS REQUIRED FOR THE INSTALLATION OF NEW PLUMBING FIXTURES. REFER TO PLUMBING FLOOR PLANS FOR POINTS OF CONNECTION.

Q. WHEREVER EXISTING PIPING SYSTEMS ARE CONNECTED TO, RE-ROUTED, OR CAPPED, CLEAN AND TEST THE ENTIRE SECTION OF THE SYSTEM AFFECTED IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS.

R. ALL CUTTING, DRILLING AND PATCHING OF WALLS, FLOORS, AND/OR STRUCTURAL MEMBERS FOR THE INSTALLATION OF THE PLUMBING SHALL BE PROVIDED. STRUCTURAL COMPONENTS SHALL NOT BE CUT, DRILLED OR MODIFIED IN A WAY WITHOUT THE STRUCTURAL ENGINEER'S REVIEW AND PRIOR WRITTEN APPROVAL. COORDINATE WITH DIVISION 01, 02 73 29 CUTTING AND PATCHING. SAWCUT OR CORE/DRILL AND REMOVE EXISTING FLOOR SLAB AS REQUIRED TO PROVIDE NEW FIXTURES, CLEANOUTS, AND UNDERSLAB WATER, WASTE AND VENT PIPING. PATCH AND REFINISH FLOOR TO MATCH EXISTING. COORDINATE WITH STRUCTURAL ENGINEER PRIOR TO CUTTING OR DRILLING SLAB. SAWCUT AND REMOVE EXISTING PAVING AND SIDEWALKS AS REQUIRED TO PROVIDE NEW SERVICES. PATCH AND RE-FINISH TO MATCH EXISTING.

S. ALL EXISTING WALLS, FLOORS, DRIVEWAYS, SIDEWALKS, PARKING AREAS, FENCING, ETC. DISTURBED DUE TO WORK DONE AND THAT ARE TO REMAIN SHALL BE REPAIRED TO CONDITION THAT IS ACCEPTABLE TO THE ARCHITECT/ENGINEER AND OWNER.

T. PRIOR TO BEGINNING CONSTRUCTION, FIELD VERIFY THE EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL, AND CONDITION OF EXISTING PIPING TO ENSURE THAT PROPER CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.

U. SITE INSPECTION: CONTRACTOR SHALL VISIT THE SITE OF WORK PRIOR TO SUBMISSION OF HIS BID AND THOROUGHLY FAMILIARIZE HIMSELF WITH THE WORKING CONDITIONS AND EXACT NATURE OF THE WORK. SUBMISSION OF A BID ACKNOWLEDGES FULL RESPONSIBILITY FOR PROVIDING ALL NECESSARY LABOR AND MATERIALS TO ENSURE COMPLETE, FUNCTIONAL, AND COMPLIANT SYSTEMS. FAILURE TO MEET THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR OMISSIONS, FAULTY WORK, OR THE PAYMENT OF ADDITIONAL COMPENSATION.

V. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. INSTALL TO CONSERVE HEADROOM AND TO CREATE MINIMUM INTERFERENCE WITH USE OF SPACE. SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN. GROUP PIPING AT COMMON ELEVATIONS WHENEVER PRACTICAL.

W. PRIOR TO ANY ROUGH-INS, COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST MANUFACTURER RECOMMENDATIONS AND DRAWINGS AND SPECIFICATIONS PREPARED BY THE ARCHITECT AND OTHER CONSULTANTS (FOOD SERVICE, LABORATORY PLANNING, ETC.). MAKE ADJUSTMENTS AND PROVIDE SERVICES AS REQUIRED.

X. LOCATE VENT TERMINALS AND FLUES THROUGH ROOF TO MAINTAIN A MINIMUM OF 15'-0" HORIZONTALLY FROM AND 2'-0" VERTICALLY ABOVE ALL OUTSIDE AIR INTAKES, OPERABLE WINDOWS, DOORS, AND ANY OTHER BUILDING OPENINGS.

Y. ALL VALVES INDICATED ON DRAWINGS SHALL BE LINE-SIZED (THE SAME SIZE AS THE PIPE THEY SERVE) UNLESS NOTED OTHERWISE.

Z. PROVIDE LOCKING ACCESS PANELS ACCEPTABLE TO ARCHITECT/OWNER AS REQUIRED TO ENSURE ACCESS TO VALVES AND WATER HAMMERS.

AA. ALL ABOVE SLAB ON GRADE FLOOR DRAINS, P-TRAPS, AND CONNECTED DRAINAGE PIPING RECEIVING CONDENSATE, ICE MACHINE WASTE, OR CONVEYING CONTENTS HAVING TEMPERATURES BELOW 55°F SHALL BE PROPERLY INSULATED TO THE FIRST VERTICAL OFFSET AND VAPOR SEALED TO PREVENT CONDENSATION.

BB. UPON COMPLETION OF WORK, THOROUGHLY ROD AND FLUSH OUT ALL GRAVITY DRAINAGE PIPING TO ENSURE IT IS FREE FROM BLOCKAGES AND FLOWING FREELY.

CC. UNLESS NOTED OTHERWISE, ADDITIONAL PRECAUTIONARY MEASURES MUST BE PROVIDED IN SPECIAL ROOMS AND AREAS AND ABOVE SPECIAL EQUIPMENT. THESE SPACES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: IDF, MDF, SERVER, ELECTRICAL, TELECOM, FOOD STORAGE, FOOD PREPARATION, FOOD SERVING, CLEAN ROOMS, STERILE AREAS, DINING ROOMS, OPERATING ROOMS, IMAGING ROOMS, AND OVER VFD'S AND CONTROL PANELS. AT SUCH LOCATIONS, PROVIDE AUXILIARY DRAIN PANS BENEATH ALL WATER, STORM, WASTE AND VENT PIPING TO DIVERT POSSIBLE LEAKAGE OR CONDENSATION. PANS SHALL BE SUSPENDED FROM STRUCTURE ABOVE WITH GALVANIZED THREADED HANGER RODS AND HARDWARE. PANS SHALL BE GALVANIZED OR STAINLESS STEEL CONSTRUCTION, WITH ALL SOLDERED SEAMS AND JOINTS, MIN. 4" DEEP, SLOPED, WITH A MIN. 1-1/4" DRAIN OUTLET AT THE LOW POINT OF THE PAN. PROVIDE DIELECTRIC ADAPTER AND TYPE DWV COPPER DRAIN LINE AND FITTINGS SLOPED TO NEAREST APPROVED INDIRECT WASTE RECEPTOR.

DD. FIRE PROTECTION ENGINEER LICENSED IN THE STATE OF TEXAS SHALL PROVIDE, FOR PERMIT AND REVIEW, FIRE PROTECTION SHOP DRAWINGS, INCLUDING BUT NOT LIMITED TO HYDRONIC CALCULATIONS, DETAILS, FOR ALL NEW AREAS AND REVISION OF EXISTING SYSTEMS PER NFPA TO PROVIDE 100% FULL COVERAGE.

EE. MATERIALS TO BE USED SHALL BE NEW AND OF THE APPROVED TYPE FOR THE LOCATION AND PURPOSE.

FF. ALL WATER PIPING TO BE FULLY INSULATED AND LABELED.

PLUMBING DEMO GENERAL NOTES:

1. PRIOR TO BEGINNING EXCAVATIONS OR DEMOLITION OF ANY NATURE WHATSOEVER, CONTRACTOR SHALL LOCATE ALL SERVICES AND UTILITIES OCCURRING WITHIN THE BOUNDS OF THE PROJECT. THE CONTRACTOR SHALL THEN PROCEED WITH CAUTION IN HIS WORK SO THAT NO UTILITY OR LINE SERVING AREAS THAT ARE TO REMAIN IS DAMAGED WITH A RESULTANT LOSS OF SERVICE. VERIFY THE SOURCE AND SERVICE OF EACH AND EVERY LINE ENCOUNTERED AND RECORD EACH SERVICE, SIZE, AND LOCATION ON RECORD DRAWINGS.
2. ALL PLUMBING FIXTURES AND EQUIPMENT REMOVED SHALL BE SUBMITTED TO THE OWNER WITH THE OPTION TO BE REUSED. ITEMS THE OWNER DOES NOT WISH TO REUSE BUT WISHES TO RETAIN SHALL BE DELIVERED TO STORAGE AS DIRECTED BY THE OWNER. ITEMS THE OWNER DOES NOT WISH TO REUSE OR RETAIN SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF LEGALLY.
3. PLUG PIPES AND PATCH FLOOR FLUSH WITH EXISTING SLAB ON GRADE AT ANY PLUMBING FLOOR PENETRATIONS NO LONGER REQUIRED.
4. CONTRACTOR SHALL REMOVE ALL PIPING AND ASSOCIATED SUPPORTS FROM ABOVE SLAB ON GRADE TO BELOW ROOF WHICH WAS PREVIOUSLY ABANDONED OR WHICH SERVES PLUMBING FIXTURES AND EQUIPMENT DESIGNATED FOR REMOVAL. REFER TO PLUMBING FLOOR PLANS FOR NEW FIXTURES OR EQUIPMENT TO BE INSTALLED IN THOSE LOCATIONS. PRIOR TO ANY REMOVAL, FIELD VERIFY THAT LINES TO BE REMOVED DO NOT SERVE ANY FIXTURES OR EQUIPMENT TO REMAIN. CAP REMOVED BRANCH LINES AS CLOSE AS POSSIBLE TO EXISTING MAINS.
5. ALL PLUMBING FIXTURES AND EQUIPMENT NOT SPECIFICALLY IDENTIFIED FOR REMOVAL SHALL REMAIN. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONFLICTS FOUND IN THE FIELD.
6. CONTRACTOR SHALL FIELD VERIFY AS NECESSARY THE EXACT LOCATION OF PLUMBING FIXTURES, PIPING, AND EQUIPMENT TO BE REMOVED. REFER TO ARCHITECTURAL DRAWINGS FOR CLARIFICATION AS REQUIRED.
7. COORDINATE EACH AND EVERY INTERRUPTION OF SERVICES AND UTILITIES IN ADVANCE WITH THE OWNER, FIRE DEPARTMENT, AND UTILITY COMPANIES TO ENSURE MINIMAL SHUT DOWN TIMES THAT ARE ACCEPTABLE TO THE OWNER AND AUTHORITIES.

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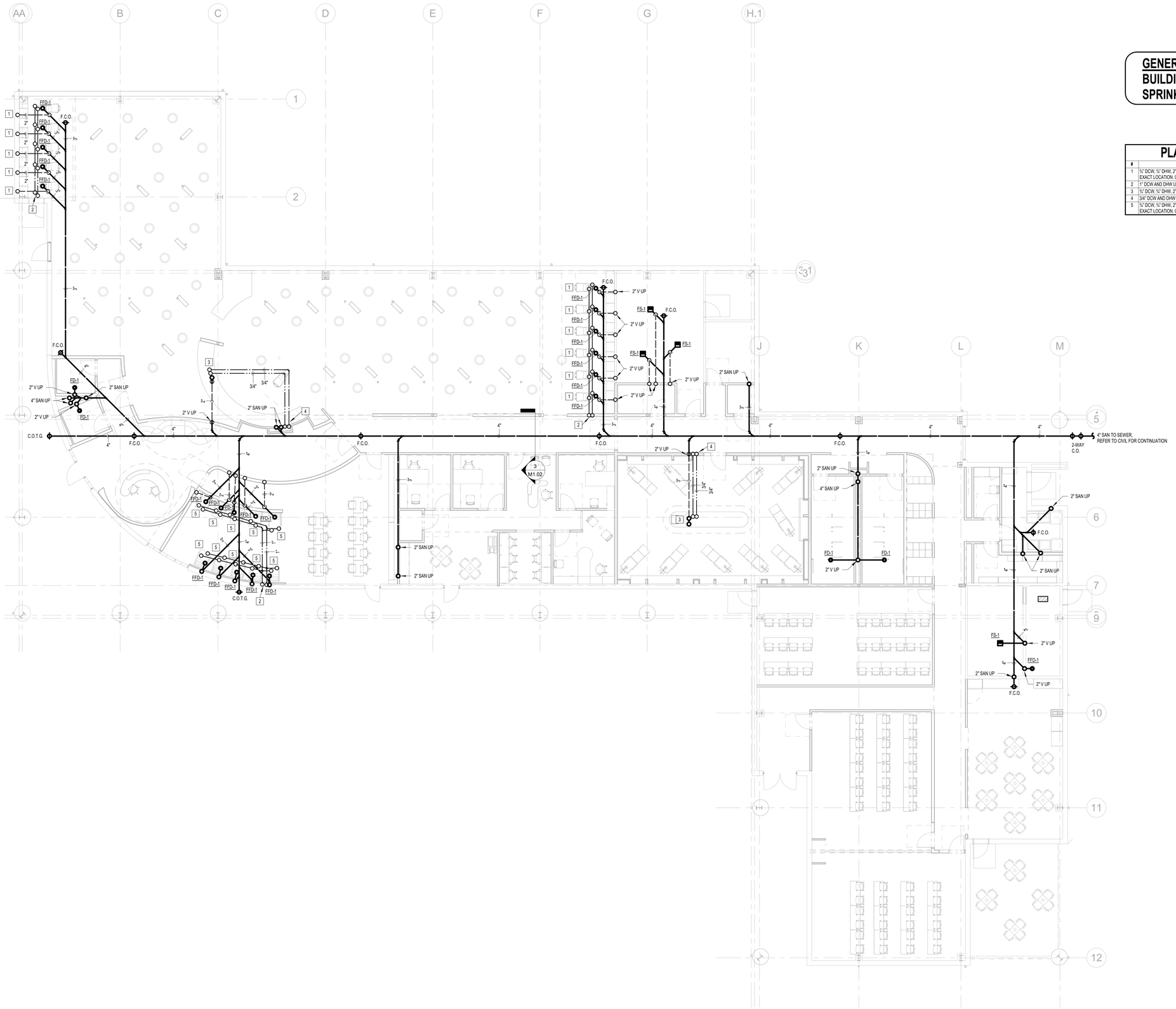
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PLUMBING SYMBOLS AND ABBREVIATIONS

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P0.01

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GENERAL NOTE:
BUILDING TO BE 100% SPRINKLERED, PER NFPA 13.

PLAN KEYED NOTES

#	NOTE
1	½" DCW, ½" DHW, 2" V, 3" SAN UP TO SHAMPOO STATION. REFER TO ARCH FOR EXACT LOCATION. COORDINATE EXACT REQUIREMENTS IN FIELD.
2	1" DCW AND DHW UP REFER TO P104 FOR CONTINUATION.
3	½" DCW, ½" DHW, 2" V, 2" SAN. REFER TO ISLAND VENT DETAIL ON P302.
4	3/4" DCW AND DHW UP REFER TO P104 FOR CONTINUATION.
5	½" DCW, ½" DHW, 2" V, 3" SAN UP TO PEDICURE STATION. REFER TO ARCH FOR EXACT LOCATION. COORDINATE EXACT REQUIREMENTS IN FIELD.

1 PLUMBING UNDERSLAB PLAN
1/8" = 1'-0"

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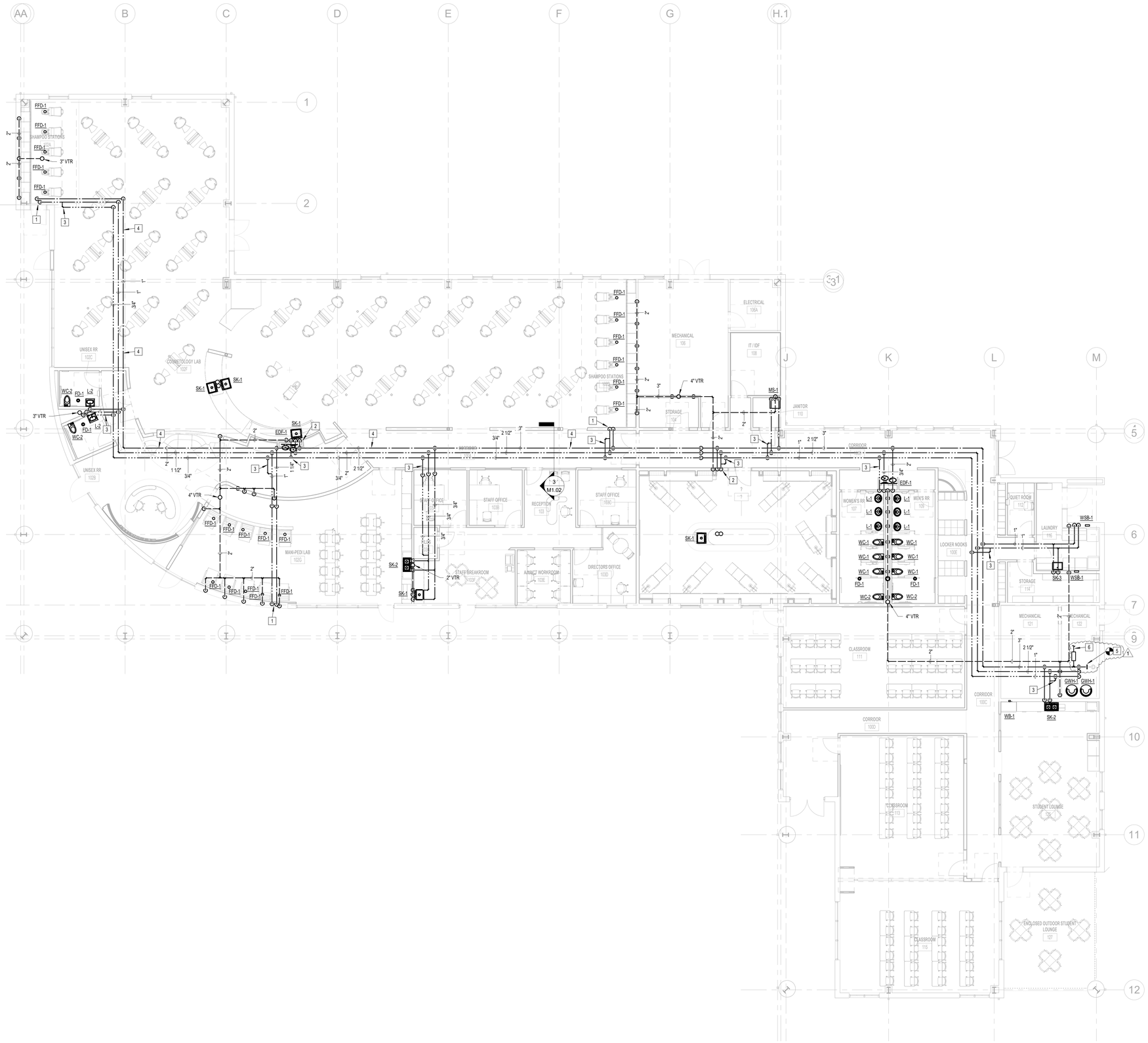
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PLUMBING UNDERSLAB PLAN

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P1.02

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1 **PLUMBING PLAN**
1/8" = 1'-0"

GENERAL NOTE:
BUILDING TO BE 100% SPRINKLERED, PER NFPA 13.

PLUMBING GENERAL NOTES:

1. PROVIDE HOT WATER RECIRCULATION PUMP. REFER TO SCHEDULE AND DETAIL ON P3.01. HOT WATER RECIRCULATION LINE TO BE BALANCED WITH CIRCUIT SOLVER THERMOSTATIC BALANCING VALVES IN ORDER TO RECEIVE ADEQUATE HOT WATER SUPPLY FOR FIXTURES REQUIRING HOT WATER. CIRCUIT SOLVERS TO BE MODEL # CSUAS-3/4"-120"
2. LAVATORY FAUCET HOT WATER SUPPLY MUST BE WITHIN THE DISTANCE ALLOWED IN IECC, SECTION C404.5.1.
3. COORDINATE EXACT REQUIREMENTS IN FIELD..

PLAN KEYED NOTES

#	NOTE
1	1" DCW AND DHW DN REFER TO P102 FOR CONTINUATION.
2	3/4" DCW AND DHW DN REFER TO P102 FOR CONTINUATION.
3	HOT WATER RECIRCULATION LINE TO BE BALANCED WITH CIRCUIT SOLVER THERMOSTATIC BALANCING VALVES IN ORDER TO RECEIVE ADEQUATE HOT WATER SUPPLY FOR FIXTURES REQUIRING HOT WATER. CIRCUIT SOLVERS TO BE MODEL # CSUAS-3/4"-120"
4	REFER TO ARCH FOR ELEVATION OF PIPING IN THIS AREA.
5	CONNECT NEW 3" DCW TO EXISTING 4" DCW ENTRY.
6	PROVIDE 1" MAKE UP WATER FOR HVAC, WITH BACK FLOW PREVENTOR. REFER TO DETAIL.

1

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PLUMBING PLAN

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PLUMBING FIXTURE AND CONNECTION SCHEDULE

MARK	FIXTURE	ROUGH-IN CONNECTION SIZE C.W.	H.W.	VENT	WASTE	MANUFACTURER	MODEL	DESCRIPTION AND NOTES
1 EDF-1	ELECTRIC DRINKING FOUNTAIN					ELKAY	EZWS-ERPBM28K	ELECTRIC REFRIGERATED, BI-LEVEL, SWIRLFLO FOUNTAIN, WALL-MOUNTED WATER COOLER WITH BOTTLE FILLER DELIVERING 8GPH OF 50° F FILTERED DRINKING WATER BASED ON 80° F INLET WATER AND 90° F AMBIENT, LEAD FREE, STAINLESS STEEL, 115V/60Hz. MOUNT AT ADA HEIGHT, RE: ARCHITECTURE.
FD-1	FLOOR DRAIN					ZURN	Z415	FLOOR DRAIN W/ TYPE 'B' STRAINER.
FFD-1	FUNNEL FLOOR DRAIN					ZURN	Z415	FLOOR DRAIN W/ TYPE 'E' STRAINER.
FS-1	FLOOR SINK	-	-	2"	4"	ZURN	Z1900	12 IN SQ. CASTIRON GRATE WITH GALVANIZED IRON DOME STRAINER AND CAST IRON SEDIMENT BUCKET.
GWH-1	GAS WATER HEATER					A.O. SMITH	BTH-199	199 MBH INPUT, 100 GALLON WATER HEATER, WITH ARMSTRONG COMPASS H CIRCULATING PUMP, 2.0 GPM, 5 FT. HEAD.
1 L-1	LAVATORY (COUNTERTOP)	1/2"	1/2"	1-1/2"	2"	BRADLEY	GLX-3	LAVATORY, COUNTERTOP, BRADLEY EXPRESS GLX SERIES THREE STATION, W/ WASHBAR DUO FAUCET, GRID DRAIN, CHROME PLATED P-TRAP WITH CLEANOUT AND ADA STOP & TRAP PROTECTORS AS REQUIRED, COORDINATE WITH ARCHITECT. INSTALL WITH WATTS #LFMMV, ASSE 1070 COMPLIANT THERMOSTATIC MIXING VALVE. REFER TO ARCHITECT FOR FINISH COLORS OF LAVATORY AND FAUCET.
L-2	LAVATORY (WALL HUNG)	1/2"	1/2"	1-1/2"	2"	BRADLEY	GLX-1	LAVATORY, COUNTERTOP, BRADLEY EXPRESS GLX SERIES SINGLE STATION, W/ WASHBAR DUO FAUCET, GRID DRAIN, CHROME PLATED P-TRAP WITH CLEANOUT AND ADA STOP & TRAP PROTECTORS AS REQUIRED, COORDINATE WITH ARCHITECT. INSTALL WITH WATTS #LFMMV, ASSE 1070 COMPLIANT THERMOSTATIC MIXING VALVE. REFER TO ARCHITECT FOR FINISH COLORS OF LAVATORY AND FAUCET.
MS-1	MOP SINK	3/4"	3/4"	2"	3"	FIAT	MSB2424	FLOOR MOUNTED SINK, 24X24" MOP SINK WITH CHICAGO FAUCET 897CP FAUCET WITH VACUUM BREAKER.
1 SK-1	SINK (SINGLE COMPARTMENT)	1/2"		1-1/2"	2"	REFER TO ARCHITECT	REFER TO ARCHITECT	BLACK SINK, REFER TO ARCHITECT, PROVIDE WITH HAIR TRAP
SK-2	SINK (DOUBLE COMPARTMENT)					REFER TO ARCHITECT	REFER TO ARCHITECT	BLACK SINK, REFER TO ARCHITECT, PROVIDE WITH HAIR TRAP
SK-3	LAUNDRY SINK	1/2"	1/2"	1-1/2"	2"	JUST	J-127-JHL	24"X24"X16" STAINLESS STEEL SERVICE BASIN WITH INTEGRAL OVERFLOW. PROVIDE J-25-FS CHROME PLATED 1-1/2" DRAIN AND #830-AA WALL MOUNTED CHROME PLATED FAUCET W/ VACUUM BREAKER.
WB-1	WALL BOX	1/2"	1/2"	-	-	GUY GRAY	MDWB1AB	WALL BOX FOR ICEMAKER. WALL BOX TO INCLUDE 1/2" INLET, 3/8" OUTLET QUARTER TURN VALVE WITH ARRESTER. PROVIDE 1/2" WATTS SERIES 7 DUAL CHECK VALVE.
WC-1	WATER CLOSET	1-1/2"		2"	4"	AMERICAN STANDARD	AFWALL 3351.001	WALL HUNG, VITREOUS CHINA, TOP SPUD, 1.28 GPF TOILET WITH ELONGATED BOWL. PROVIDE WITH SLOAN OPTIMA PLUS 8111 FLUSHOMETER. PROVIDE W/ CHURCH #9500 OPEN FRONT SEAT.
WC-2	WATER CLOSET (ADA)	1-1/2"		2"	4"	AMERICAN STANDARD	AFWALL 3351.001	SAME AS WC-1 BUT MOUNT AT ADA HEIGHT
WSB-1	WASHER SUPPLY BOX	1/2"	1/2"	1-1/2"	2"	SIOUX CHIEF	696-2313 MF	OUTLET BOX WITH HW & CW HAMMER ARRESTORS AND SEPERATE DRAIN BOX.

PLUMBING PIPE MATERIALS

SYSTEM:	MATERIAL:
WATER PIPE, ABOVE GRADE	TYPE 'L' COPPER
WATER PIPE, BELOW GRADE	TYPE 'K' COPPER
SANITARY SEWER & VENT, ABOVE GRADE	CAST IRON NO HUB
SANITARY SEWER & VENT, BELOW GRADE	SCHEDULE 40 PVC
FIRE SPRINKLER LINE	BLACK STEEL
STORM, ABOVE GRADE	CAST IRON NO HUB
STORM, BELOW GRADE	SCHEDULE 40 PVC
NATURAL GAS	SCHEDULE 40 BLACK STEEL

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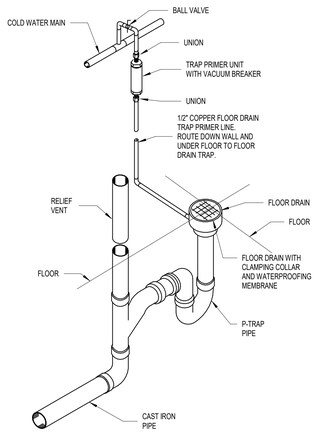
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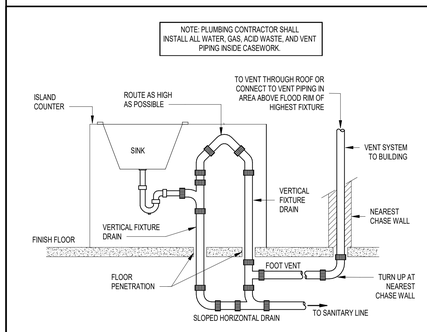
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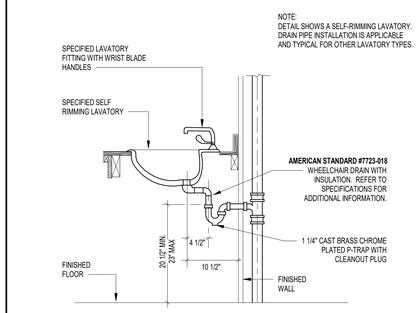
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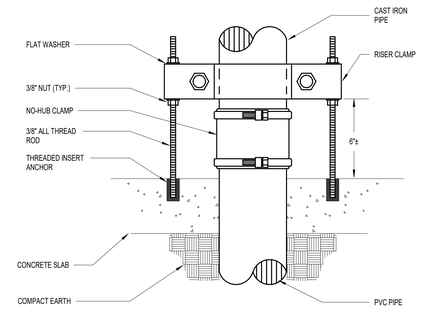
11 TRAP PRIMER DETAIL
NOT TO SCALE



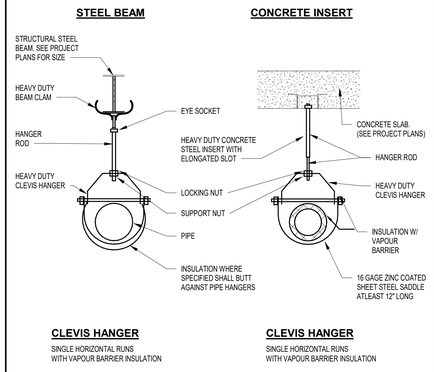
9 ISLAND SINK PIPING
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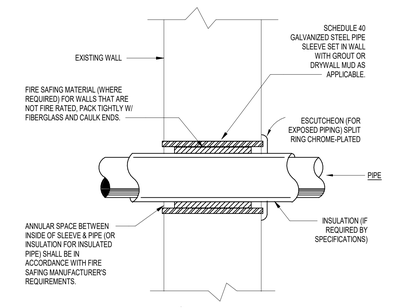
6 TYPICAL HANDICAPPED LAVATORY DETAIL
NOT TO SCALE



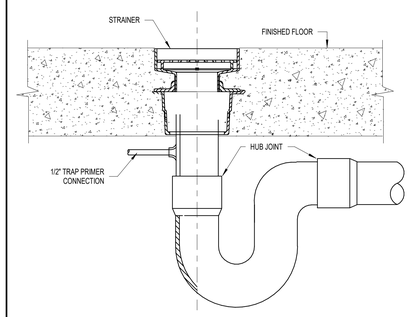
3 CAST IRON TO PVC TRANSITION DETAIL
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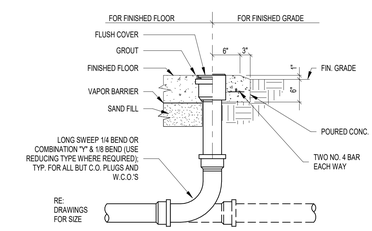
10 TYPICAL HANGER DETAIL
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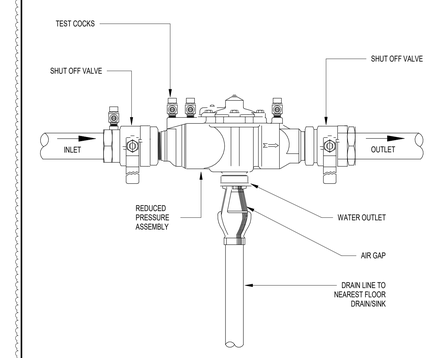
8 INTERIOR WALL SLEEVE
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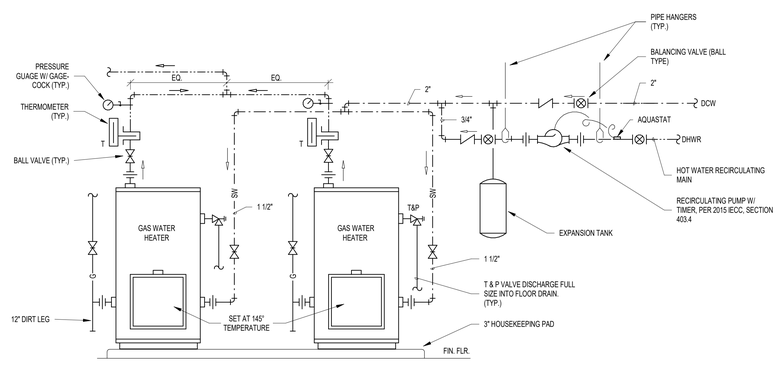
5 FLOOR DRAIN WITH TRAP PRIMER DETAIL
NOT TO SCALE



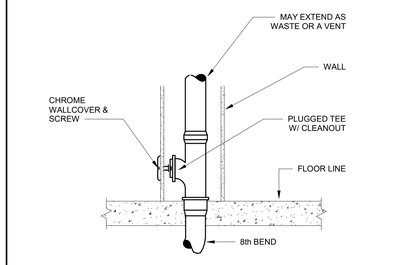
2 TYPICAL CLEANOUT DETAIL
NOT TO SCALE



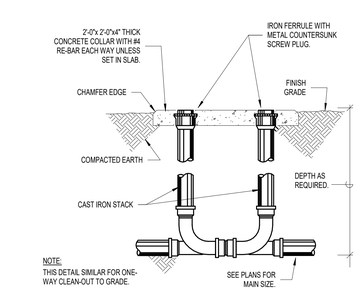
12 BACKFLOW PREVENTER
NOT TO SCALE



7 WATER HEATER - DUAL GAS
NOT TO SCALE



4 WALL CLEANOUT
NOT TO SCALE



1 2-WAY CLEANOUT DETAIL
NOT TO SCALE

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JE#4921
07/22/2025
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Project Status:
CONSTRUCTION DOCUMENTS

No.	DATE	DESCRIPTION
	09.12.2024	ISSUE FOR REVIEW
1	07.22.2025	ADDENDUM-4- PRE BID REVISION

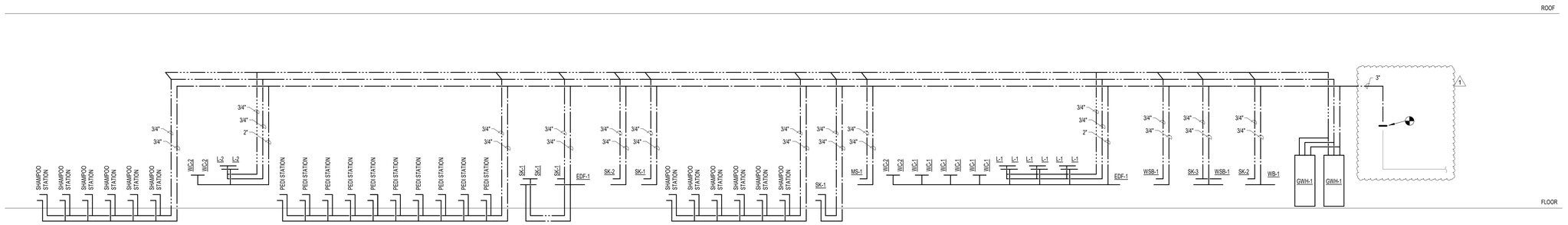
Sheet Title
PLUMBING DETAILS

Project Mgr:	JE
Designer:	JE
Drawn By:	JE
Checked By:	JE
Date:	10/14/2024
Job No.:	1503

P3.02

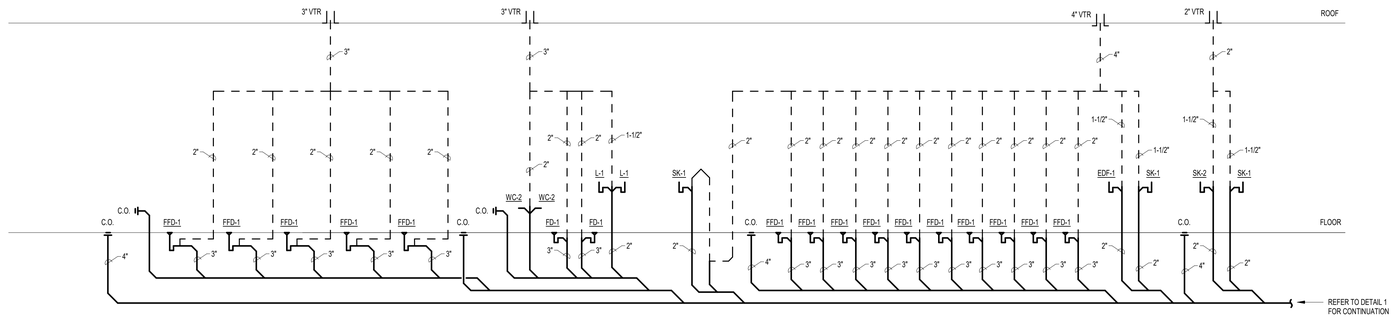
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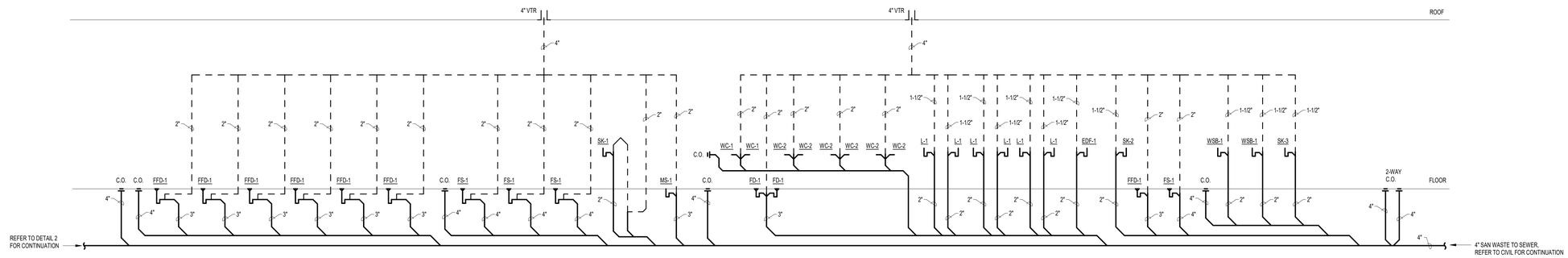
3 DOMESTIC WATER RISER DIAGRAM

N.T.S.



2 SAN WASTE & VENT RISER DIAGRAM - WEST

N.T.S.



1 SAN WASTE & VENT RISER DIAGRAM - EAST

N.T.S.

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Sheet Title
PLUMBING RISER DIAGRAMS

Project Mgr:	JE
Designer:	JE
Drawn By:	JE
Checked By:	JE
Date:	10/14/2024
Job No.:	1503

P3.03

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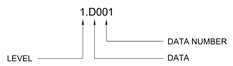
TECHNOLOGY GENERAL NOTES

1. FOLLOW TELECOM STANDARDS AND PRACTICES. SEE DIVISION 27 SPECIFICATIONS AND T DRAWINGS.
2. REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER (RCDD) SUPERVISOR SHALL REVIEW, APPROVE AND STAMP ALL SHOP DRAWINGS. COORDINATE DRAWINGS AND RECORD DRAWINGS.
3. ALL WALL PENETRATIONS SHALL BE SEALED WITH APPROVED FIRE STOPPING.
4. REFER TO THE ELECTRICAL FLOOR PLAN DRAWINGS FOR ADDITIONAL ROUGH-IN REQUIREMENTS. WHERE THERE ARE DRAWING DISCREPANCIES, THE CONTRACTOR SHALL INSTALL THE GREATER QUANTITY OF DEVICES.
5. REFER TO THE SITE PLAN ON AND RISER DIAGRAM FOR TELECOMMUNICATION BACKBONE CONDUITS/CABLES. FIELD COORDINATE EXACT ROUTING WITH OTHER TRADES.
6. ALL COMMUNICATIONS EQUIPMENT SHOWN SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE.
7. BOND ALL COMMUNICATIONS CABINETS, RELAY RACKS, CABLE TRAYS, AND OTHER METALLIC SUPPORTING DEVICES TO TELECOMMUNICATIONS GROUND BUSBAR INSIDE COMMUNICATIONS ROOM. BOND WITH A #6 GROUND CONDUCTOR.
8. ALL HORIZONTAL VOICE AND DATA CABLES SHALL BE DISTRIBUTED VIA MINIMUM 1" CONDUIT AND/OR CABLE TRAY. NO EXCEPTIONS.
9. SINGLE LINE DIAGRAMS, SCHEMATICS, DETAILS AND CONDUIT PATHS SHOWN HEREIN ARE CONCEPTUAL AND ILLUSTRATE ONLY THE FUNCTIONAL RELATIONSHIPS BETWEEN COMPONENTS OF THE SYSTEM. ACCORDINGLY, FULL SHOP DRAWING DEVELOPMENT IS REQUIRED TO REALIZE THE SPECIFIED FUNCTIONS.
10. DEVICE LOCATIONS ON PLANS ARE CONCEPTUAL. LOCATE AS SITE CONDITIONS REQUIRE AND AS APPROVED BY GC.
11. REFER TO THE BID SPECIFICATION FOR ADDITIONAL REQUIREMENTS REGARDING THIS WORK.
12. PAINTING, PATCHING AND FINISHES FOR DEVICES LOCATED IN EXISTING AREAS SHALL MATCH EXISTING FINISHES AS APPROVED BY GC.
13. FINISHES OF DEVICES IN NEW/REMODEL AREAS SHALL BE APPROVED BY GC.
14. WORK AND MATERIALS SHALL CONFORM TO THE MOST CURRENT UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AS FURNISHED BY GC. WORK AND MATERIALS NOT IN CONFORMANCE WITH THESE SPECIFICATIONS AND DETAILS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
15. IN SOME INSTANCES THE IDF MAY BE OVER 90 METERS FROM THE IP DEVICE DUE TO LEGACY DESIGN STANDARDS WHEN THE BUILDING WAS CONSTRUCTED. IF TESTED CABLE DOES NOT PASS CERTIFICATION, CONTRACTOR MUST USE MIDSPAN EXTENDER INSTALLED INSIDE OF ENCLOSURE. REFERENCE DETAIL SHEETS FOR INSTALLATION DIAGRAM.
16. CABLING INSTALLATION PRACTICES SHALL CONFORM TO ANSI/BICSI N1, AS APPLICABLE. INSTALLED.
17. CABLING SHALL MET THE REQUIREMENTS OF APPLICABLE STANDARDS (E.G., ANSI/TIA-568.2 ANSI/TIA-568.3, ISO/IEC 11801-1). ALL CONNECTORS SHALL BE SELECTED AND PROTECTED AS APPROPRIATE FOR THE ENVIRONMENTAL (E.G., PLENUM SPACE,
18. FOR PASSIVE DAS DISTRIBUTION SYSTEMS, INSTALLATION PROCEDURES SHALL CAREFULLY FOLLOW THE MANUFACTURER'INSTRUCTIONS TO ENSURE A HIGH-QUALITY INSTALLATION WITH MINIMUM PIM.
19. INSTALLED SYSTEMS SHALL BE TESTED WITH A PIM TESTER. ANY DEFECTS FOUND SHALL BE CORRECTED AND THE SYSTEM RETESTED.

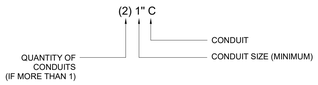
TECHNOLOGY ABBREVIATIONS

AC	ALTERNATING CURRENT	(N)	NEW
AHJ	AUTHORITY HAVING JURISDICTION	NET	NETWORK SWITCH
BDA	BIDIRECTIONAL AMPLIFIER	NIC	NOT IN CONTRACT
BIM	BUILDING INFORMATION MODELING	PIM	PASSIVE INTERMODULATION
BTS	BASE TRANSCEIVER STATION	POE	POWER OVER ETHERNET
CBRS	CITIZEN BROADBAND RADIO SERVICE	PR	PAIR AS IN COPPER PAIR (CATEGORY 5)
CX	COAXIAL CABLE	PTP	POINT TO POINT
CM	CABLE MANAGEMENT	R	RADIUS
CW	CONTINUOUS WAVE	RF	RADIO FREQUENCY
COPP	COPPER PATCH PANEL	RFI	RADIO FREQUENCY INTERFERENCE
DAS	DISTRIBUTED ANTENNA SYSTEM	SMF	SINGLE MODE FIBER
DC	DIRECT CURRENT	SNMP	SIMPLE NETWORK MANAGEMENT PROTOCOL
(E)	EXISTING	STP	SHIELDED TWISTED PAIR, 22 AWG
EIRP	EFFECTIVE ISOTROPIC RADIATED POWER	TR	TELECOMMUNICATIONS ROOM
EMI	ELECTROMAGNETIC INTERFERENCE	UHF	ULTRA HIGH FREQUENCY
ER	EQUIPMENT ROOM	UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
ERP	EFFECTIVE RADIATED POWER	UTP	UNSHIELDED TWISTED PAIR
FOPP	FIBER OPTIC PATCH PANEL	UTP	UNSHIELDED TWISTED PAIR
GC	GENERAL CONTRACTOR	VHF	VERY HIGH FREQUENCY
ICT	INFORMATION AND COMMUNICATION TECHNOLOGY	VSWR	VOLTAGE STANDING WAVE RATIO
LEC	LOCAL EXCHANGE CARRIER	WAN	WIDE AREA NETWORK
LMR	LAND MOBILE RADIO	WLAN	WIRELESS LOCAL AREA NETWORK
LTE	LONG TERM EVOLUTION	WSP	WIRELESS SERVICE PROVIDER
MCU	MASTER CONTROL UNIT		
MIMO	MULTIPLE INPUT/MULTIPLE OUTPUT (ANTENNA)		
MMF	MULTIMODE FIBER		

DEVICE DESIGNATION KEY



CONDUIT DESIGNATION KEY



TECHNOLOGY EQUIPMENT SYMBOLS LIST

SYMBOL	DESCRIPTION
DAS	DISTRIBUTED ANTENNA SYSTEM
HDMI-R	HDMI RECEIVER
HDMI-T	HDMI TRANSMITTER
FOPP	FIBER OPTIC PATCH PANEL
FOT	FIBER OPTIC TRANSMITTER
FOR	FIBER OPTIC RECEIVER
CPP	COPPER PATCH PANEL
PH X	PHONE WHERE "X" IS: C - CONFERENCE PHONE D - DESK PHONE S - SOFT PHONE (NON PHYSICAL PHONE: USES LICENSE)
HH	HAND HOLE
MATV	MAINTENANCE HOLE
MH	MAN HOLE
NS O	NETWORK SWITCH (OWNER)
NS T	NETWORK SWITCH (TENANT)
PB	PULL BOX
P	OSP COPPER PROTECTOR
▼X	X-CAT6 TERMINATION JACK WHERE X REPRESENTS QUANTITY OF CAT6 CABLES. FIELD COORDINATE EXACT PLACEMENT WITH OTHER TRADE.
▼4	EXAMPLE: 4-CAT6 WITH 4-PORT WALL PLATE, 15" A.F.F. PROVIDE PATCH CORD FOR EACH CONNECTED PORT.
▼TV	TV OUTLET (1 RG-6 CABLE)
▼A/V	HDMI WITH 2 AUDIO JACKS. INCLUDE PLENUM HDMI AND 2 AUDIO CABLE FROM JACK TO A/V SOURCE WITHIN ROOM.
▼W	1 CAT 6 WITH PLATE FOR WALL MOUNTED PHONE, 45"A.F.F.
▼B	BLANK WALL PLATE
X ▼	X CAT 6 CABLE (FLOOR OUTLET) WHERE X REPRESENTS QUANTITY OF CAT6 CABLES.
X ▽	X CAT 6 CABLE (CEILING OUTLET)
AW ▼	ALL WEATHER OUTDOOR PHONE, 1 CAT 6
FDLU	FIBER DISTRIBUTION LOCAL UNIT
FDRU	FIBER DISTRIBUTION REMOTE UNIT
SVR	CBRS SERVER
SP	SPLITTER
MX	MULTIPLEXER
T	TERMINATOR
TAP	PASSIVE TAP/SPLITTER/COMBINER/PLEXOR
PC1	PC TYPE 1
PC2	PC TYPE 2

TECHNOLOGY EQUIPMENT SYMBOLS LIST

SYMBOL	DESCRIPTION
○	CONDUIT TURNING UP
●———	CONDUIT TURNING DOWN
———	TERMINATING CONDUIT. PROVIDE GROUND LUG AND INSULATED THROAT BUSHING.
———	EXPOSED CONDUIT
— — — — — —	CONCEALED CONDUIT
— · — · — · —	ARIEL CABLE
FPC	FLIGHT INFORMATION DISPLAY PC
HCM	HORIZONTAL CABLE MANAGEMENT
JB	JUNCTION BOX
EX	ETHERNET EXTENDER
REC	REMOTE EQUIPMENT ENCLOSURE
WAP	WIRELESS ACCESS POINT, 2 CAT 6A CABLES
COAX TYPE 1	COXIAL CABLE TYPE 1

SHEET INDEX

SHEET NO.	DESCRIPTION
T.001	TELECOM - SHEET LIST, SYMBOLS & NOTES
T.100	TELECOM - SITE PLAN
T.101	TELECOM - FLOOR PLAN - LEVEL 1
T.201	TELECOM - ROOF PLAN
T.401	TELECOM - ENLARGED PLAN - LEVEL 1 - IDF/IT 108
T.501	TELECOM - DETAILS
T.601	TELECOM - SCHEDULE

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Project Status:
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No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
TELECOM - SHEET LIST, SYMBOLS & NOTES

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

T.001

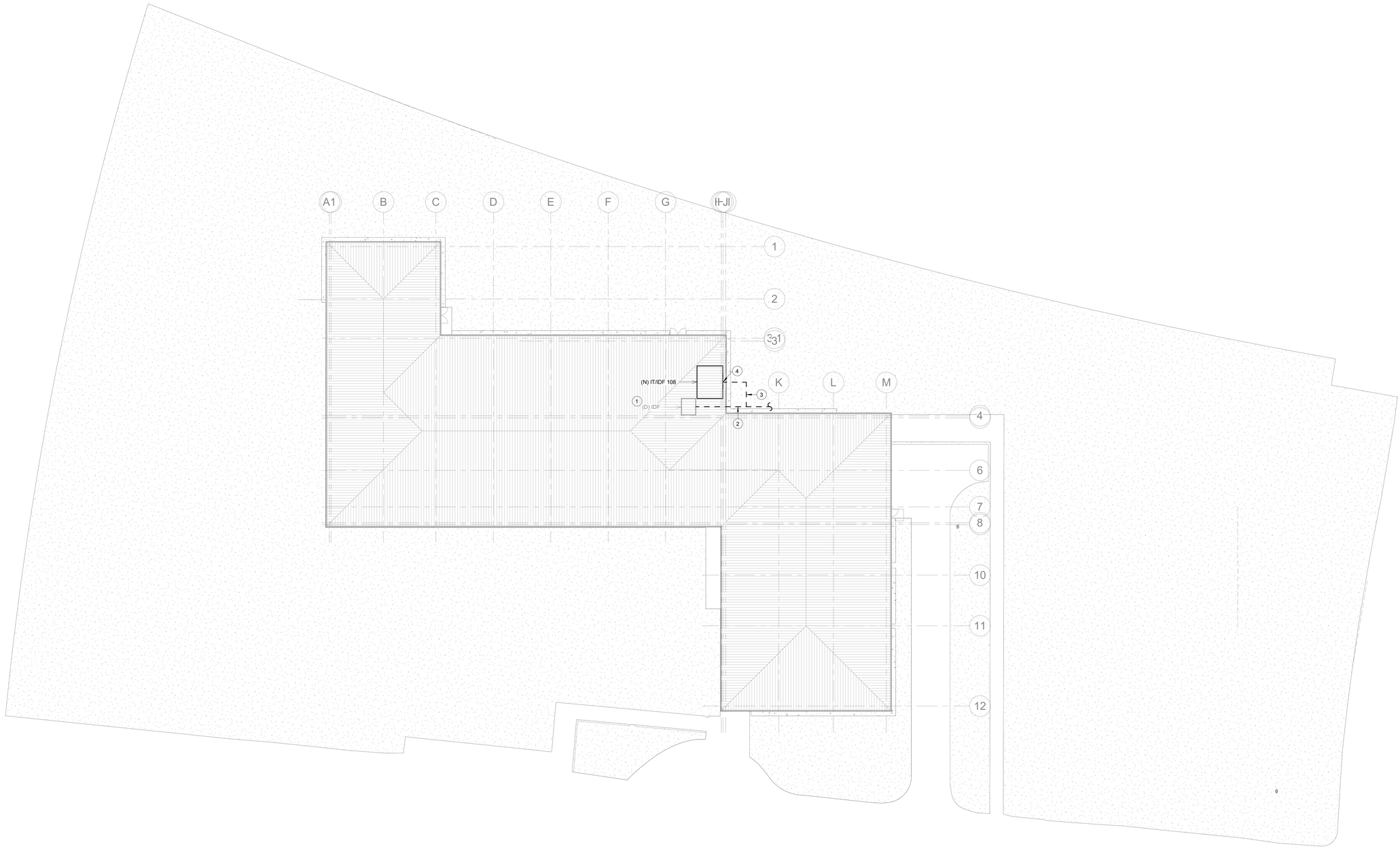
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GENERAL NOTES:

1. REFER TO GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.
3. REFER TO AUDIO/VISUAL SPECIFICATION FOR EXACT MODEL AND SUBSTITUTES.
4. AV AND IT CABLING ROUTED ALONG CEILING SHALL BE INSTALLED IN CONDUIT PAINTED TO MATCH CEILING.

KEYED NOTES:

1. EXISTING IDF. DEMO ALL EQUIPMENT AND RETURN TO OWNER.
2. (2) 2" CONDUITS (E) WITH 24 SMF TO CENTRAL PLANT AND 50 PAIR COPPER CABLE. PULL CABLE BACK TO NEAREST HANDHOLE OR PEDASTOL AND REINSTALL INTO NEW PATHWAY AND NEW IDF.
3. (2) 2" CONDUIT (N). INSTALL EXISTING 24 SMF AND 50 PAIR COPPER CABLE THROUGH NEW PATHWAY.
4. RISER UP TO TRAY HEIGHT INSIDE IDF AND EXTEND THROUGH WALL USING (2) 2" LBD. SEAL AS REQUIRED. REF. 5/T.501



1 TELECOM - SITE PLAN
1/16" = 1'-0"

N

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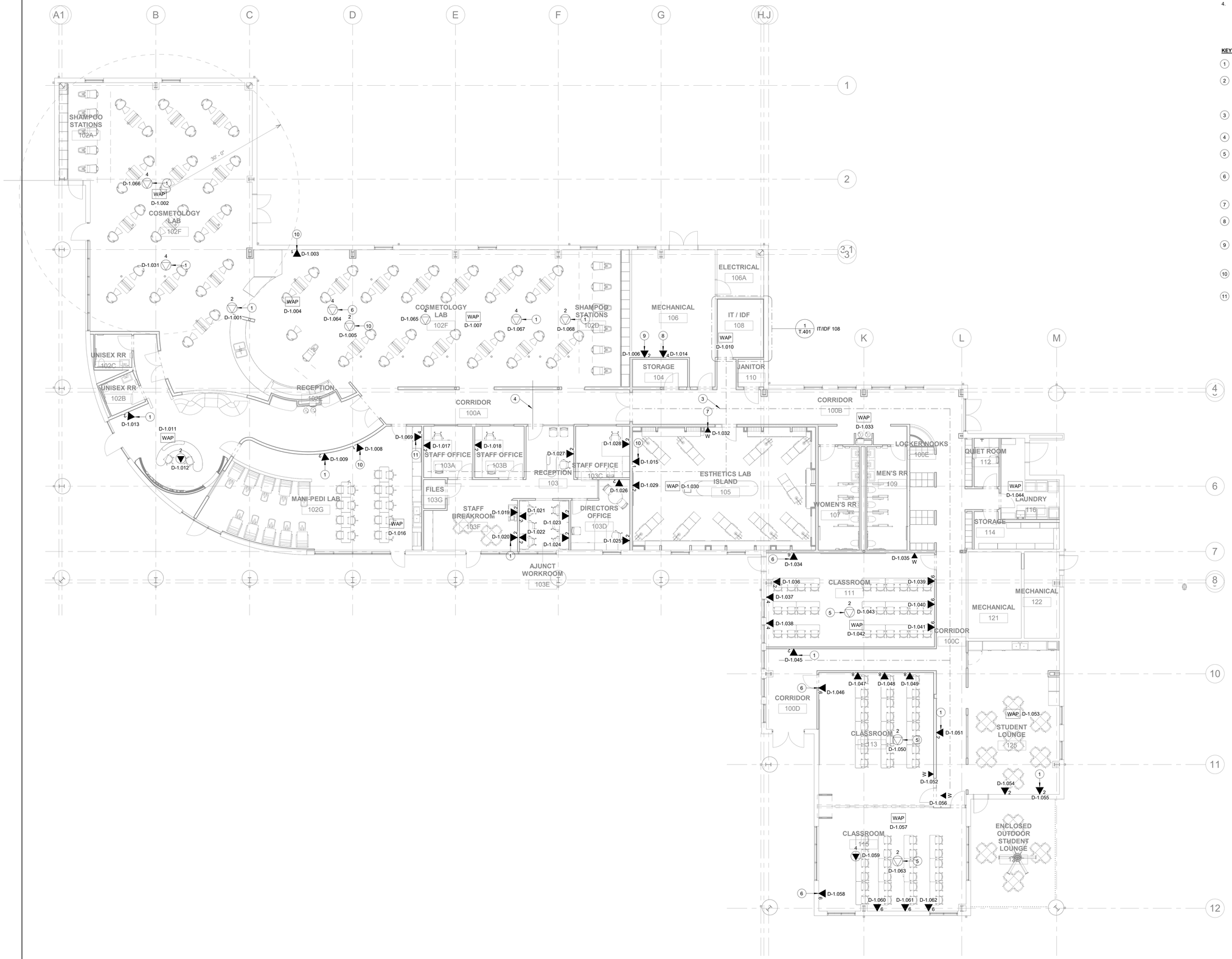
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Sheet Title
TELECOM - SITE PLAN

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

T.100



1 TELECOM - FLOOR PLAN - LEVEL 1
1/8" = 1'-0"

N

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3. REFER TO AUDIO/VISUAL SPECIFICATION FOR EXACT MODEL AND SUBSTITUTES.
4. AV AND IT CABLING ROUTED ALONG CEILING SHALL BE INSTALLED IN CONDUIT PAINTED TO MATCH CEILING.

KEYED NOTES:

1. DATA FOR DISPLAY CONNECTIVITY, REFER TO A/V FOR ADDITIONAL DETAILS.
2. FLOOR DATA CONNECTIVY FOR CLASSROOM LECTERN/PODUIM. STRUCTURED CABLING CONTRACTOR SHALL COORDINATE EXACT LOCATION WITH ELECTRICAL CONTRACTOR AND FURNITURE VENDOR.
3. J-HOOK PATHWAY INSTALLATION IN PLENUM SPACE. DO NOT EXCEED 40% FILL, SPACE J-HOOK EVERY 6 FEET.
4. 4" C. PATHWAY FOR STRUCTURED CABLING. COORDINATE SPACE WITH MEP.
5. DATA OUTLET IN A/V CEILING PLENUM BOX. COORDINATE EXACT LOCATION WITH A/V CONTRACTOR.
6. COORDINATE LECTERN/PODUIM LOCATION STRUCTURED CABLING CONTRACTOR SHALL COORDINATE EXACT LOCATION WITH FURNITURE VENDOR.
7. DATA FOR WALL PHONE. COORDINATE EXACT LOCATION.
8. DATA FOR FIRE PANEL. COORDINATE EXACT LOCATION AND CONNECTIVITY WITH FIRE SAFETY CONTRACTOR.
9. DATA FOR MECHANICAL BUILDING CONTROLS. COORDINATE EXACT LOCATION AND CONNECTIVITY WITH MECHANICAL CONTRACTOR.
10. DATA FOR PRESENTER CAMERA. COORDINATE EXACT LOCATION WITH A/V CONTRACTOR.
11. DATA FOR A/V RACK. COORDINATE EXACT LOCATION WITH A/V CONTRACTOR.

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Houston, TX 77032
346.570.2418
pgaengineers.com
TBPE FIRM #12493

STATE OF TEXAS
JOHN GRUENWALD
100039
LICENSED
PROFESSIONAL ENGINEER

07/22/2025

CLIENT:
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2700 W W THORNE DRIVE
LEIGHANN BAILIE
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713.664.0130

LANDSCAPE
ASAKURA ROBINSON
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SPECIAL SYSTEMS (IT / SECURITY)
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346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
TELECOM - FLOOR PLAN - LEVEL 1

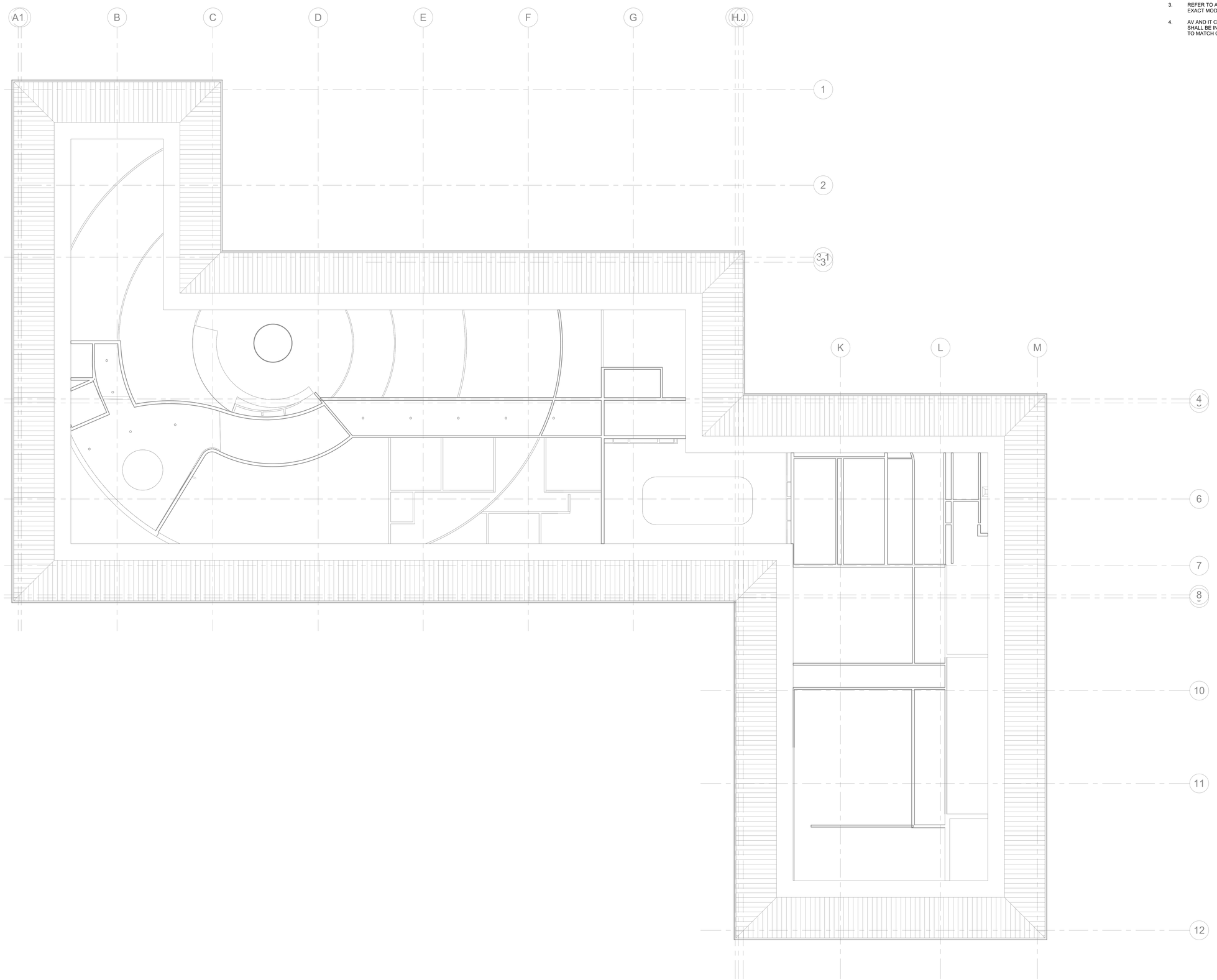
Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

T.101

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

GENERAL NOTES:

1. REFER TO GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.
3. REFER TO AUDIO/VISUAL SPECIFICATION FOR EXACT MODEL AND SUBSTITUTES.
4. AV AND IT CABLING ROUTED ALONG CEILING SHALL BE INSTALLED IN CONDUIT PAINTED TO MATCH CEILING.



1 TELECOM - ROOF PLAN
1/8" = 1'-0"

N

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Project Status:

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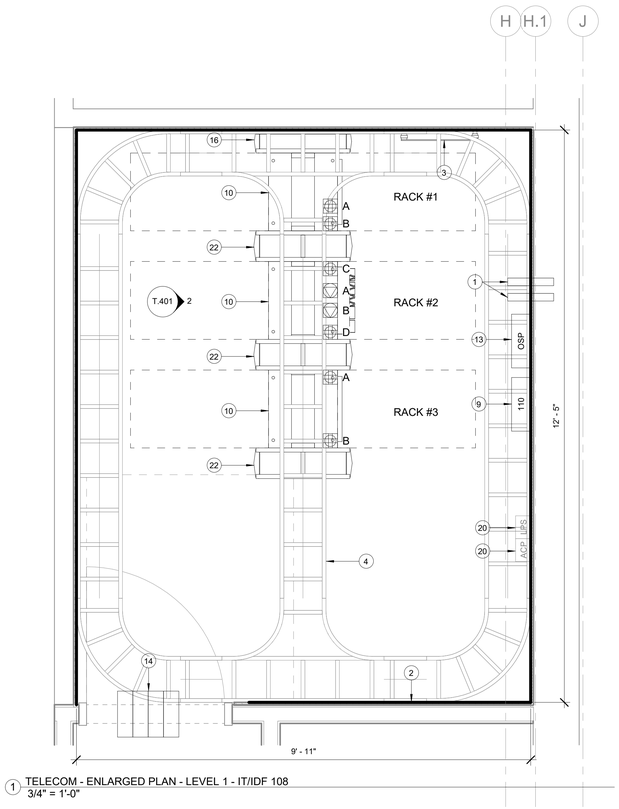
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Sheet Title

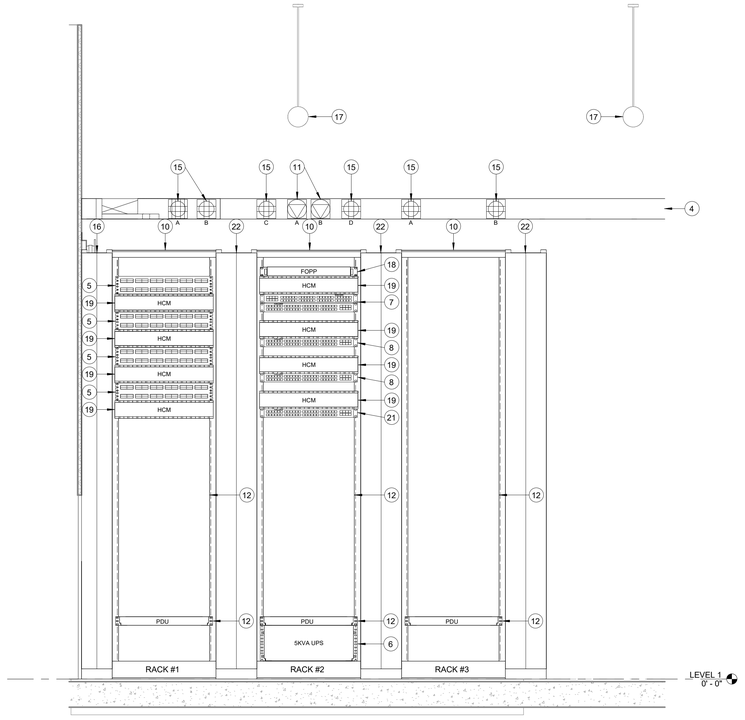
TELECOM - ROOF PLAN

Project Mgr:	
Designer:	
Drawn By:	PGA
Checked By:	RDLR
Date:	07/22/2025
Job No.:	1503

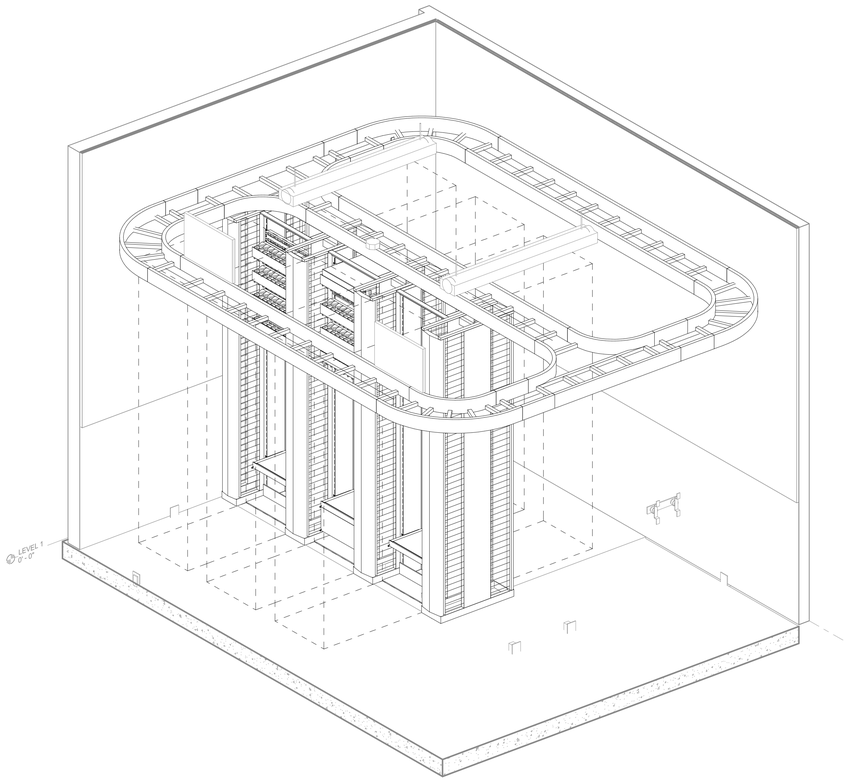
T.201



1 TELECOM - ENLARGED PLAN - LEVEL 1 - IT/IDF 108
3/4" = 1'-0"



2 TELECOM - RACK ELEVATION - IDF/IT 108
1" = 1'-0"



3 TELECOM - ISOMETRIC VIEW - IDF/IT 108

GENERAL NOTES:

1. REFER TO GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.
3. REFER TO AUDIO/VISUAL SPECIFICATION FOR EXACT MODEL AND SUBSTITUTES.
4. AV AND IT CABLING ROUTED ALONG CEILING SHALL BE INSTALLED IN CONDUIT PAINTED TO MATCH CEILING.
5. STRUCTURED CABLING CONTRACTOR SHALL COORDINATE EQUIPMENT WITH OWNER IT PROJECT MANAGER PRIOR TO INSTALL.

KEYED NOTES:

1. (2) 2" CONDUIT SLEEVES ABOVE HORIZONTAL TRAY.
2. 4' X 8' PLYWOOD BACKBOARD AROUND PERIMETER OF ROOM 8" AFF. PAINT ALL SIDES AND EDGES WITH FIRE RETARDANT PAINT.
3. (IDF) TELECOMMUNICATION GROUND BUSBAR (TGB). BOND TO MAIN EQUIPMENT GROUND IN RM 106A VIA #2AWG GROUND CONDUCTOR IN 1.5"C. MOUNT AT 7' AFF.
4. 12" CABLE LADDER. PROVIDE JUNCTION, SPLICE, AND SUPPORT KITS AS REQUIRED. BOND TO TMGB WITH A #6AWG INSULATED BONDING CONDUCTOR.
5. 48 PORT COPPER PATCH PANEL.
6. 5KVA APC SUA5000 RACK MOUNT UPS WITH L6-30P INPUT CORD, AND (2) L6-20R; (2) L6-30R OUTPUTS.
7. NETWORK DISTRIBUTION SWITCH.
8. NETWORK ACCESS SWITCH.
9. 25 PAIR COPPER PATCH PANNEL. 110 TYPE.
10. EIA/TIA 7' RELAY RACK. RACK 1 FOR HORIZONTAL CABLE TERMINATIONS. RACK 2 FOR FIBER RISER, COPPER RISER, NETWORK EQUIPMENT, AND UPS. RACK 3 FOR HORIZONTAL CABLE TERMINATIONS AND FUTURE USE.
11. 208V, 30A, L6-30R RECEPTACLE FASTENEND TO CABLE TRAY ABOVE CABINET. REFERENCE ELECTRICAL DRAWINGS AND SPECIFICATIONS.
12. HORIZONTAL PDU WITH L6-20P INPUT CORD.
13. TELECOM ENTRANCE CABLE PROTECTOR PANEL AND TRANSITION SPLICE. BOND TO TMGB.
14. (4) 4" WALL SLEEVES OR CUNDUITS WITH BUSHING AND FIRESTOP FOR HORIZONTAL CABLE DISTRIBUTION..
15. 120V, 20A, 5-20R QUAD RECEPTACLE FASTENEND TO CABLE TRAY. REFERENCE ELECTRICAL DRAWINGS AND SPECIFICATIONS.
16. 6" WIDE, DOUBLE SIDED VERTICLE CABLE MANAGER. THE VERTICLE CABLE MANAGER AGAINST THE WALL TO BE 6" W.
17. COORDINATE LIGHT FIXTURE WITH ELECTRICAL @ 8.5' AFF. LIGHTING TO BE PROVIDED IN FRONT AND REAR OF EACH ROW OF CABINETS.
18. (1RU) 48 PORT FIBER OPTIC PATCH PANEL.
19. (2RU) HORIZONTAL CABLE MANAGER.
20. ACCESS CONTROL PANEL (ACP) AND LOCK POWER SUPPLIES (LPS) FOR SECURITY. REFER TO SECURITY PLANS FOR ADDITIONAL DETAILS.
21. NETWORK ACCESS SWITCH DEDICATED FOR WAPS.
22. 8" WIDE, DOUBLE SIDED VERTICLE CABLE MANAGER.

N

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11301 FALLBROOK DR STE 320
832-678-2110

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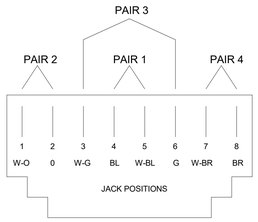
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Sheet Title
TELECOM - ENLARGED PLAN - LEVEL 1 - IDF/IT 108

Project Mgr:	
Designer:	
Drawn By:	PGA
Checked By:	RDLR
Date:	07/22/2025
Job No.:	1503

T.401

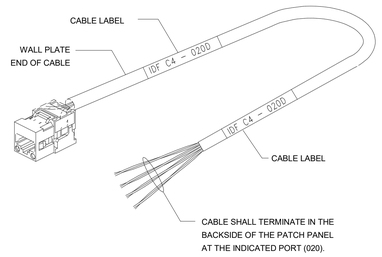
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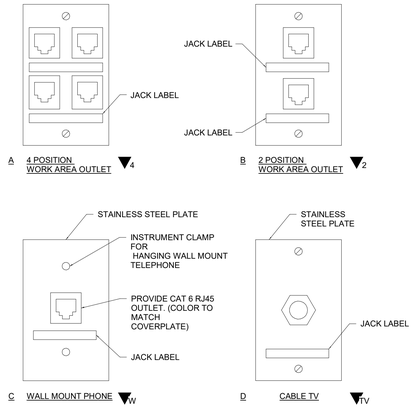
NOTE:

ALL DEVICES WIRED T568B AS SHOWN.

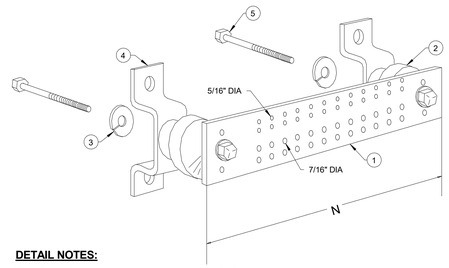
1 568B WIRING DIAGRAM
NTS



2 COMMUNICATIONS CABLE LABELING
NTS



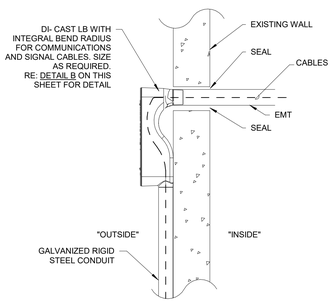
3 COVERPLATE DETAILS
NTS



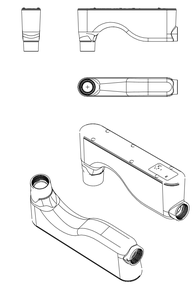
DETAIL NOTES:

1. COPPER GROUND BAR, 1/4" X 4" X N". ORTRONICS GB4X(N) ERICO TMGBA14L15PT OR EQUAL. N=12" FOR TGB, 24" FOR TMGB USE COMPRESSION LUGS WITH 2 SCREW HOLES AND ALUMINUM AND/OR COPPER ANTIOXIDANT JOINT COMPOUND
2. INSULATOR
3. LOCKWASHERS
4. WALLMOUNTING BRACKET
5. BOLT

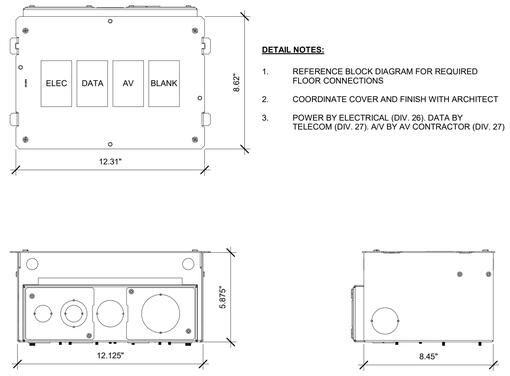
4 TELECOMMUNICATIONS GROUNDBUSAR
NTS



5 WALL PENETRATION DETAIL "A"
NTS



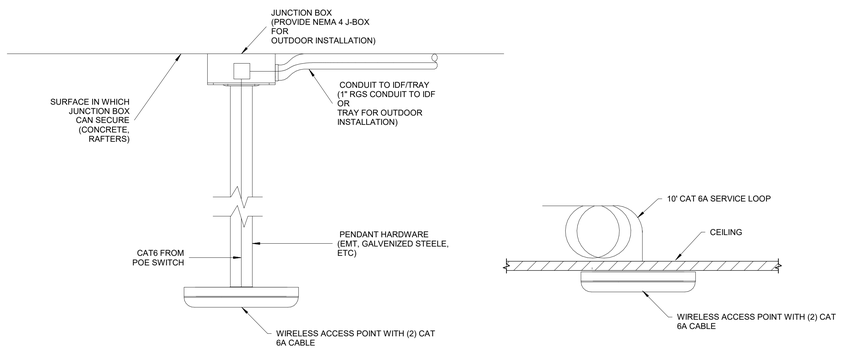
6 WALL PENETRATION DETAIL "B"
NTS



DETAIL NOTES:

1. REFERENCE BLOCK DIAGRAM FOR REQUIRED FLOOR CONNECTIONS
2. COORDINATE COVER AND FINISH WITH ARCHITECT
3. POWER BY ELECTRICAL (DIV. 26). DATA BY TELECOM (DIV. 27). A/V BY AV CONTRACTOR (DIV. 27)

8 DETAIL - FLOOR BOX
3" = 1'-0"

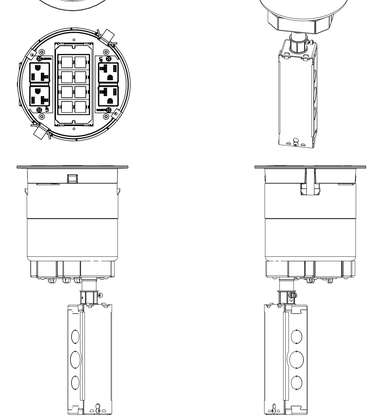


A. SUSPENDED **B. CEILING MOUNT**

9 WIRELESS ACCESS POINT MOUNTING
NTS

DETAIL NOTES:

1. REFERENCE FLOOR PLANS FOR REQUIRED FLOOR CONNECTIONS.
2. COORDINATE COVER AND FINISH WITH ARCHITECT.
3. DATA BY TELECOM (DIV. 27). POWER BY ELECTRICAL (DIV. 26)
4. POKE THORUGH TO SUPPORT UP TO 8 CAT6 REF. ELECTRICAL DRAWINGS FOR ELECTRICAL SCOPE.
5. LEGRAND 6STCP POKE THRU WITH 6ACT8A DATA INSERT PLATE. SUBMIT PRODUCT DATA FOR APPROVAL PRIOR TO PROCUREMENT AND INSTALLATION.



7 DETAIL - FLOOR POKE
3" = 1'-0"

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4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title

TELECOM - DETAILS

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

T.501

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Data Jack Device Schedule			
LEVEL	DEVICE ID	PORT COUNT	TERMINATING IDF
LEVEL 1	D-1.001	2	IDF/IT 108
LEVEL 1	D-1.002	1	IDF/IT 108
LEVEL 1	D-1.003	1	IDF/IT 108
LEVEL 1	D-1.004	1	IDF/IT 108
LEVEL 1	D-1.005	2	IDF/IT 108
LEVEL 1	D-1.006	2	IDF/IT 108
LEVEL 1	D-1.007	1	IDF/IT 108
LEVEL 1	D-1.008	1	IDF/IT 108
LEVEL 1	D-1.009	2	IDF/IT 108
LEVEL 1	D-1.010	1	IDF/IT 108
LEVEL 1	D-1.011	1	IDF/IT 108
LEVEL 1	D-1.012	2	IDF/IT 108
LEVEL 1	D-1.013	2	IDF/IT 108
LEVEL 1	D-1.014	4	IDF/IT 108
LEVEL 1	D-1.015	1	IDF/IT 108
LEVEL 1	D-1.016	1	IDF/IT 108
LEVEL 1	D-1.017	2	IDF/IT 108
LEVEL 1	D-1.018	2	IDF/IT 108
LEVEL 1	D-1.019	2	IDF/IT 108
LEVEL 1	D-1.020	2	IDF/IT 108
LEVEL 1	D-1.021	2	IDF/IT 108
LEVEL 1	D-1.022	2	IDF/IT 108
LEVEL 1	D-1.023	2	IDF/IT 108
LEVEL 1	D-1.024	2	IDF/IT 108
LEVEL 1	D-1.025	2	IDF/IT 108
LEVEL 1	D-1.026	2	IDF/IT 108
LEVEL 1	D-1.027	2	IDF/IT 108
LEVEL 1	D-1.028	2	IDF/IT 108
LEVEL 1	D-1.029	2	IDF/IT 108
LEVEL 1	D-1.030	1	IDF/IT 108
LEVEL 1	D-1.031	4	IDF/IT 108
LEVEL 1	D-1.032	1	IDF/IT 108
LEVEL 1	D-1.033	1	IDF/IT 108
LEVEL 1	D-1.034	6	IDF/IT 108
LEVEL 1	D-1.035	1	IDF/IT 108
LEVEL 1	D-1.036	2	IDF/IT 108
LEVEL 1	D-1.037	4	IDF/IT 108
LEVEL 1	D-1.038	4	IDF/IT 108
LEVEL 1	D-1.039	6	IDF/IT 108
LEVEL 1	D-1.040	6	IDF/IT 108
LEVEL 1	D-1.041	6	IDF/IT 108
LEVEL 1	D-1.042	1	IDF/IT 108
LEVEL 1	D-1.043	2	IDF/IT 108
LEVEL 1	D-1.044	1	IDF/IT 108
LEVEL 1	D-1.045	2	IDF/IT 108
LEVEL 1	D-1.046	6	IDF/IT 108
LEVEL 1	D-1.047	8	IDF/IT 108
LEVEL 1	D-1.048	8	IDF/IT 108
LEVEL 1	D-1.049	8	IDF/IT 108
LEVEL 1	D-1.050	2	IDF/IT 108
LEVEL 1	D-1.051	2	IDF/IT 108
LEVEL 1	D-1.052	1	IDF/IT 108
LEVEL 1	D-1.053	1	IDF/IT 108
LEVEL 1	D-1.054	2	IDF/IT 108
LEVEL 1	D-1.055	2	IDF/IT 108
LEVEL 1	D-1.056	1	IDF/IT 108
LEVEL 1	D-1.057	1	IDF/IT 108
LEVEL 1	D-1.058	6	IDF/IT 108
LEVEL 1	D-1.059	4	IDF/IT 108
LEVEL 1	D-1.060	6	IDF/IT 108
LEVEL 1	D-1.061	6	IDF/IT 108
LEVEL 1	D-1.062	6	IDF/IT 108
LEVEL 1	D-1.063	2	IDF/IT 108
LEVEL 1	D-1.064	4	IDF/IT 108
LEVEL 1	D-1.065	4	IDF/IT 108
LEVEL 1	D-1.066	4	IDF/IT 108
LEVEL 1	D-1.067	4	IDF/IT 108
LEVEL 1	D-1.068	2	IDF/IT 108
LEVEL 1	D-1.069	4	IDF/IT 108
TOTAL: 69		CABLE TOTAL: 193	

1 DATA JACK SCHEDULE
NTS

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Sheet Title

TELECOM - SCHEDULE

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

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A/V EQUIPMENT SYMBOLS LIST

SYMBOL	TYPE
AA	AUDIO AMPLIFIER
ANT	WIRELESS VIDEO ANTENNA
AV1	AV FLOORBOX TYPE 1
AV2	AV FLOORBOX TYPE 2
HDMI	AUDIO VIDEO JACK: HDMI
AVR	AV MILLWORK RACK
CAM	PRESENTER CAMERA
CC1	CABLE CUBBY TYPE 1
CM	CEILING MICROPHONE
CP	CONTROL PROCESSOR
DSP	DIGITAL SIGNAL PROCESSOR
DS	DIGITAL SIGNAGE PLAYER
FP1	FLAT PANEL DISPLAY TYPE 1
MIC	MICROPHONE
PS	PROJECTOR SCREEN
OP	OVERHEAD PROJECTOR
RS	ROOM SCHEDULER
SP1	CEILING MOUNT SPEAKER
SP2	PENDANT MOUNT SPEAKER
TP1	TOUCH PANEL TYPE 1
VC	VIDEO CONFERENCE CAMERA
VCB	VIDEO CONFERENCE A/V BRIDGE
VS	VIDEO SWITCHER MATRIX
VR	VIDEO RECEIVER
VT	VIDEO TRANSMITTER
VW	VIDEO WALL
WM	WIRELESS MICROPHONE
WVR	WIRELESS VIDEO RECEIVER
WVT	WIRELESS VIDEO TRANSMITTER
PC1	TYPE 1 PC
IDB	INTERACTIVE DISPLAY BOARD
UTX	USB EXTENDER
ENC	VIDEO OVER IP ENCODER
STB	DTV, SET TOP BOX
VCC	VIDEO CONFERENCING CODEC

ABBREVIATION

AUDIO		INDUSTRY TERMS	
AA	AUDIO AMPLIFIER	ADA	AMERICANS WITH DISABILITIES ACT
AEC	AUTO ECHO CANCELATION.	AFF	ABOVE FINISHED FLOOR
ALD	ASSITIVE LISTENING DEVICE	ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
DSP	DIGITAL SOUND PROCESSOR	ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
MIC	MICROPHONE	AVCS	AUDIO VIDEO CONTROL SYSTEM
PA	POWER AMPLIFIER	AVI	AUDIO VISUAL INTEGRATOR
SP	SPEAKER	BIM	BUILDING INFORMATION MODELING
WMS	WIRELESS MICROPHONE SYSTEM	CAD	COMPUTER AIDED DESIGN
VIDEO		CADD	COMPUTER AIDED DESIGN AND DRAFTING
CCTV	CLOSED CIRCUIT TELEVISION	CEA	CONSUMER ELECTRONICS ASSOCIATION
CAM	CAMERA	CEDIA	CUSTOM ELECTRONIC DESIGN AND INSTALLATION ASSOCIATION
CCU	CAMRA CONTROL UNIT	CSI	CONSTRUCTION SPECIFICATIONS INSTITUTE
DA	DISTRIBUTION AMPLIFIER	ISO	INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
EDID	EXTENDED DISPLAY IDENTIFICATION DATA	NCS	NATIONAL CAD STANDARD
FP	FLAT PANEL DISPLAY	NEC	NATIONAL ELECTRIC CODE
HDBT	HDBASET (VIDEO STANDARD)	NEM	NATIONAL EQUIPMENT MANUFACTURER'S ASSOCIATION
HDCP	HIGH-BANDWIDTH DIGITAL CONTENT PROTECTION	NIBS	NATIONAL INSTITUTE OF BUILDING SCIENCES
HDMI	HIGH-DEFINITION MULTIMEDIA INTERFACE	RCP	REFLECTED CEILING PLAN
LEN	CAMERA LENS	SIA	SECURITY INDUSTRY ASSOCIATION
TUN	TUNER	UDS	UNIFORM DRAWING SYSTEM
VS	VIDEO MATRIX SWITCHER	NETWORK	
EQUIPMENT HARDWARE		AVLAN	AUDIO VISUAL LOCAL AREA NETWORK
ANT	ANTENNA	BLAN	BUSINESS LOCAL AREA NETWORK
AVC	A/V EQUIPMENT CABINET	CAT	PHYSICAL LAYER CATEGORY NETWORK CABLE
FPM	FLAT PANEL MOUNT	DANTE	DIGITAL AUDIO NETWORK THROUGH ETHERNET
IDF	INTERMEDIATE DISTRIBUTION FRAME	LAN	LOCAL AREA NETWORK
LEC	LECTERN	POE	POWER OVER ETHERNET
PMT	PROJECTOR MOUNT	VLAN	VIRTUAL LOCAL AREA NETWORK
RU	RACK UNIT (1.75") OF VERTICAL SPACE IN AN AV RACK	VOIP	VOICE OVER INTERNET PROTOCOL.
UPS	UNINTERRUPTIBLE POWER SUPPLY	WAN	WIDE AREA NETWORK
WRK	WALL RACK		

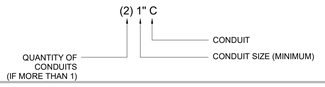
COMMON WIRE TYPES

TYPE	PART #	PLENUM	CONDUCTR COUNT	SHIELD	WIRE GAUGE	NOTES
MIC/LINE	BELDEN 8428	NO	2	1	18	
MIC/LINE	BELDEN 8412P	YES	2	1	20	
SPEAKER	BELDEN 5200UE	NO	2	0	16	
SPEAKER	BELDEN 6000UE	YES	2	0	12	
CATEGORY	BELDEN 7883A	NO	8	0	24	PATCH CABLE
CATEGORY	BELDEN 2413	YES	8	0	23	2400
CATEGORY	BELDEN 4813	YES	8	0	23	4800
CATEGORY	BELDEN 7953A	NO	8	1	23	SHIELDED
M. FIBER	CORNING 024T88-33190-D3	YES	24	N/A	50 µM	(OM4)
S. FIBER	CORNING 024E88-33131-D3	YES	24	N/A	8.2 µM	(OS2)

GENERAL NOTES

1. FOLLOW TELECOM STANDARDS AND PRACTICES. SEE DIVISION 27 SPECIFICATIONS AND DRAWINGS.
2. REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER (RCDD) SUPERVISOR SHALL REVIEW, APPROVE AND STAMP ALL SHOP DRAWINGS. COORDINATE DRAWINGS AND RECORD DRAWINGS.
3. ALL WALL PENETRATIONS SHALL BE SEALED WITH APPROVED FIRE STOPPING.
4. REFER TO THE ELECTRICAL FLOOR PLAN DRAWINGS FOR ADDITIONAL ROUGH-IN REQUIREMENTS. WHERE THERE ARE DRAWING DISCREPANCIES, THE CONTRACTOR SHALL INSTALL THE GREATER QUANTITY OF DEVICES.
5. REFER TO THE SITE PLAN ON AND RISER DIAGRAM FOR TELECOMMUNICATION BACKBONE CONDUITS/CABLES. FIELD COORDINATE EXACT ROUTING WITH OTHER TRADES.
6. ALL COMMUNICATIONS EQUIPMENT SHOWN SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE.
7. BOND ALL COMMUNICATIONS CABINETS, RELAY RACKS, CABLE TRAYS, AND OTHER METALLIC SUPPORTING DEVICES TO TELECOMMUNICATIONS GROUND BUSBAR INSIDE COMMUNICATIONS ROOM. BOND WITH A #6 GROUND CONDUCTOR.
8. ALL HORIZONTAL VOICE AND DATA CABLES SHALL BE DISTRIBUTED VIA MINIMUM 1" CONDUIT AND/OR CABLE TRAY. NO EXCEPTIONS.
9. SINGLE LINE DIAGRAMS, SCHEMATICS, DETAILS AND CONDUIT PATHS SHOWN HEREIN ARE CONCEPTUAL AND ILLUSTRATE ONLY THE FUNCTIONAL RELATIONSHIPS BETWEEN COMPONENTS OF THE SYSTEM. ACCORDINGLY, FULL SHOP DRAWING DEVELOPMENT IS REQUIRED TO REALIZE THE SPECIFIED FUNCTIONS.
10. DEVICE LOCATIONS ON PLANS ARE CONCEPTUAL. LOCATE AS SITE CONDITIONS REQUIRE AND AS APPROVED BY GC.
11. REFER TO THE BID SPECIFICATION FOR ADDITIONAL REQUIREMENTS REGARDING THIS WORK.
12. PAINTING, PATCHING AND FINISHES FOR DEVICES LOCATED IN EXISTING AREAS SHALL MATCH EXISTING FINISHES AS APPROVED BY GC.
13. FINISHES OF DEVICES IN NEW/REMODEL AREAS SHALL BE APPROVED BY GC.
14. WORK AND MATERIALS SHALL CONFORM TO THE MOST CURRENT UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AS FURNISHED BY GC. WORK AND MATERIALS NOT IN CONFORMANCE WITH THESE SPECIFICATIONS AND DETAILS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
15. IN SOME INSTANCES THE IDF MAY BE OVER 90 METERS FROM THE IP DEVICE DUE TO LEGACY DESIGN STANDARDS WHEN THE BUILDING WAS CONSTRUCTED. IF TESTED CABLE DOES NOT PASS CERTIFICATION, CONTRACTOR MUST USE MIDSPAN EXTENDER INSTALLED INSIDE OF ENCLOSURE. REFERENCE DETAIL SHEETS FOR INSTALLATION DIAGRAM.

CONDUIT DESIGNATION KEY



DEVICE DESIGNATION KEY



SHEET INDEX

SHEET NO.	DESCRIPTION
TA.001	AUDIO/VISUAL - SHEET LIST, SYMBOLS & NOTES
TA.101	AUDIO/VISUAL - FLOOR PLAN - LEVEL 1
TA.102	AUDIO/VISUAL - REFLECTIVE CEILING PLAN - LEVEL 1
TA.401	AUDIO/VISUAL - ENLARGED PLAN - LEVEL 1 - IDF/IT 108
TA.501	AUDIO/VISUAL - DETAILS
TA.502	AUDIO/VISUAL - DETAILS
TA.601	AUDIO/VISUAL - SCHEDULES

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STATE OF TEXAS
JOHN GRUENWALD
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07/22/2025

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Project Status:

ISSUE FOR BID

No.	DATE	DESCRIPTION
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2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

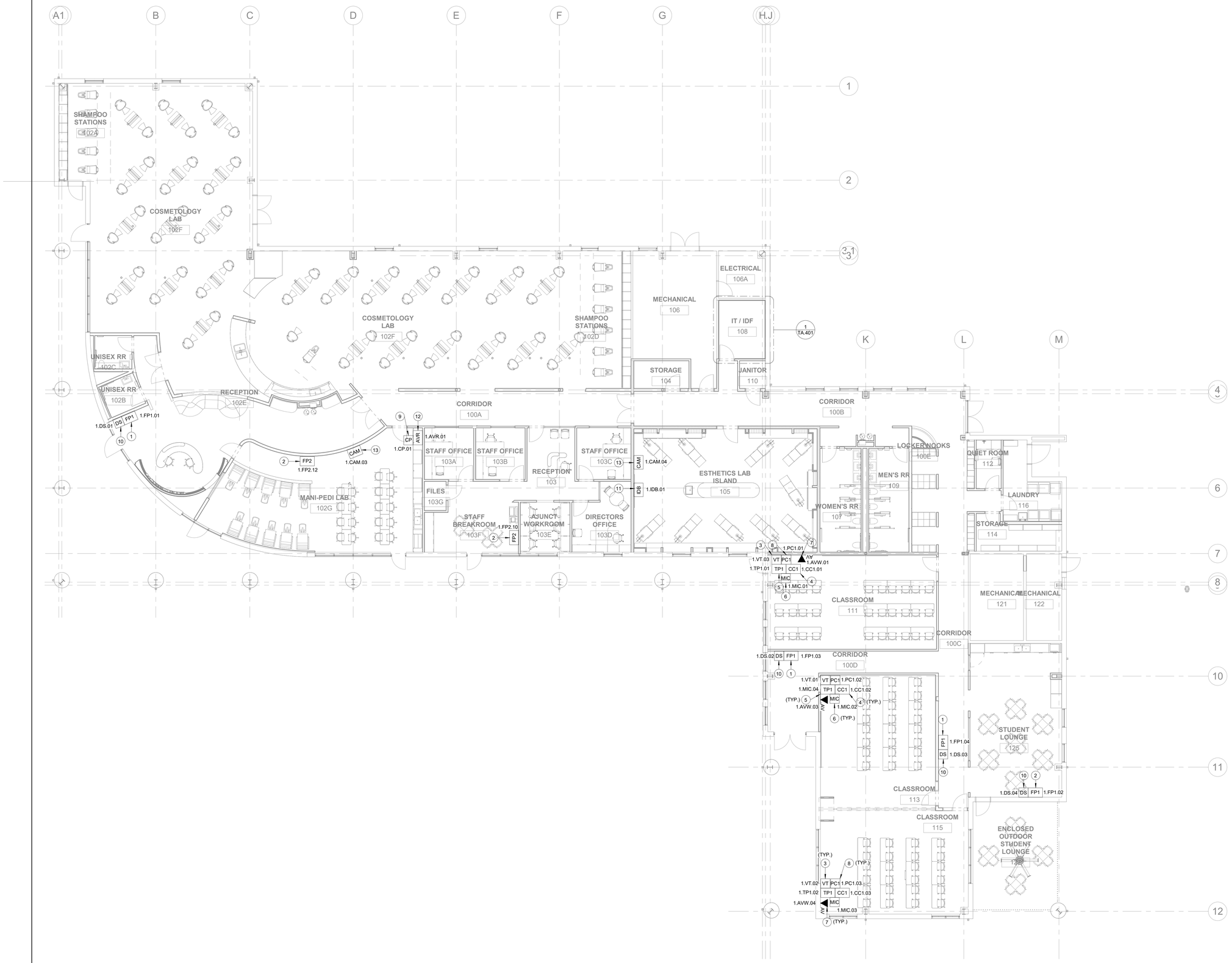
Sheet Title

AUDIO/VISUAL - SHEET LIST, SYMBOLS & NOTES

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

TA.001

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



1 AUDIO/VISUAL - FLOOR PLAN - LEVEL 1
1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.
3. REFER TO AUDIO/VISUAL SPECIFICATION FOR EXACT MODEL AND SUBSTITUTES.
4. AV AND IT CABLING ROUTED ALONG CEILING SHALL BE INSTALLED IN CONDUIT PAINTED TO MATCH CEILING.

KEYED NOTES:

1. 55" FLAT PANEL DISPLAY TYPE 1. REFER TO SHEET TA.501/1.
2. 65" FLAT PANEL DISPLAY TYPE 2. REFER TO SHEET TA.501/1.
3. VIDEO TRANSCEIVER/SWITCHER.
4. PODUIM/LECTERN CABLE CUBBY COORDINATE WITH FURNITURE VENDOR.
5. TOUCH PANEL.
6. AI-BASED 180° CAMERA AND MICROPHONE DEVICE.
7. DATA OUTLET AND HDBASET HDMI WALL PLATE.
8. OWNER PROVIDED PC.
9. A/V CONTROL PROCESSOR
10. OWNER PROVIDED DIGITAL SIGNAGE.
11. NEWLINE INTERACTIVE DISPLAY BOARD.
12. AV RACK, COORDINATE INSTALLATION AND EXHAUST IN MILLWORK.
13. PRESENTER CAMERA.

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Project Status:
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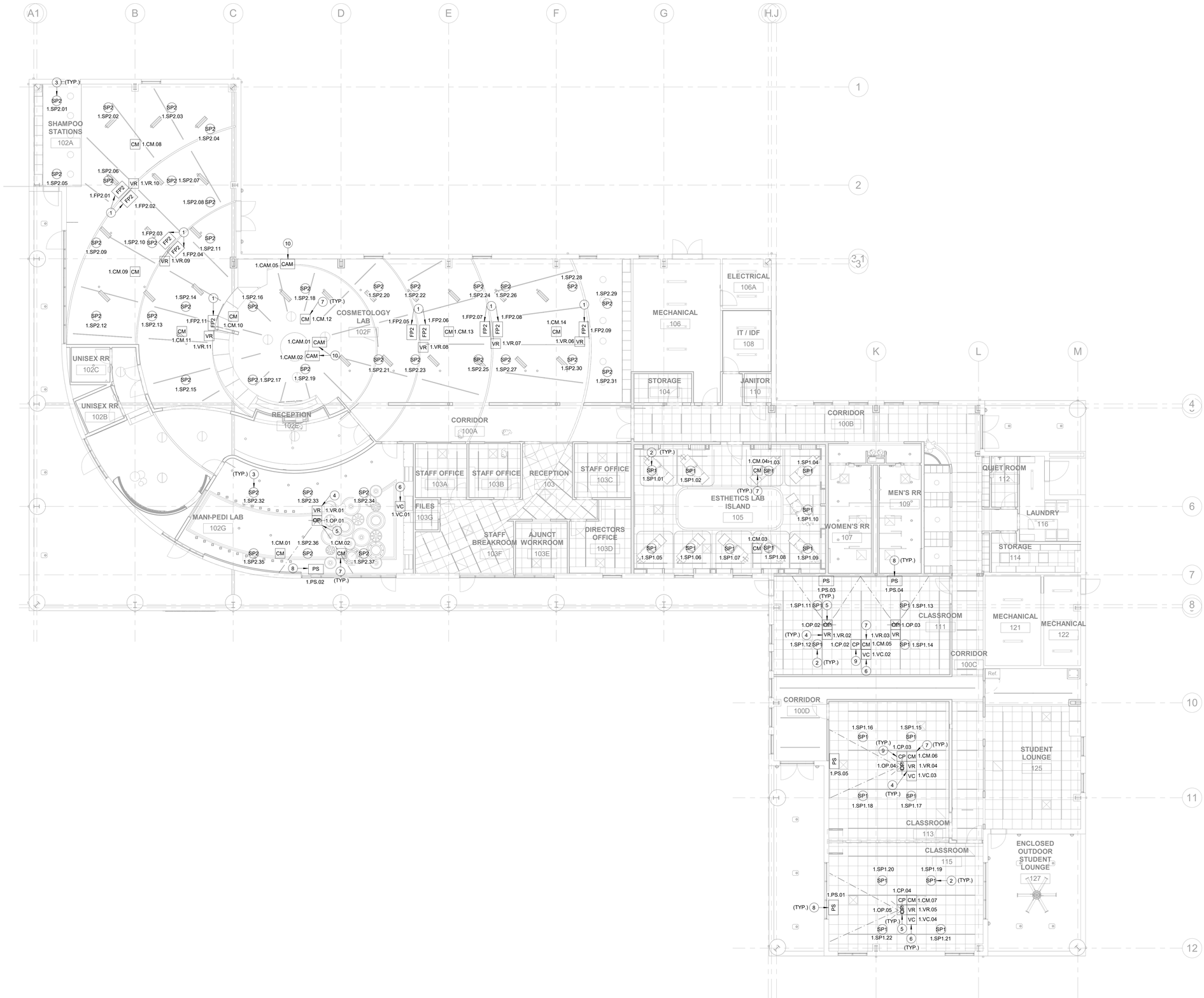
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4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
AUDIO/VISUAL - FLOOR PLAN - LEVEL 1

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

TA.101

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



1 AUDIO/VISUAL - REFLECTIVE CEILING PLAN - LEVEL 1
1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.
3. REFER TO AUDIO/VISUAL SPECIFICATION FOR EXACT MODEL AND SUBSTITUTES.
4. AV AND IT CABLING ROUTED ALONG CEILING SHALL BE INSTALLED IN CONDUIT PAINTED TO MATCH CEILING.

KEYED NOTES:

1. 65" FLAT PANEL DISPLAY TYPE 2. COORDINATE EXACT HEIGHT PRIOR TO ROUGH-IN.
2. LOUDSPEAKER TYPE 1. CEILING SURFACE MOUNT. A/V CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR SPEAKER PLACEMENT.
3. LOUDSPEAKER TYPE 2. CEILING PENDANT MOUNT. A/V CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR SPEAKER PLACEMENT.
4. VIDEO RECEIVER.
5. OVERHEAD CEILING PROJECTOR AND MOUNT. A/V CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR MOUNTING AND PLACEMENT.
6. CEILING MOUNTED EPTZ AUTO-TRACKING CAMERA.
7. CEILING MICROPHONE.
8. 113" DIAG. 16:10 PROJECTOR SCREEN. A/V CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR MOUNTING AND PLACEMENT.
9. A/V CONTROL PROCESSOR AND PLENUM BOX.
10. PRESENTER CAMERA.

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4	07/22/25	Addendum-4- Pre Bid Revision

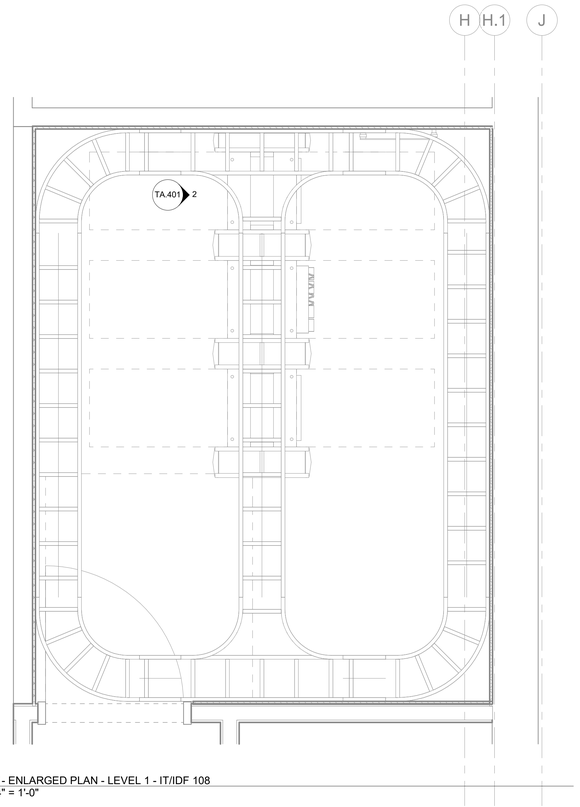
Sheet Title

AUDIO/VISUAL - REFLECTIVE CEILING PLAN - LEVEL 1

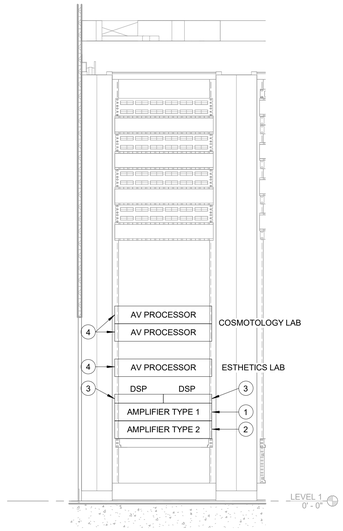
Project Mgr:	
Designer:	
Drawn By:	PGA
Checked By:	RDLR
Date:	07/22/2025
Job No.:	1503

TA.102

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



1 AV - ENLARGED PLAN - LEVEL 1 - IT/IDF 108
3/4" = 1'-0"



2 AV - RACK ELEVATION - IDF/IT 108
1" = 1'-0"

GENERAL NOTES:

1. REFER TO GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.
3. REFER TO AUDIO/VISUAL SPECIFICATION FOR EXACT MODEL AND SUBSTITUTES.
4. AV AND IT CABLING ROUTED ALONG CEILING SHALL BE INSTALLED IN CONDUIT PAINTED TO MATCH CEILING.

KEYED NOTES:

1. AMPLIFIER TYPE 1 (AA1).
2. AMPLIFIER TYPE 2 (AA2).
3. DIGITAL SIGNAL PROCESSOR (DSP).
4. AV CONTROL PROCESSOR. COORDINATE WITH CONTRACTOR EXACT QTY.

N

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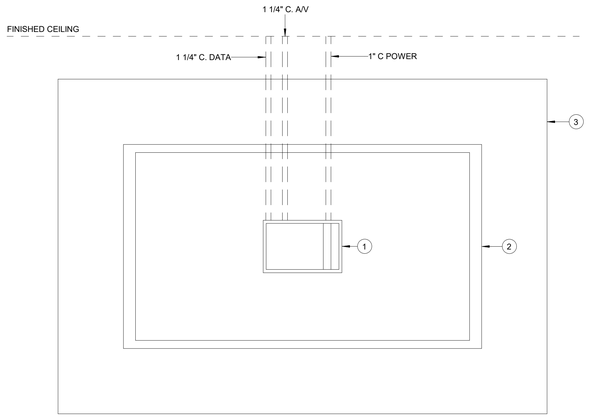
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Sheet Title
AUDIO/VISUAL - ENLARGED PLAN - LEVEL 1 - IDF/IT 108

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

TA.401

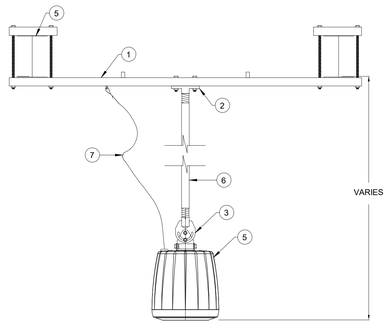
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DETAIL NOTES:

1. 14.25" W x 9" H x 3.88" D FLUSH MOUNT WALL BOX WITH 120 VAC, AV, DATA RECEPTACLES BEHIND FIXED PANEL DISPLAY.
2. FLAT PANEL DISPLAY. REFERENCE AV DEVICE SPECIFICATIONS.
3. 3/4" FIRE-RATED PLYWOOD BLOCKING BEHIND DRYWALL.

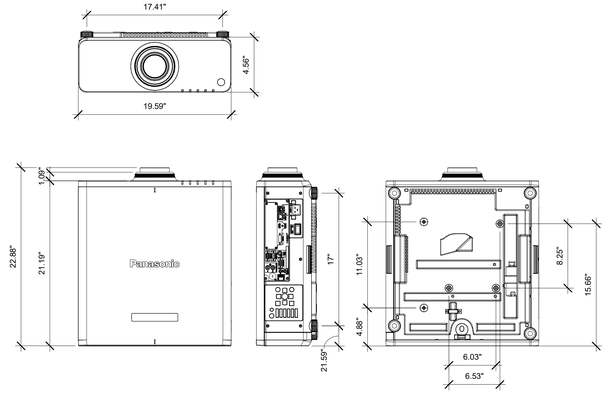
1 FLAT PANEL DISPLAY
1" = 1'-0"



KEY NOTES:

1. COLD FORMED CHANNEL STRUT, 1 5/8", 12 GA. MAX LENGTH 10'. SUBMIT SHOP DRAWINGS TO STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
2. STRUT ATTACHMENT, ADAPTIVE TECHNOLOGIES GROUP # MP-1.5 NPT-TA
3. MULTI-MOUNT, ADAPTIVE TECHNOLOGIES GROUP # MM-3RAX-120
4. (E) I BEAM, REFERENCE STRUCTURAL DRAWINGS
5. LOUD SPEAKER TYPE 2 (5.2lbs)
6. 1.5" SCH 40 THREADED PIPE, NPT. MAX 72".
7. SAFETY CABLE, 8'. ADAPTIVE TECHNOLOGIES GROUP # SC-188-96-SS.

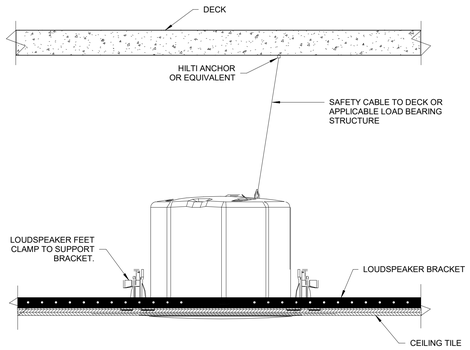
2 DETAILS - PENDANT MOUNT SPEAKER
1" = 1'-0"



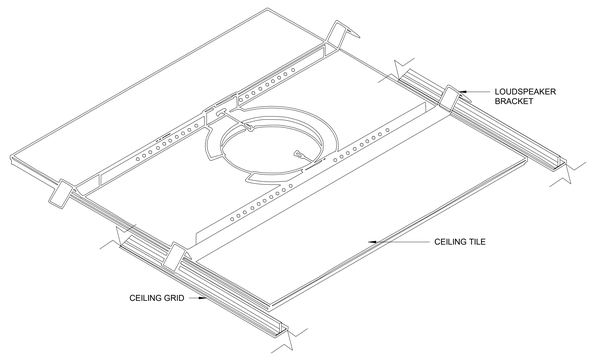
3 DETAIL - OVERHEAD PROJECTOR (TYPICAL)
NTS

DETAIL NOTES:

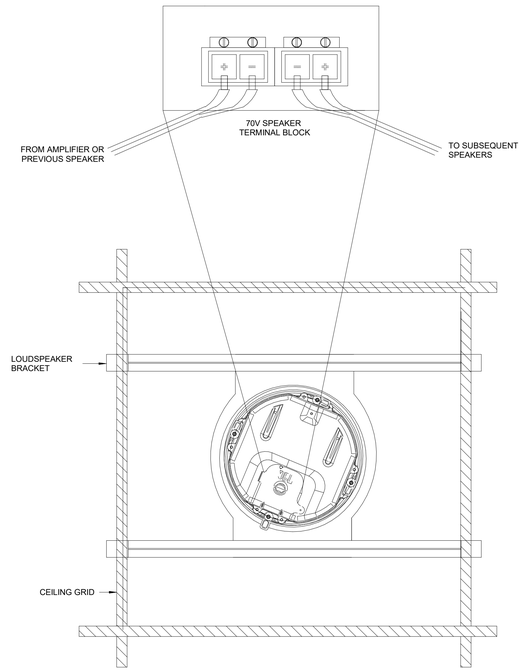
1. CUT CEILING TILE, PROVIDED BY OTHERS, USING THE TEMPLATE PROVIDED WITH SPEAKER.
2. DAISY CHAIN 70V SPEAKERS FROM THE AMPLIFIER TO TO EACH SPEAKER USING 18 GAUGE PLENUM RATED WIRE.
3. REMOVABLE LOCKING CONNECTOR IS PROVIDED WITH THE SPEAKER. PEAL BACK SPEAKER WIRE INSULATION 3/16 INCH. USE APPROPRIATE CRIMP TOOL FOR TERMINATING CABLE ENDS WITH FERRULES. INSERT WIRES AND TIGHTEN HOLD DOWN SCREW WITH FLATHEAD SCREWDRIVER BEFORE INSERTING INTO THE SPEAKER'S TERMINAL CUP.
4. TIGHTEN THE STRAIN RELIEF FITTING AND CLOSE TERMINAL COVER.



SIDE VIEW (NTS)



SUPPORT BRACKET ISO VIEW (NTS)



TOP VIEW (NTS)

4 DETAILS - CEILING MOUNT SPEAKER
NTS

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Project Status:
ISSUE FOR BID

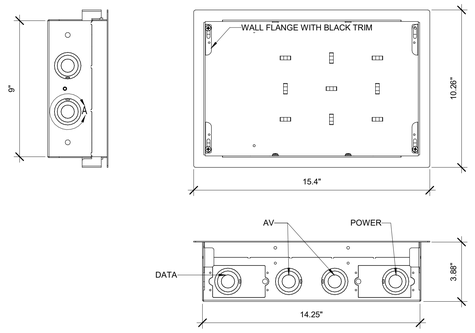
No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
AUDIO/VISUAL - DETAILS

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

TA.501

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

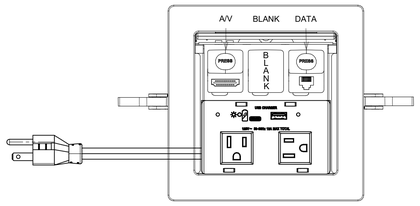


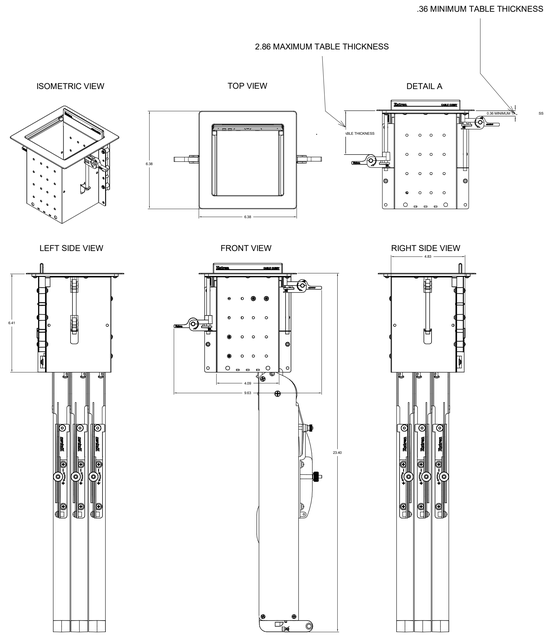
1 DETAILS - WALL BOX1
3" = 1'-0"

DETAIL NOTES:

1. REFERENCE BLOCK DIAGRAM FOR REQUIRED FLOOR CONNECTIONS
2. COORDINATE COVER AND FINISH WITH ARCHITECT
3. POWER BY ELECTRICAL (DIV. 26). DATA BY TELECOM (DIV. 27). A/V BY AV CONTRACTOR (DIV. 27)
4. REFERENCE A/V SPECIFICATIONS FOR CABLE CUBBY MODULE TYPES AND QUANTITIES.

MODULES

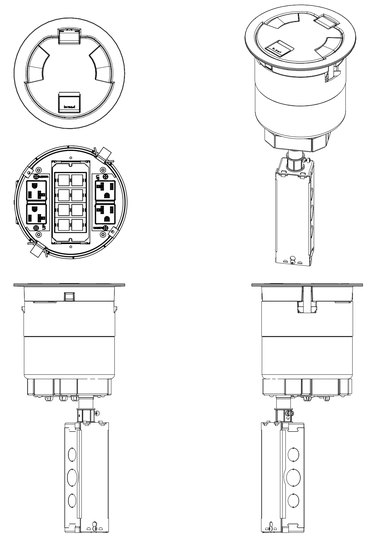




2 AV CABLE CUBBY1
3" = 1'-0"

DETAIL NOTES:

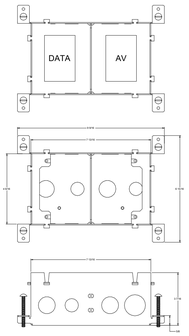
1. REFERENCE FLOOR PLANS FOR REQUIRED FLOOR CONNECTIONS.
2. COORDINATE COVER AND FINISH WITH ARCHITECT.
3. DATA BY TELECOM (DIV. 27). POWER BY ELECTRICAL (DIV. 26)
4. POKE THORUGH TO SUPPORT UP TO 8 CAT6 REF. ELECTRICAL DRAWINGS FOR ELECTRICAL SCOPE.
5. LEGRAND 6STCP POKE THRU WITH 6ACT8A DATA INSERT PLATE. SUBMIT PRODUCT DATA FOR APPROVAL PRIOR TO PROCUREMENT AND INSTALLATION.



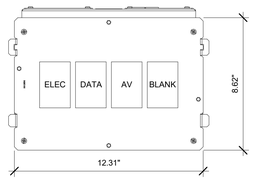
5 DETAIL - FLOOR POKE TYPE 1
3" = 1'-0"

DETAIL NOTES:

1. REFERENCE BLOCK DIAGRAM FOR REQUIRED FLOOR CONNECTIONS
2. COORDINATE COVER AND FINISH WITH ARCHITECT
3. DATA BY TELECOM (DIV. 27). A/V BY AV CONTRACTOR (DIV. 27)

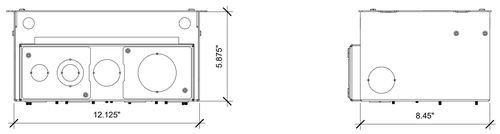


3 FLOOR BOX TYPE 1
3" = 1'-0"

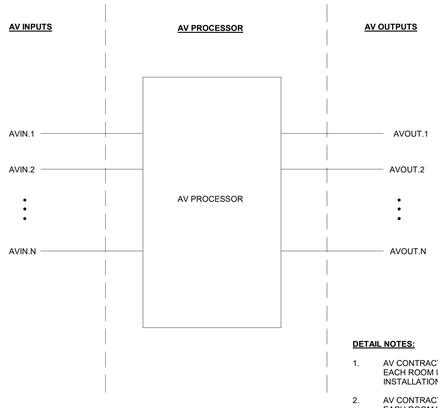


DETAIL NOTES:

1. REFERENCE BLOCK DIAGRAM FOR REQUIRED FLOOR CONNECTIONS
2. COORDINATE COVER AND FINISH WITH ARCHITECT
3. POWER BY ELECTRICAL (DIV. 26). DATA BY TELECOM (DIV. 27). A/V BY AV CONTRACTOR (DIV. 27)



4 FLOOR BOX TYPE 2
3" = 1'-0"



DETAIL NOTES:

1. AV CONTRACTOR TO SUBMIT FUNTIONAL 1-LINE DIAGRAM FOR EACH ROOM IN ADDITION TO PRODUCT DATA SHEETS AND INSTALLATION SHOP DRAWINGS.
2. AV CONTRACTOR TO SUBMIT FINAL BILL OF MATERIAL FOR EACH ROOM WITH MAKE AND MODEL FOR EACH AV DEVICE.

6 AV CONCEPTUAL DIAGRAM
NTS

LONE STAR COLLEGE
NORTH HARRIS

SCHOOL OF COSMETOLOGY
2700 W W THORNE BLVD, 77073

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PROFESSIONAL ENGINEER

07/22/2025

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LANDSCAPE
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CIVIL ENGINEER
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11301 FALLBROOK DR STE 320
832-678-2110

Project Status:

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Sheet Title

AUDIO/VISUAL - DETAILS

Project Mgr:	
Designer:	
Drawn By:	PGA
Checked By:	RDLR
Date:	07/22/2025
Job No.:	1503

TA.502

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

GENERAL NOTES:

1. AV CONTRACTOR TO SUBMIT FUNCTIONAL ONE-LINE DIAGRAM FOR EACH ROOM IN ADDITION TO PRODUCT DATA SHEETS AND INSTALLATION SHOP DRAWINGS
2. AV CONTRACTOR SHALL SUBMIT FINAL BILL F MATERIAL FOR EACH ROOM WITH MAKE ND MODEL FOR EACH EV DEVICE.

COSMETOLOGY ROOM 102F

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
102F	LEVEL 1	1.CAM.01	PRESENTER CAMERA		
102F	LEVEL 1	1.CAM.02	PRESENTER CAMERA		
102F	LEVEL 1	1.CAM.05	PRESENTER CAMERA		
102F	LEVEL 1	1.CM.08	CEILING MICROPHONE		
102F	LEVEL 1	1.CM.09	CEILING MICROPHONE		
102F	LEVEL 1	1.CM.10	CEILING MICROPHONE		
102F	LEVEL 1	1.CM.11	CEILING MICROPHONE		
102F	LEVEL 1	1.CM.12	CEILING MICROPHONE		
102F	LEVEL 1	1.CM.13	CEILING MICROPHONE		
102F	LEVEL 1	1.CM.14	CEILING MICROPHONE		
102F	LEVEL 1	1.FP2.01	65" FLAT PANEL DISPLAY		
102F	LEVEL 1	1.FP2.02	65" FLAT PANEL DISPLAY		
102F	LEVEL 1	1.FP2.03	65" FLAT PANEL DISPLAY		
102F	LEVEL 1	1.FP2.04	65" FLAT PANEL DISPLAY		
102F	LEVEL 1	1.FP2.05	65" FLAT PANEL DISPLAY		
102F	LEVEL 1	1.FP2.06	65" FLAT PANEL DISPLAY		
102F	LEVEL 1	1.FP2.07	65" FLAT PANEL DISPLAY		
102F	LEVEL 1	1.FP2.08	65" FLAT PANEL DISPLAY		
102F	LEVEL 1	1.FP2.09	65" FLAT PANEL DISPLAY		
102F	LEVEL 1	1.FP2.11	65" FLAT PANEL DISPLAY		
102F	LEVEL 1	1.SP2.01	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.02	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.03	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.04	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.05	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.06	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.07	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.08	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.09	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.10	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.11	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.12	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.13	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.14	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.15	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.16	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.17	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.18	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.19	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.20	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.21	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.22	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.23	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.24	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.25	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.26	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.27	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.28	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.29	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.30	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.SP2.31	PENDANT-MOUNT CEILING SPEAKER		
102F	LEVEL 1	1.VR.06	DIGITAL MEDIA RECEIVER		
102F	LEVEL 1	1.VR.07	DIGITAL MEDIA RECEIVER		
102F	LEVEL 1	1.VR.08	DIGITAL MEDIA RECEIVER		
102F	LEVEL 1	1.VR.09	DIGITAL MEDIA RECEIVER		
102F	LEVEL 1	1.VR.10	DIGITAL MEDIA RECEIVER		
102F	LEVEL 1	1.VR.11	DIGITAL MEDIA RECEIVER		

MANI-PEDI LAB 102G

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
102G	LEVEL 1	1.AVR.01	A/V RACK		
102G	LEVEL 1	1.CAM.03	PRESENTER CAMERA		
102G	LEVEL 1	1.CM.01	CEILING MICROPHONE		
102G	LEVEL 1	1.CM.02	CEILING MICROPHONE		
102G	LEVEL 1	1.CP.01	A/V CONTROL PROCESSOR		
102G	LEVEL 1	1.FP2.12	65" FLAT PANEL DISPLAY		
102G		1.OP.01	OVERHEAD PROJECTOR		
102G	LEVEL 1	1.PS.02	PROJECTOR SCREEN		
102G	LEVEL 1	1.SP2.32	PENDANT-MOUNT CEILING SPEAKER		
102G	LEVEL 1	1.SP2.33	PENDANT-MOUNT CEILING SPEAKER		
102G	LEVEL 1	1.SP2.34	PENDANT-MOUNT CEILING SPEAKER		
102G	LEVEL 1	1.SP2.35	PENDANT-MOUNT CEILING SPEAKER		
102G	LEVEL 1	1.SP2.36	PENDANT-MOUNT CEILING SPEAKER		
102G	LEVEL 1	1.SP2.37	PENDANT-MOUNT CEILING SPEAKER		
102G	LEVEL 1	1.VC.01	CEILING CONFERENCE CAMERA		
102G	LEVEL 1	1.VR.01	DIGITAL MEDIA RECEIVER		

ESTHETICS LAB 105

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
105	LEVEL 1	1.CAM.04	PRESENTER CAMERA		
105	LEVEL 1	1.CM.03	CEILING MICROPHONE		
105	LEVEL 1	1.CM.04	CEILING MICROPHONE		
105	LEVEL 1	1.IDB.01	DISPLAY BOARD		
105	LEVEL 1	1.SP1.01	SURFACE-MOUNT CEILING SPEAKER		
105	LEVEL 1	1.SP1.02	SURFACE-MOUNT CEILING SPEAKER		
105	LEVEL 1	1.SP1.03	SURFACE-MOUNT CEILING SPEAKER		
105	LEVEL 1	1.SP1.04	SURFACE-MOUNT CEILING SPEAKER		
105	LEVEL 1	1.SP1.05	SURFACE-MOUNT CEILING SPEAKER		
105	LEVEL 1	1.SP1.06	SURFACE-MOUNT CEILING SPEAKER		
105	LEVEL 1	1.SP1.07	SURFACE-MOUNT CEILING SPEAKER		
105	LEVEL 1	1.SP1.08	SURFACE-MOUNT CEILING SPEAKER		
105	LEVEL 1	1.SP1.09	SURFACE-MOUNT CEILING SPEAKER		
105	LEVEL 1	1.SP1.10	SURFACE-MOUNT CEILING SPEAKER		

STAFF BREAK ROOM 103F

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
103F	LEVEL 1	1.FP2.10	65" FLAT PANEL DISPLAY		

CLASSROOM 111

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
111		1.AVW.01	WALL A/V OUTLET		
111	LEVEL 1	1.CC1.01	PODUIM/LECTURN CABLE ACCESS ENCLOSURE		
111	LEVEL 1	1.CM.05	CEILING MICROPHONE		
111	LEVEL 1	1.CP.02	A/V CONTROL PROCESSOR		
111	LEVEL 1	1.CP.04	A/V CONTROL PROCESSOR		
111	LEVEL 1	1.DS.04	DIGITA SIGNAGE PLAYER (OFE)		
111	LEVEL 1	1.MIC.01	MICROPHONE & CAMERA DEVICE		
111	LEVEL 1	1.OP.02	OVERHEAD PROJECTOR		
111	LEVEL 1	1.OP.03	OVERHEAD PROJECTOR		
111	LEVEL 1	1.PC1.01	PC (OFE)		
111	LEVEL 1	1.PS.03	PROJECTOR SCREEN		
111	LEVEL 1	1.PS.04	PROJECTOR SCREEN		
111	LEVEL 1	1.SP1.11	SURFACE-MOUNT CEILING SPEAKER		
111	LEVEL 1	1.SP1.12	SURFACE-MOUNT CEILING SPEAKER		
111	LEVEL 1	1.SP1.13	SURFACE-MOUNT CEILING SPEAKER		
111	LEVEL 1	1.SP1.14	SURFACE-MOUNT CEILING SPEAKER		
111	LEVEL 1	1.TP1.01	TOUCHPANEL		
111	LEVEL 1	1.VC.02	CEILING CONFERENCE CAMERA		
111	LEVEL 1	1.VR.02	DIGITAL MEDIA RECEIVER		
111	LEVEL 1	1.VR.03	DIGITAL MEDIA RECEIVER		
111	LEVEL 1	1.VT.03	VIDEO TRANSMITTER & A/V SWITCHER		

CLASSROOM 113

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
113	LEVEL 1	1.AVW.03	WALL A/V OUTLET		
113	LEVEL 1	1.CC1.02	PODUIM/LECTURN CABLE ACCESS ENCLOSURE		
113	LEVEL 1	1.CM.06	CEILING MICROPHONE		
113	LEVEL 1	1.CP.03	A/V CONTROL PROCESSOR		
113	LEVEL 1	1.MIC.02	MICROPHONE & CAMERA DEVICE		
113	LEVEL 1	1.MIC.04	TOUCHPANEL		
113	LEVEL 1	1.OP.04	OVERHEAD PROJECTOR		
113	LEVEL 1	1.PC1.02	PC (OFE)		
113	LEVEL 1	1.PS.05	PROJECTOR SCREEN		
113	LEVEL 1	1.SP1.15	SURFACE-MOUNT CEILING SPEAKER		
113	LEVEL 1	1.SP1.16	SURFACE-MOUNT CEILING SPEAKER		
113	LEVEL 1	1.SP1.17	SURFACE-MOUNT CEILING SPEAKER		
113	LEVEL 1	1.SP1.18	SURFACE-MOUNT CEILING SPEAKER		
113	LEVEL 1	1.VC.03	CEILING CONFERENCE CAMERA		
113	LEVEL 1	1.VR.04	DIGITAL MEDIA RECEIVER		
113	LEVEL 1	1.VT.01	VIDEO TRANSMITTER & A/V SWITCHER		

STUDENT LOUNGE 125

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
125	LEVEL 1	1.FP1.02	55" FLAT PANEL DISPLAY		

CLASSROOM 115

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
115		1.AVW.04	WALL A/V OUTLET		
115	LEVEL 1	1.CC1.03	PODUIM/LECTURN CABLE ACCESS ENCLOSURE		
115	LEVEL 1	1.CM.07	CEILING MICROPHONE		
115	LEVEL 1	1.MIC.03	MICROPHONE & CAMERA DEVICE		
115	LEVEL 1	1.OP.05	OVERHEAD PROJECTOR		
115	LEVEL 1	1.PC1.03	PC (OFE)		
115	LEVEL 1	1.PS.01	PROJECTOR SCREEN		
115	LEVEL 1	1.SP1.19	SURFACE-MOUNT CEILING SPEAKER		
115	LEVEL 1	1.SP1.20	SURFACE-MOUNT CEILING SPEAKER		
115	LEVEL 1	1.SP1.21	SURFACE-MOUNT CEILING SPEAKER		
115	LEVEL 1	1.SP1.22	SURFACE-MOUNT CEILING SPEAKER		
115	LEVEL 1	1.TP1.02	TOUCHPANEL		
115	LEVEL 1	1.VC.04	CEILING CONFERENCE CAMERA		
115	LEVEL 1	1.VR.05	DIGITAL MEDIA RECEIVER		
115	LEVEL 1	1.VT.02	VIDEO TRANSMITTER & A/V SWITCHER		

CORRIDOR 100C

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
100C	LEVEL 1	1.DS.03	DIGITA SIGNAGE PLAYER (OFE)		
100C	LEVEL 1	1.FP1.04	55" FLAT PANEL DISPLAY		

CORRIDOR 100D

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
100D	LEVEL 1	1.DS.02	DIGITA SIGNAGE PLAYER (OFE)		
100D	LEVEL 1	1.FP1.03	55" FLAT PANEL DISPLAY		

LOBBY/WAITING ROOM 102E

LOCATION	LEVEL	DEVICE NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
102E	LEVEL 1	1.DS.01	DIGITA SIGNAGE PLAYER (OFE)		
102E	LEVEL 1	1.FP1.01	55" FLAT PANEL DISPLAY		

LONE STAR COLLEGE
NORTH HARRIS
SCHOOL OF COSMETOLOGY
2700 W W THORNE BLVD, 77073

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LICENSED
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07/22/2025

CLIENT:
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JONES ENGINEERS
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LANDSCAPE
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11301 FALLBROOK DR STE 320
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Sheet Title

AUDIO/VISUAL - SCHEDULES

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

TA.601

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

SECURITY EQUIPMENT SYMBOLS LIST

SYMBOL	DESCRIPTION
AED	DEFIBRILLATOR UNIT PROVIDED BY OTHERS. ALARM OUTPUT TERMINATED TO I-STAR BY SECURITY CONTRACTOR
APS	POWER SUPPLY FOR ISTAR PANELS
CPS	CAMERA POWER SUPPLY
CR	CARD READER
D	MAGNETIC DOOR SWITCH, FLUSH MTD.
D 2	MAGNETIC DOOR SWITCH - DOUBLE DOOR
D S	MAGNETIC DOOR SWITCH - SURFACE MTD. TO DOOR
D OH	MAGNETIC DOOR SWITCH - OVERHEAD DOOR
E L	EXIT PANIC DEVICE w/ ELECTRIC LOCK. PROVIDED UNDER DIV. 8, TERMINATED BY SECURITY CONTRACTOR.
E M	MAGNETIC LOCK. PROVIDED UNDER DIV. 8, TERMINATED BY SECURITY CONTRACTOR.
E ML	ELECTRIC MORTISE LOCK DPDT REX SWITCH. PROVIDED UNDER DIV. 8, TERMINATED BY SECURITY CONTRACTOR.
E LR	EXIT PANIC DEVICE - w/ DPDT REX SWITCH & ELECTRIC LATCH RETRACTION PROVIDED UNDER DIV. 8, TERMINATED BY SECURITY CONTRACTOR.
E S	ELECTRIC STRIKE PROVIDED UNDER DIV. 8. TERMINATED BY SECURITY CONTRACTOR.
EP	EXIT ONLY PANIC HARDWARE w/ REX SWITCH.
IC	INTERCOM SUBSTATION
IC M	INTERCOM MASTER SUBSTATION
#	REFER TO NOTE SCHEDULE ON SHEET AS INDICATED
DETAIL PAGE	REFER TO DETAIL AND SHEET AS INDICATED
DETAIL PAGE	REFER TO ELEVATION DETAIL AND SHEET AS INDICATED
TV	24" LED MONITOR WITH DVI INPUT
FACP	FIRE ALARM CONTROL PANEL (EXISTING - SHOWN FOR REFERENCE)
LPS	LOCK POWER SUPPLY
LAP	LOCAL ALARM PANEL w/ KEYSWITCH OVERRIDE
VDA	VIDEO DISTRIBUTION AMPLIFIER (VDA)
PoE-T	POWER OVER ETHERNET - TRANSMITTER
PoE-R	POWER OVER ETHERNET - RECEIVER
M	MOTION SENSOR (REQUEST-TO-EXIT)
M A	MOTION SENSOR - ALARM INPUT
DP	DUPRESS BUTTON - DESK MTD.
P	OSP CABLE SURGE PROTECTOR
DP B	DUPRESS BUTTON - WALL MTD. (UTPD)
PB	EXIT PUSH-BUTTON - WALL MTD.
T	TAMPER SWITCH
GO	GATE OPERATOR
TDL	TIME DELAYED EGRESS PANIC DEVICE - PROVIDED BY OTHER
F	FIRE ALARM PULL STATION W/ DPDT CONTACT
ACP	ACCESS CONTROL PANEL - ISTAR
KS OH	OVERHEAD DOOR KEYSWITCH
SEC	SECURITY TELEPHONE
FIX	FIXED CAMERA (DENOTES CAMERA LOCATION)
PTZ	PTZ CAMERA (DENOTES CAMERA LOCATION)
360	360 CAMERA (DENOTES CAMERA LOCATION)
180	180 CAMERA (DENOTES CAMERA LOCATION)
WK	WORKSTATION

ABBREVIATION

AC	ALTERNATING CURRENT POWER CONNECTION	NTS	NOT TO SCALE
ACP	ACCESS CONTROL PANEL	NVR	NETWORK VIDEO RECORDER
A.F.C.	ABOVE FINISHED CEILING	OPP	OPPOSITE
A.F.F.	ABOVE FINISHED FLOOR	OTDR	OPTICAL TIME DOMAIN REFLECTOMETER
A.F.G.	ABOVE FINISHED GRADE	P	POLE
B.F.C.	BELOW FINISHED CEILING	PB	PULL BOX
B.F.G.	BELOW FINISHED GRADE	PBX	PRIVATE BRANCH EXCHANGE (IN-HOUSE TELEPHONE SWITCH)
C.	CONDUIT	PED	PEDESTAL
CCVS	CLOSED CIRCUIT VIDEO SURVEILLANCE	R	READER
C.U.	CENTRAL OFFICE TELEPHONE LINE	REQ'D	REQUIRED
CPS	CAMERA POWER SUPPLY	REX	REQUEST-TO-EXIT
CPU	CENTRAL PROCESSING UNIT	RX	RECEIVE / RECEIVER
CR	CARD/KEY READER	SIM	SIMILAR
DA	DURESS (PERSONAL ASSIST) SWITCH	SM	SINGLE MODE
DPS	DOOR POSITION SWITCH	SPB	SECURITY PULLBOX
E	EXISTING	STC	SECURITY TERMINAL CABINET
EC	ELECTRICAL CONTRACTOR	TGB	TERMINAL GROUND BUSBAR
ELVC	ELEVATOR CONTRACTOR	TS	TURNSTILE
EXT	EXTERNAL	TYP	TYPICAL
EW	EACH WAY	TX	TRANSMIT / TRANSMITTER
F	FUTURE	UON	UNLESS OTHERWISE NOTED
FOPP	FIBER OPTIC PATCH PANEL	VAC	VOLTS ALTERNATING CURRENT
GA	GATE ARM	VDC	VOLTS DIRECT CURRENT
GC	GENERAL CONTRACTOR	VLAN	SECURITY LOCAL AREA NETWORK
GND	GROUND	W/	WITH
GPS	GLOBAL POSITIONING SYSTEM	W/O	WITHOUT
GRC	GALVANIZED RIGID CONDUIT	WP	WEATHER PROOF
IC	INTERCOM FIELD STATION	WS	WORKSTATION
ICS	INTERCOM SYSTEM	XFMR	TRANSFORMER
J	JUNCTION BOX	(E)	EXISTING, TO REMAIN
LAN	LOCAL AREA NETWORK	(N)	NEW
LPS	LOW VOLTAGE POWER SUPPLY	(R)	EXISTING, TO BE REMOVED AND REPLACED, AS SPECIFIED
MD	MOTION DETECTOR	(X)	EXISTING, TO BE REMOVED
MFG	MANUFACTURER	(SL)	SLIDING GATE
MM	MULTIMODE		
N/A	NOT APPLICABLE		
NC	NORMALLY CLOSED		
NO	NORMALLY OPEN		
N.I.C.	NOT IN CONTRACT		

SECURITY CABLE DESIGNATION/TYPE *

DESIGNATION	DESCRIPTION	USAGE	PART # (RISER)	PART # (PLENUM)
A	SECURITY COMPOSITE CABLE (4C, 18 AWG 16/30 STR, SHIELDED; 3 PR, 22 AWG 7/30 STR, SHIELDED; 2C, 22 AWG 7/30 STR, SHIELDED; 4C, 22 AWG 7/30 STR, SHIELDED)	DOOR STRIKE, CARD READER, DOOR CONTACT, REQUEST-TO-EXIT	BELDEN 5584AFJ	BELDEN 6584AFJ
B	1 PAIR 22 AWG SHIELDED	ALARM MONITORING	BELDEN 5500FE	BELDEN 6500FE
C	3 PAIR 22 AWG SHIELDED	CARD READER	BELDEN 5542FE	BELDEN 6542FE
D	2 PAIR 20 AWG SHIELDED	MOTION DETECTOR, BEAM DETECTORS	BELDEN 5441FE	BELDEN 6441FE
E	2/C 18 AWG SHIELDED	HORN	BELDEN 5300FE	BELDEN 6300FE
F	4 CONDUCTOR, 22 AWG, (7X30) STRANDED	DURESS BUTTON	BELDEN 5502FE	BELDEN 6502FE
G	1 PAIR 20 AWG TWISTED	INTERCOM	BELDEN 5400FE	BELDEN 6400FE
H	1 PAIR TWISTED SH 18 AWG PLUS 2/C 18 AWG	EMERGENCY PHONE	BELDEN 5302GE	-
I	CCTV COMPOSITE CABLE 2C 18 AWG, UNSHIELDED, CABLE ETHERNET, RG59	CAM PWR, UTP/IP VIDEO ANALOG VIDEO CONNECT K112	BELDEN 500PTZ	BELDEN 600PTZ
J	ENHANCED CAT-6 BONDED-PAIR UTP	NETWORK AND CAMERA	BELDEN 7881A	BELDEN 7882A
K	2/C 18 AWG	CAMERA PWR, PUSH BUTTON, LOCK PWR	BELDEN 5300UE	BELDEN 6300UE
L	2 PAIR 22 AWG SHIELDED	DATA, CCVS PTZ CONTROL	BELDEN 5541FE	BELDEN 6541FE

* THIS TABLE IS REFERENCED AND IS SHOWN AS AN EXAMPLE OF ACCEPTABLE CABLE DESIGNATIONS. CONTRACTOR SHALL UTILIZE CABLE DESIGNATION TABLE FOR SHOP DRAWING AND RECORD DRAWING SUBMITTALS.

CCVS SYSTEM NOTES

1. ALL OUTDOOR CAMERAS, TERMINATION BOXES, AND PULLBOXES SHALL BE INSTALLED WITH WEATHER RESISTANT HARDWARE.
2. PROVIDE ALL INTEGRATION WITH ALARM ACCESS CONTROL SYSTEM COMPONENTS AND SECURITY COMMUNICATIONS SYTEM.
3. PROVIDE ALL COORDINATION WITH OTHER DISCIPLINES FOR INSTALLATION OF EQUIPMENT.
4. COORDINATE ALL SITE WORK WITH OWNER'S REP.
5. DRAWINGS INDICATE CAMERA 'HOME POSITIONS'. VERIFY FIELD OF VIEW WITH MDACC AND DESIGN CONSULTANT DURING INSTALLATION. SUBSTITUTION OF LENS TYPE & SIZE TO ACCOMPLISH INTENDED FIELD OF VIEW SHALL BE AT NO ADDITIONAL COST.
6. CAMERAS MAY INCLUDE MULTIPLE TRANSMISSION METHODS. VERIFY EACH CAMERA PRIOR TO INSTALLATION.
7. FIELD VERIFY ALL CAMERA LOCATIONS PROIR TO INSTALLATION. CAMERA MAY BE RELOCATED WITHIN 25' OF LOCATION SHOWN ON FLOOR PLANS WITHOUT ADDITIONAL COST.

ACS SYSTEM NOTES

1. ALL OUTDOOR MOUNTED CARD READERS SHALL BE INSTALLED WITH WEATHER RESISTANT AND TAMPER PROOF HARDWARE.
2. CARD READER PEDESTALS SHALL BE SIZED FOR VOICE COMMUNICATIONS.
3. PROVIDE ALL INTEGRATION WITH CLOSED CIRCUIT VIDEO SURVEILLANCE COMPONENTS AND SECURITY COMMUNICATION SYSTEM.
4. PROVIDE ALL COORDINATION WITH OTHER DISCIPLINES FOR INSTALLATION OF EQUIPMENT.
5. COORDINATE ALL SITE WORK WITH OWNERS REP.

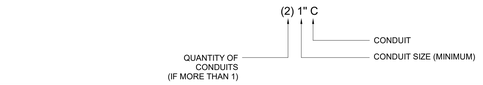
SECURITY COMMUNICATION SYSTEM

1. ALL OUTDOOR STATIONS SHALL BE INSTALLED WITH WEATHER RESISTANT AND TAMPER PROOF HARDWARE.
2. PROVIDE ALL INTEGRATION WITH CLOSED CIRCUIT VIDEO SURVEILLANCE (CCVS) SYSTEM AND ACS.
3. COORDINATE WITH OWNER PROVISION OF TELEPHONE CIRCUIT FOR THE COMMUNICATION STATIONS.
4. PROVIDE ALL COORDINATION WITH OTHER DISCIPLINES FOR INSTALLATION OF EQUIPMENT.
5. COORDINATE ALL SITE WORK WITH OWNERS REP.

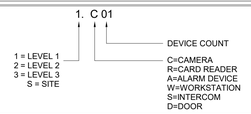
GENERAL NOTES

1. THE FOLLOWING GENERAL NOTES ARE APPLICABLE AS STATED BELOW, EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE, ON THE DRAWINGS OR IN THE BID SPECIFICATION.
2. SINGLE LINE DIAGRAMS, SCHEMATICS, DETAILS AND CONDUIT PATHS SHOWN HEREIN ARE CONCEPTUAL AND ILLUSTRATE ONLY THE FUNCTIONAL RELATIONSHIPS BETWEEN COMPONENTS OF THE SYSTEM. ACCORDINGLY, FULL SHOP DRAWING DEVELOPMENT IS REQUIRED TO REALIZE THE SPECIFIED FUNCTIONS.
3. DEVICE LOCATIONS ON PLANS ARE CONCEPTUAL. LOCATE AS SITE CONDITIONS REQUIRE AND AS APPROVED BY THE OWNER.
4. REFER TO THE BID SPECIFICATION FOR ADDITIONAL REQUIREMENTS REGARDING THIS WORK.
5. INSTALL WALL MOUNTED CARD READERS, PUSH BUTTON SWITCHES, KEYPADS, KEY SWITCHES AND OTHER WALL MOUNTED FIELD DEVICES, AT 48 INCHES MAXIMUM ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED. MOUNTING HEIGHT SHALL COMPLY WITH TEXAS ACCESSIBILITY STANDARD (TAS).
6. PROVIDE PAINTING, PATCHING AND FINISHES, OF MATERIALS AND DEVICES, AS APPROVED BY THE OWNER.
7. DOOR DETAILS ILLUSTRATE FUNCTIONAL RELATIONSHIPS. ACTUAL ARCHITECTURAL CONDITIONS (SUCH AS DIRECTION OF SWING AND HAND OF DOOR) MAY VARY.
8. WORK AND MATERIALS TO CONFORM TO THE MOST CURRENT UNIFORM STANDARD SPECIFICATIONS, ASSOCIATED CODES REFERENCED BY THE (AHJ) AUTHORITY HAVING JURISDICTION, AND DETAILS FOR CONSTRUCTION, AS FURNISHED BY THE OWNER. WORK AND MATERIALS, NOT IN CONFORMANCE WITH PROJECT SPECIFICATIONS AND DETAILS, ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
9. FOR INFORMATION REGARDING FIRE RATINGS AND OCCUPANCY SEPARATIONS, REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS.
10. NEW CONDUIT CONNECTIONS TO INCLUDE INTEGRAL PROTECTIVE BUSHINGS OR CHASE NIPPLES.
11. NEW CONDUIT FOR FUTURE USE TO BE FILLED WITH 200 POUND STRENGTH PULL LINE. PROVIDE LABELING ON EACH END OF THE PULL LINE TO INDICATE LOCATION OF OTHER END.
12. NEW CONDUITS SHALL BE CONCEALED WHENEVER POSSIBLE. SURFACE MOUNTED CONDUITS ARE PERMISSIBLE ONLY WHERE APPROVED. USE ONLY CONCEALED CONDUITS WITHIN FINISHED SPACES. THE ABOVE STANDARDS ALSO APPLY TO EXTERIOR SPACES. SEEK APPROVAL FROM THE OWNER FOR EACH AREA WHERE SURFACE CONDUIT IS NECESSARY.
13. JUNCTION BOXES SHALL BE MINIMUM 4 INCH SQUARE DEEP STYLE, SIZED AS REQUIRED TO ACCOMMODATE CONDUITS UNLESS OTHERWISE NOTED. PROVIDE MOUNTING RING AS REQUIRED. PROVIDE A BLANK COVER PLATE FOR JUNCTION BOXES AND PULL BOXES WITH NO DEVICE.
14. EXPOSED BOXES AND PANELS, MOUNTED IN OR ON EXTERIOR WALLS, TO BE NEMA 4.
15. NEW CONDUIT TO BE 3/4 INCH EMT MINIMUM, UNLESS OTHERWISE NOTED. EXTERIOR CONDUIT TO BE RIGID.
16. USE 120VAC CIRCUITS UNLESS OTHERWISE NOTED. VERIFY CURRENT LOAD ON EXISTING CIRCUITS BEFORE CONNECTING NEW LOADS. COORDINATE WITH OWNER IF ADDITIONAL CIRCUITS ARE REQUIRED.
17. CONTRACTOR TO VERIFY CONDUIT AND PLENUM CABLE PATHS INDICATED ON THE DRAWINGS. CONTRACTOR MAY PROPOSE ALTERNATE ROUTING WHERE CONFLICTS ARE FOUND.
18. CONTRACTOR IS RESPONSIBLE FOR CEILING INTEGRITY, THIS INCLUDES ROUTING ABOVE CONCEALED SPLINE INTERLOCKING TILES.
19. CONTRACTOR TO OBTAIN RECERTIFICATION FOR FIRE RATED DOOR FRAME AND DOOR MODIFIED BY THIS PROJECT.
20. ACCESS CONTROL LOW VOLTAGE WIRING TO BE PLENUM RATED.
21. DO NOT EXCEED 180° IN AGGREGATE CONDUIT BENDS WITHOUT PULLBOX.
22. PROVIDE GROUND BUSHING ON ALL CONDUIT END IN EQUIPMENT ROOM. BOND TO APPROVED BUILDING GROUND.
23. LABEL CONDUIT EVERY 50' WITH DEVICE ID & EQUIPMENT ROOM ID WITH PERMANENT INK CABLE MADE WITH LASER CABLE MAKER. SECURE TO CONDUIT WITH CLEAR TAPE.
24. ALL WALL AND FLOOR PENETRATIONS SHALL BE SEALED WITH APPROVED FIRE STOP.
25. ALL CABLES NOT IN CONDUIT ABOVE DROP CEILING SHALL BE INSTALLED IN MIN, 1" J-HOOK EVERY 5'-8". DO NOT EXCEED 40% FILL.
26. LABEL CABLE NOT IN CONDUIT EVERY 50' WITH DEVICE ID & EQUIPMENT ROOM ID. USE PERMANENT INK LABEL MAKER. SECURE TO CABLE WITH CLEAR TAPE.
27. LOCATE DEVICES AS SITE CONDITIONS REQUIRE.
28. FIELD VERIFY ALL DIMENSIONS.
29. REFER TO THE SPECIFICATION FOR ADDITIONAL REQUIREMENTS REGARDING THIS WORK. CONTRACTOR TO PREPARE PROPOSAL FOR EACH DISCIPLINE. PROVIDE COORDINATION BETWEEN DISCIPLINES FOR CONSTRUCTION.
30. NOTIFY DESIGN CONSULTANT AND OWNER WHERE EXISTING CONDITIONS REQUIRE REPAIR PRIOR TO INSTALLATION.
31. COORDINATE ALL WORK WITH GENERAL CONTRACTOR.
32. ALL CABLE PULLS WITHIN EXISTING AND NEW CONDUITS TO BE MADE AT SAME TIME.
33. COORDINATE WITH FIRE ALARM CONTRACTOR TO MAKE CONNECTION TO ACCESS CONTROL SYSTEM FOR CARD READER CONTROLLED AND ELECTRICALLY LOCK DOOR RELEASE. FIRE ALARM RELAY SHALL BE BY FIRE ALARM CONTRACTOR. CONNECTIVITY TO ACCESS CONTROL PANEL SHALL BE BY SECURITY CONTRACTOR.

CONDUIT DESIGNATION KEY



DEVICE DESIGNATION KEY



SHEET INDEX

SHEET NO.	DESCRIPTION
TY.001	SECURITY - SHEET LIST, SYMBOLS & NOTES
TY.100	SECURITY - SITE PLAN
TY.101	SECURITY - FLOOR PLAN - LEVEL 1
TY.201	SECURITY - ROOF PLAN
TY.401	SECURITY - ENLARGED PLAN - LEVEL 1 - IDF/IT 108
TY.501	SECURITY - DETAILS
TY.502	SECURITY - DETAILS
TY.601	SECURITY - SCHEDULES

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07/22/2025

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Project Status:
ISSUE FOR BID

No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

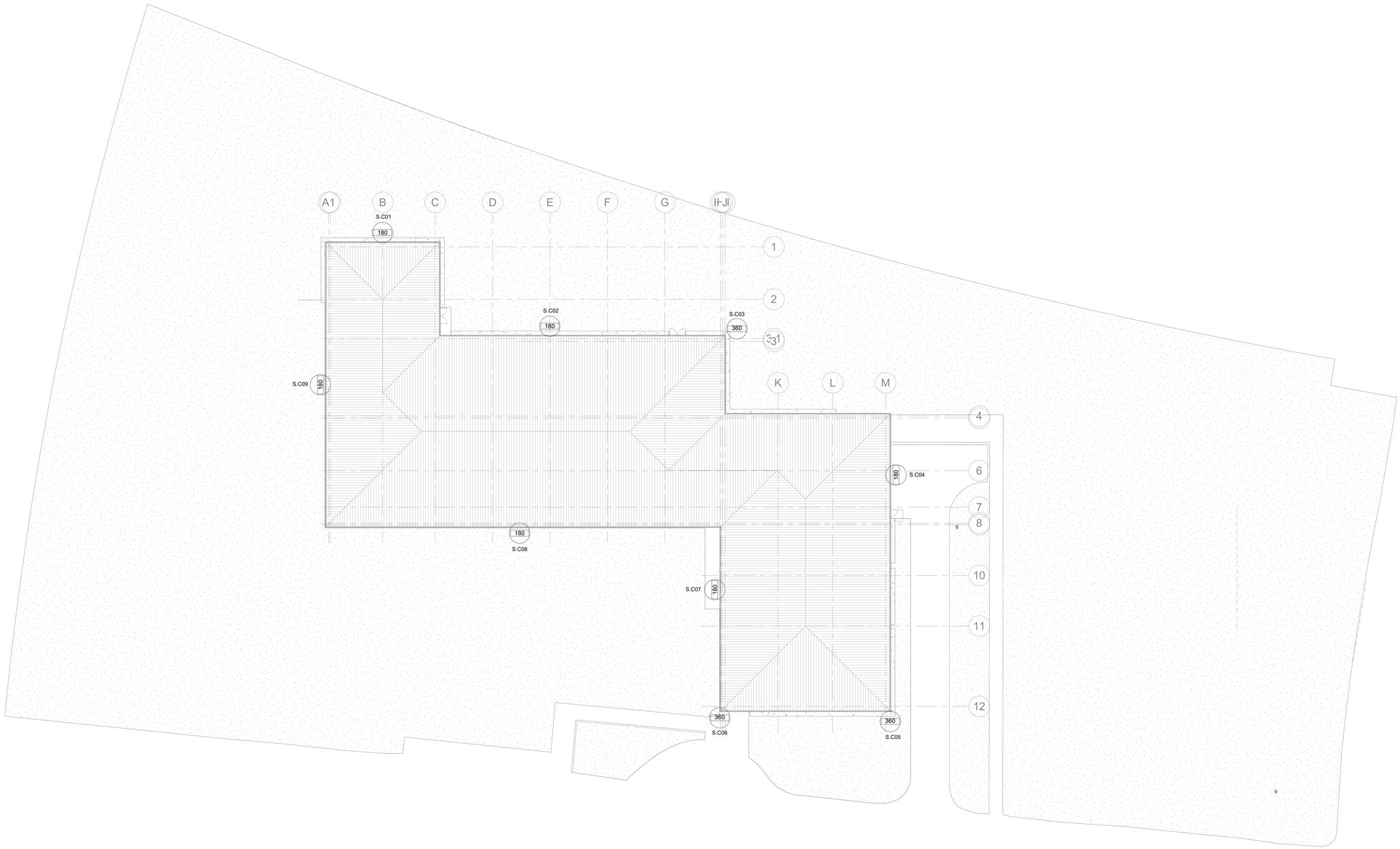
Sheet Title
SECURITY - SHEET LIST, SYMBOLS & NOTES

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

TY.001

GENERAL NOTES:

1. REFER TO GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.



1 SECURITY - SITE PLAN
1/16" = 1'-0"

N

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS

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4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title

SECURITY - SITE PLAN

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

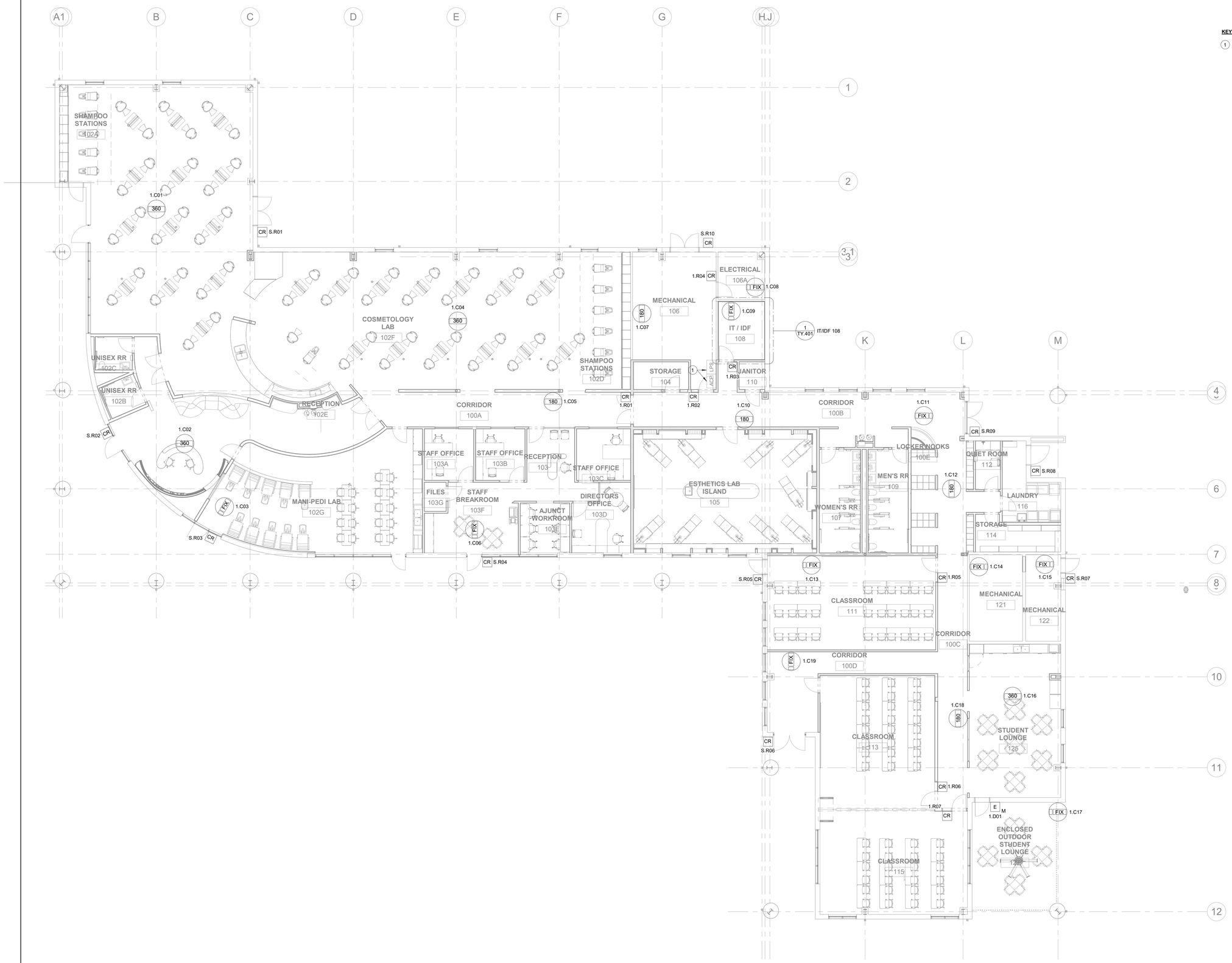
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GENERAL NOTES:

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2. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.

KEYED NOTES:

(1) DEMO EXISTING ACCESS CONTROL PANELS (ACP) AND LOCK POWER SUPPLIES (LPS) AND RETURN TO OWNER.



1 SECURITY - FLOOR PLAN - LEVEL 1
1/8" = 1'-0"

N

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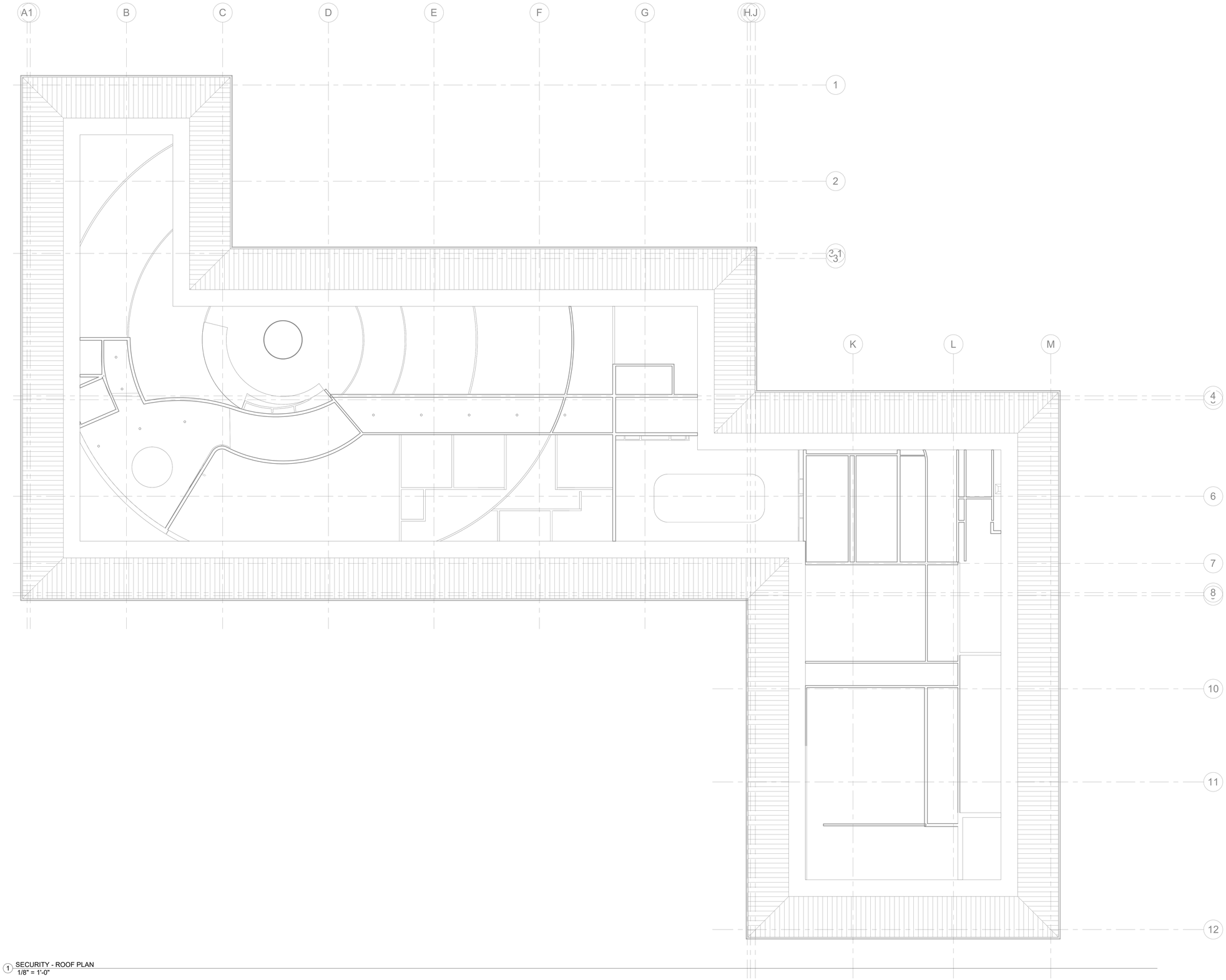
Sheet Title
SECURITY - FLOOR PLAN - LEVEL 1

Project Mgr:	
Designer:	
Drawn By:	PGA
Checked By:	RDLR
Date:	07/22/2025
Job No.:	1503

TY.101

GENERAL NOTES:

1. REFER TO GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.



1 SECURITY - ROOF PLAN
1/8" = 1'-0"

N

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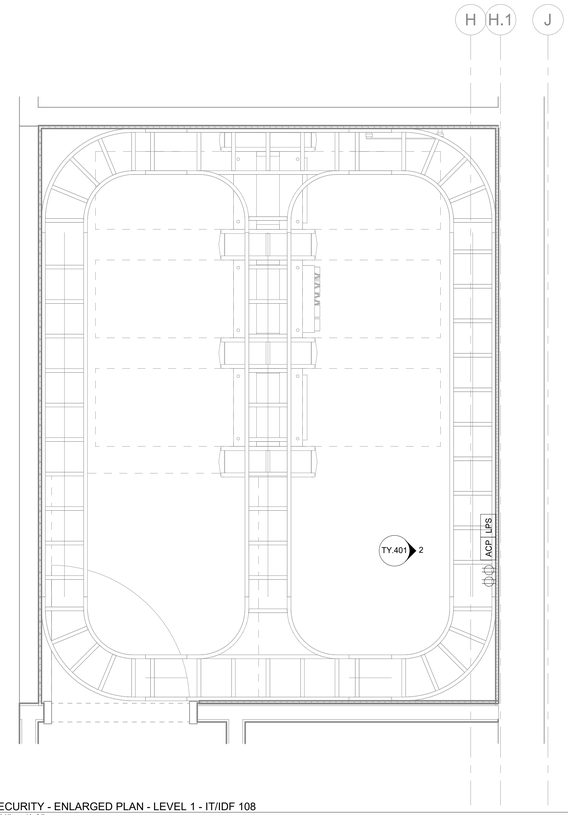
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Sheet Title
SECURITY - ROOF PLAN

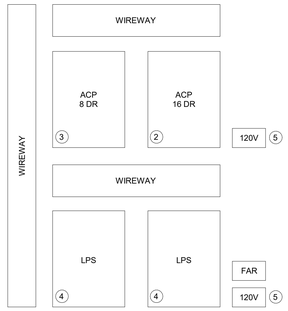
Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

TY.201

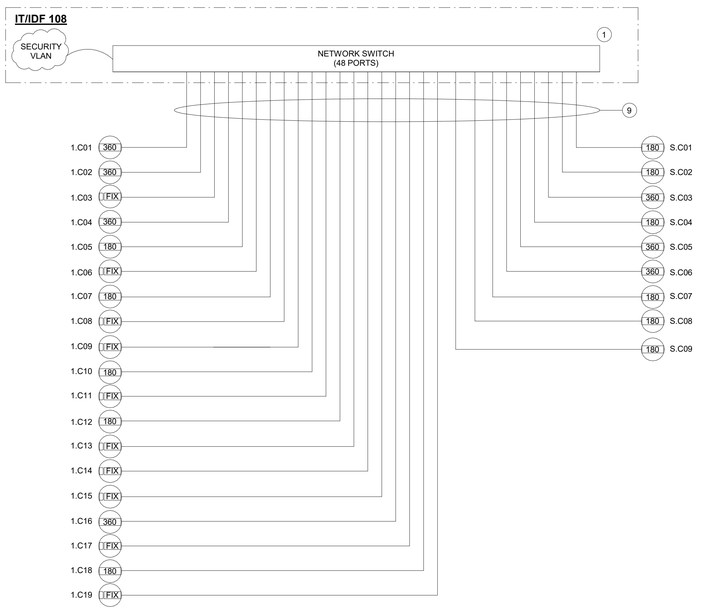
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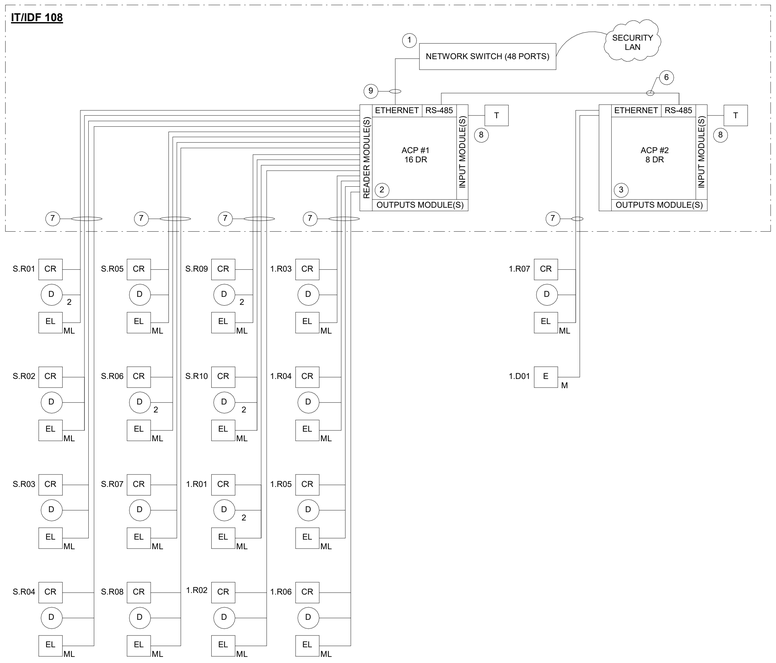
1 SECURITY - ENLARGED PLAN - LEVEL 1 - IT/IDF 108
3/4" = 1'-0"



2 ELEVATION - SECURITY BACKBOARD
NTS



3 CCTV SYSTEM DIAGRAM
NTS



4 ACCESS CONTROL SYSTEM (ACS) DIAGRAM
NTS

GENERAL NOTES:

1. REFER TO GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN ACCORDANCE WITH DIVISION 27 SPECIFICATIONS.

KEYED NOTES:

1. 48 PORT NETWORK SWITCH (DIVISION 27).
2. 16 DOOR, WALL MOUNTED ACCESS CONTROL PANEL.
3. 4 DOOR, WALL MOUNTED ACCESS CONTROL PANEL.
4. LOCKING POWER SUPPLY.
5. 120V, 20A DUPLEX RECEPTACLE.
6. RS-485 CABLE.
7. COMPOSITE ACCESS CONTROL CABLE.
8. TAMPER SWTICH.
9. CAT 6 HORIZONTAL CABLE. PROVIDE 2 PATCH CORD FOR EACH CONNECTED DEVICE. ONE AT DEVICE, 1 AT IDF.

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SPECIAL SYSTEMS (IT / SECURITY)
PGA ENGINEERS
3838 N SAM HOUSTON PKWY E, STE 550
346-570-2418

CIVIL ENGINEER
CFS CONSULTING LP
11301 FALLBROOK DR STE 320
832-678-2110

Project Status:
ISSUE FOR BID

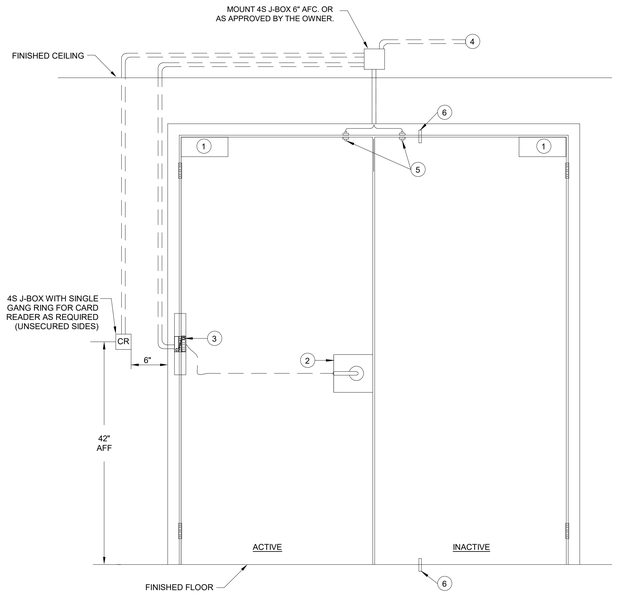
No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
2	07/02/25	Addendum-2- Cancelled by LSC
3	07/10/25	Addendum-3- Approved by LSC
4	07/22/25	Addendum-4- Pre Bid Revision

Sheet Title
SECURITY - ENLARGED PLAN - LEVEL 1 - IDF/IT 108

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

TY.401

THIS DRAWING PRINTS FULL SIZE TO 30" X 42" SHEETS. DO NOT SCALE PRINTS



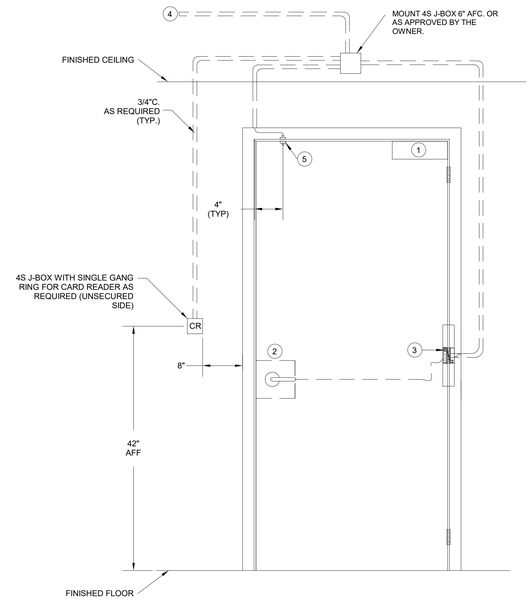
1 SECURITY DOOR - ELECTRIC MORTISE LOCK (DOUBLE DOOR)
1" = 1'-0"

GENERAL NOTES:

1. VIEW SHOWN IS FROM SECURED SIDE OF PORTAL. CONDUIT, BOXES AND EQUIPMENT SHALL BE MOUNTED ON SECURED SIDE OF PORTAL, UNLESS OTHERWISE NOTED.
2. CONDUITS MAY BE COMBINED. IF COMBINED, CONTRACTOR SHALL ENSURE CONDUIT IS SIZED TO ACCEPT REQUIRED CONDUCTORS PER NEC.
3. COORDINATE MOUNTING LOCATIONS, ROUGH-IN AND FINISHES WITH THE OWNER.
4. CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
5. DOOR HARDWARE SHOWN FOR REFERENCE ONLY. TYPE OF HARDWARE MAY VARY. ALL DOOR HARDWARE SHALL HAVE KEY CYLINDER UNLESS NOTED OTHERWISE. DOOR HARDWARE BY DIV.8.
6. PROVIDE CONDUIT ONLY WHERE WIRING CANNOT ROUTE IN DOOR FRAME.
7. ALL SECURITY DOORS SHALL HAVE DOOR CLOSER.

KEY NOTES:

1. DOOR COORDINATOR (PROVIDED BY DIV.8).
2. ELECTRIFIED MORTISE LOCK WITH BUILT-IN REX (BY DIV.8).
3. ELECTRIC POWER TRANSFER (BY DIV.8).
4. 1"C. TO NEAREST CABLE TRAY. EXTEND CABLES TO MDF/IDF ROOM FOR CONNECTION TO ACP.
5. DOOR POSITION SWITCH, FLUSH MOUNT.
6. MANUAL FLUSH BOLT (BY DIV. 8.)



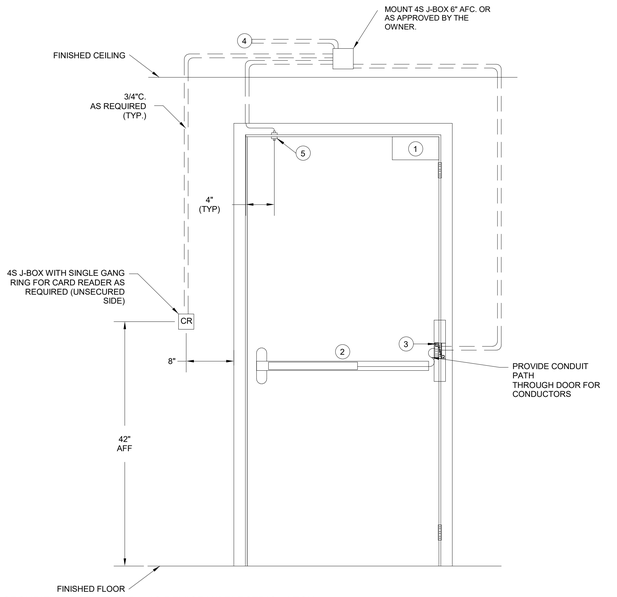
2 SECURITY DOOR - ELECTRIC MORTISE LOCK (SINGLE DOOR)
1" = 1'-0"

GENERAL NOTES:

1. VIEW SHOWN IS FROM SECURED SIDE OF PORTAL. CONDUIT, BOXES AND EQUIPMENT SHALL BE MOUNTED ON SECURED SIDE OF PORTAL, UNLESS OTHERWISE NOTED.
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3. COORDINATE MOUNTING LOCATIONS, ROUGH-IN AND FINISHES WITH THE OWNER.
4. CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
5. DOOR HARDWARE SHOWN FOR REFERENCE ONLY. TYPE OF HARDWARE MAY VARY. ALL DOOR HARDWARE SHALL HAVE KEY CYLINDER UNLESS NOTED OTHERWISE. DOOR HARDWARE BY DIV.8.
6. PROVIDE CONDUIT ONLY WHERE WIRING CANNOT ROUTE IN DOOR FRAME.
7. ALL SECURITY DOORS SHALL HAVE DOOR CLOSER.

KEY NOTES:

1. DOOR COORDINATOR (PROVIDED BY DIV.8).
2. ELECTRIFIED MORTISE LOCK WITH BUILT-IN REX (BY DIV.8).
3. ELECTRIC POWER TRANSFER (BY DIV.8).
4. 1"C. TO NEAREST CABLE TRAY. EXTEND CABLES TO MDF/IDF ROOM FOR CONNECTION TO ACP.
5. DOOR POSITION SWITCH, FLUSH MOUNT.



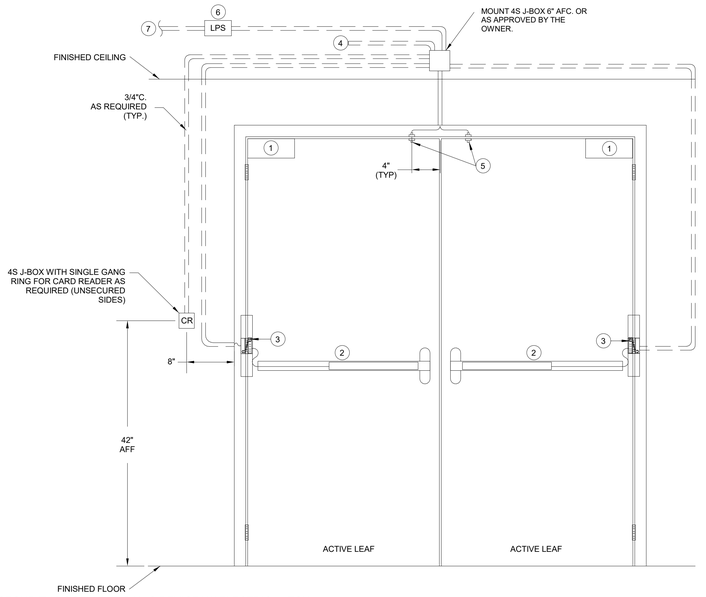
3 SECURITY DOOR - EXIT PANIC DEVICE W/ ELECTRIC LATCH RETRACTION (SINGLE DOOR)
1" = 1'-0"

GENERAL NOTES:

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3. COORDINATE MOUNTING LOCATIONS, ROUGH-IN AND FINISHES WITH THE OWNER.
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5. DOOR HARDWARE SHOWN FOR REFERENCE ONLY. TYPE OF HARDWARE MAY VARY. ALL DOOR HARDWARE SHALL HAVE KEY CYLINDER UNLESS NOTED OTHERWISE. DOOR HARDWARE BY DIV.8.
6. PROVIDE CONDUIT ONLY WHERE WIRING CANNOT ROUTE IN DOOR FRAME.
7. ALL SECURITY DOORS SHALL HAVE DOOR CLOSER.

KEY NOTES:

1. DOOR CLOSER (PROVIDED BY OTHERS).
2. EXIT PANIC DEVICE WITH ELECTRIC LATCH RETRACTION AND REX SWITCH (BY DIV. 8).
3. ELECTRIC POWER TRANSFER (BY DIV.8).
4. 1"C. TO NEAREST CABLE TRAY. EXTEND CABLES TO MDF/IDF ROOM FOR CONNECTION TO ACP.
5. DOOR POSITION SWITCH, FLUSH MOUNT.



4 SECURITY DOOR - EXIT PANIC DEVICE W/ ELECTRIC LATCH RETRACTION (DOUBLE DOOR)
1" = 1'-0"

GENERAL NOTES:

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3. COORDINATE MOUNTING LOCATIONS, ROUGH-IN AND FINISHES WITH THE OWNER.
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6. PROVIDE CONDUIT ONLY WHERE WIRING CANNOT ROUTE IN DOOR FRAME.
7. ALL SECURITY DOORS SHALL HAVE DOOR CLOSER.

KEY NOTES:

1. DOOR CLOSER (PROVIDED BY OTHERS).
2. EXIT PANIC DEVICE WITH ELECTRIC LATCH RETRACTION AND REX SWITCH (BY DIV. 8).
3. ELECTRIC POWER TRANSFER (BY DIV.8).
4. 1"C TO NEAREST CABLE TRAY. EXTEND CABLES TO MDF/IDF ROOM FOR CONNECTION TO ACP.
5. DOOR POSITION SWITCH, FLUSH MOUNT.
6. COORDINATE 120 VAC POWER REQUIREMENT WITH ELECTRICAL CONTRACTOR
7. 1"C. TO NEAREAST ELECTRICAL PANEL (BY DIV. 26)

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TBPE FIRM #12493

STATE OF TEXAS
JOHN GRUENWALD
100039
LICENSED
PROFESSIONAL ENGINEER

07/22/2025

CLIENT:
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LANDSCAPE
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2500 SUMMER STREET, SUITE 3228
713.337.5830

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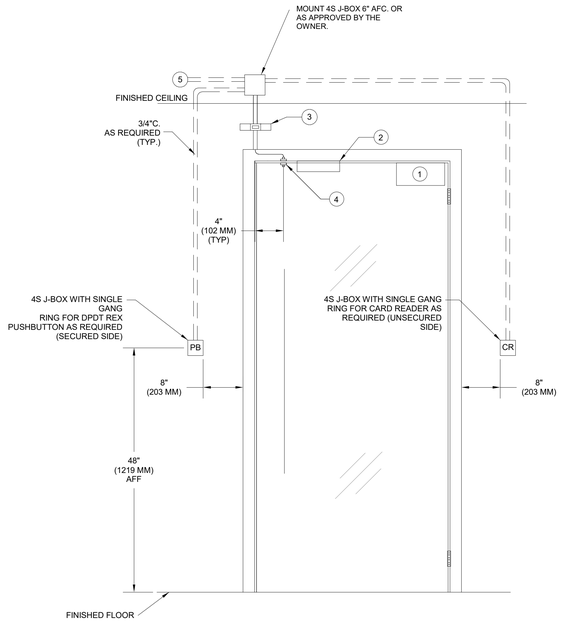
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Sheet Title
SECURITY - DETAILS

Project Mgr:	
Designer:	
Drawn By:	PGA
Checked By:	RDLR
Date:	07/22/2025
Job No.:	1503

TY.501



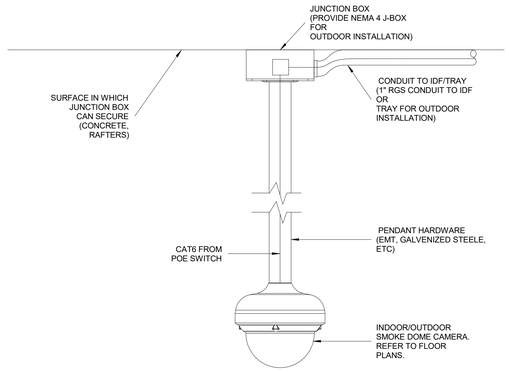
1 SECURITY DOOR - GLASS DOOR W/ MAGNETIC LOCK (SINGLE DOOR)
1" = 1'-0"

GENERAL NOTES:

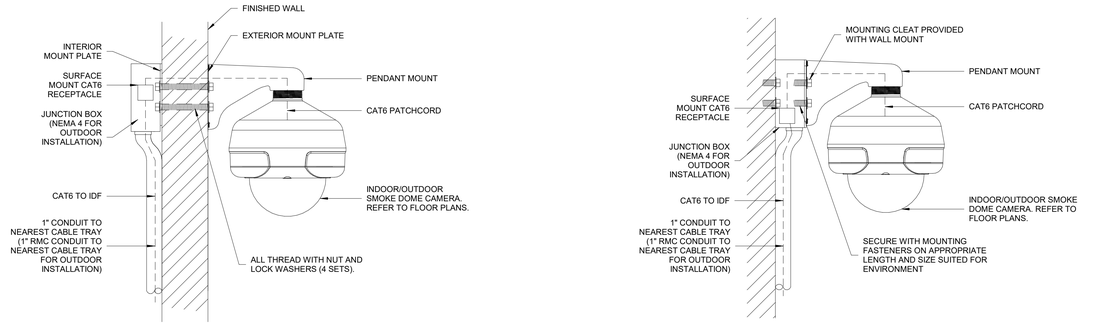
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3. COORDINATE MOUNTING LOCATIONS, ROUGH-IN AND FINISHES WITH THE OWNER.
4. CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
5. DOOR HARDWARE SHOWN FOR REFERENCE ONLY. TYPE OF HARDWARE MAY VARY. ALL DOOR HARDWARE SHALL HAVE KEY CYLINDER UNLESS NOTED OTHERWISE.
6. PROVIDE CONDUIT ONLY WHERE WIRING CANNOT ROUTE IN DOOR FRAME.
7. ALL SECURITY DOORS SHALL HAVE DOOR CLOSER.

KEY NOTES:

1. DOOR CLOSER (PROVIDED BY OTHERS)
2. MAGNETIC LOCK
3. REQUEST-TO-EXIT (REX) MOTION SENSOR - MOUNT ON 4S J-BOX WITH SINGLE GANG RING (HORIZONTAL) 6" ABOVE DOOR FRAME. MOUNT ON FRAME FOR FULL HEIGHT DOORS. COORDINATE COLOR AND FINISH WITH OWNER.
4. SURFACE MOUNT DOOR POSITION SWITCH (OPDT)
5. 1"C. TO NEAREST CABLE TRAY. EXTEND CABLES TO IDF ROOM FOR CONNECTION TO ACP & LPS.

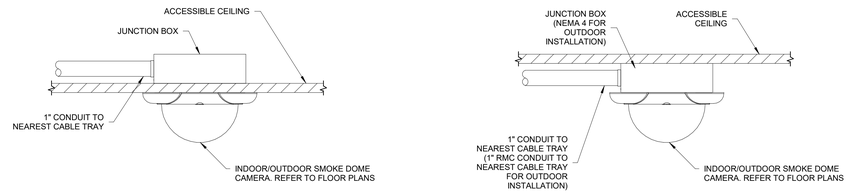


2 TYPICAL CAMERA MOUNTING DETAIL - CEILING PENDANT MOUNT
NTS



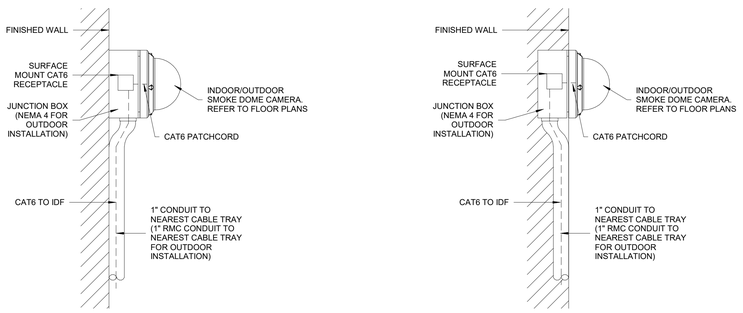
A. FLUSH MOUNT **B. SURFACE MOUNT**

3 TYPICAL CAMERA MOUNTING DETAIL - WALL PENDANT MOUNT
NTS



A. RECESS/FLUSH MOUNT **B. SURFACE MOUNT**

4 TYPICAL CAMERA MOUNTING DETAIL - CEILING MOUNT
NTS



A. SURFACE MOUNT **B. FLUSH MOUNT**

5 TYPICAL CAMERA MOUNTING DETAIL - WALL MOUNT
NTS

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LANDSCAPE
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Project Status:
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No.	DATE	DESCRIPTION
1	07/01/25	Addendum-1- Issued by LSC Procurement
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Sheet Title
SECURITY - DETAILS

Project Mgr:	
Designer:	
Drawn By:	PGA
Checked By:	RDLR
Date:	07/22/2025
Job No.:	1503

TY.502

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Security - Camera Schedule

ITEM	CAMERA NO.	LEVEL	CAMERA SHEET NO.	CAMERA TYPE	MOUNTING HEIGHT	TERMINATING IDF	CAMERA MOUNTING TYPE	CAMERA MODEL	REFERNCE CAMERA DETAIL SHEET NO.
1	1.C01	LEVEL 1	TY.101	360 FOV	9' - 0"	IT/IDF 108	CEILING	REFER TO SPECS	TY.502/2
2	1.C02	LEVEL 1	TY.101	360 FOV	9' - 0"	IT/IDF 108	CEILING	REFER TO SPECS	TY.502/2
3	1.C03	LEVEL 1	TY.101	FIXED	9' - 0"	IT/IDF 108	CEILING	REFER TO SPECS	TY.502/2
4	1.C04	LEVEL 1	TY.101	360 FOV	9' - 0"	IT/IDF 108	CEILING	REFER TO SPECS	TY.502/2
5	1.C05	LEVEL 1	TY.101	180 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/5
6	1.C06	LEVEL 1	TY.101	FIXED	9' - 0"	IT/IDF 108	CEILING	REFER TO SPECS	TY.502/4
7	1.C07	LEVEL 1	TY.101	180 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/5
8	1.C08	LEVEL 1	TY.101	FIXED	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/5
9	1.C09	LEVEL 1	TY.101	FIXED	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/5
10	1.C10	LEVEL 1	TY.101	180 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/5
11	1.C11	LEVEL 1	TY.101	FIXED	9' - 0"	IT/IDF 108	CEILING	REFER TO SPECS	TY.502/4
12	1.C12	LEVEL 1	TY.101	180 FOV	9' - 0"	IT/IDF 108	CEILING	REFER TO SPECS	TY.502/4
13	1.C13	LEVEL 1	TY.101	FIXED	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/5
14	1.C14	LEVEL 1	TY.101	FIXED	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/5
15	1.C15	LEVEL 1	TY.101	FIXED	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/5
16	1.C16	LEVEL 1	TY.101	360 FOV	9' - 0"	IT/IDF 108	CEILING	REFER TO SPECS	TY.502/4
17	1.C17	LEVEL 1	TY.101	FIXED	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/3
18	1.C18	LEVEL 1	TY.101	180 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/5
19	1.C19	LEVEL 1	TY.101	FIXED	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/5
20	S.C01	SITE	TY.100	180 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/3
21	S.C02	SITE	TY.100	180 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/3
22	S.C03	SITE	TY.100	360 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/3
23	S.C04	SITE	TY.100	180 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/3
24	S.C05	SITE	TY.100	360 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/3
25	S.C06	SITE	TY.100	360 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/3
26	S.C07	SITE	TY.100	180 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/3
27	S.C08	SITE	TY.100	180 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/3
28	S.C09	SITE	TY.100	180 FOV	9' - 0"	IT/IDF 108	WALL	REFER TO SPECS	TY.502/3

1 CAMERA SCHEDULE
NTS

Security - Card Reader Schedule

ITEM	READER NO.	SHEET NO.	LEVEL	SECURITY - DOOR NO.	READER TYPE	MOUNT	TERMINATING IDF	REFERNCE DOOR DETAIL SHEET NO.
1	1.R01	TY.101	LEVEL 1	100B	PROXIM	WALL	IT/IDF 108	TY.501/1
2	1.R02	TY.101	LEVEL 1	106	PROXIM	WALL	IT/IDF 108	TY.501/2
3	1.R03	TY.101	LEVEL 1	108	PROXIM	WALL	IT/IDF 108	TY.501/2
4	1.R04	TY.101	LEVEL 1	106A	PROXIM	WALL	IT/IDF 108	TY.501/2
5	1.R05	TY.101	LEVEL 1	111	PROXIM	WALL	IT/IDF 108	TY.501/2
6	1.R06	TY.101	LEVEL 1	113	PROXIM	WALL	IT/IDF 108	TY.501/2
7	1.R07	TY.101	LEVEL 1	115	PROXIM	WALL	IT/IDF 108	TY.501/2
8	S.R01	TY.101	SITE	102F	PROXIM	WALL	IT/IDF 108	TY.501/1
9	S.R02	TY.101	SITE	102E	PROXIM	WALL	IT/IDF 108	TY.502/1
10	S.R03	TY.101	SITE	102G	PROXIM	WALL	IT/IDF 108	TY.502/1
11	S.R04	TY.101	SITE	103F	PROXIM	WALL	IT/IDF 108	TY.502/1
12	S.R05	TY.101	SITE	111	PROXIM	WALL	IT/IDF 108	TY.502/1
13	S.R06	TY.101	SITE	100D	PROXIM	WALL	IT/IDF 108	TY.501/4
14	S.R07	TY.101	SITE	122	PROXIM	WALL	IT/IDF 108	TY.501/2
15	S.R08	TY.101	SITE	108	PROXIM	WALL	IT/IDF 108	TY.501/2
16	S.R09	TY.101	SITE	100B	PROXIM	WALL	IT/IDF 108	TY.501/4
17	S.R10	TY.101	SITE	106	PROXIM	WALL	IT/IDF 108	TY.501/1

2 CARD READER SCHEDULE
NTS

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Sheet Title

SECURITY - SCHEDULES

Project Mgr:
Designer:
Drawn By: PGA
Checked By: RDLR
Date: 07/22/2025
Job No.: 1503

TY.601

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