# SUPER KIDS DENTAL

6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741

> <u>ISSUE FOR PERMIT</u> <u>06/25/24</u>

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05 - PLUK P101	PLUMBING FLOOR PLANS
P101 P201	PLUMBING FLOOR PLANS PLUMBING RISER DIAGRAMS
P301	PLUMBING RISER DIAGRAMS PLUMBING DETAILS
P401	PLUMBING SCHEDULES
P402	PLUMBING SPECIFICATIONS



PROJECT TEAM

<u>OWNER</u> SUPER KIDS DENTAL 2410 E RIVERSIDE DRIVE, SUITE 12-H

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EXISTING PERMIT NUMBERS:

CORE & SHELL PLAN REVIEW #: 2022-148757 PR

BUILDING PERMIT #: 2023-120995 BP

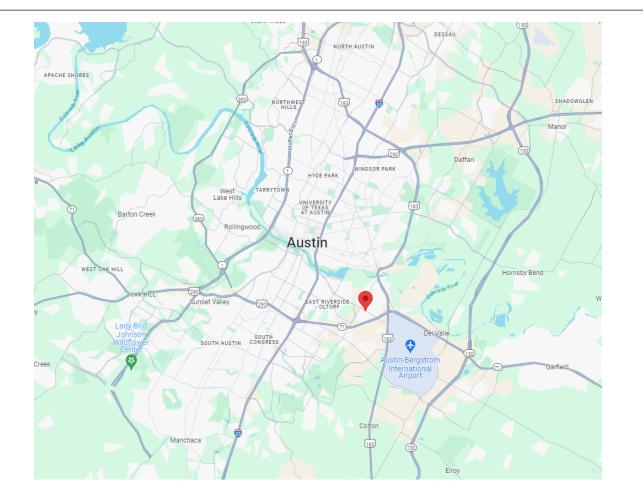
SITE PLAN CASE #: SP-2022-0057C

DEFERRED SUBMITTALS:

[X] FIRE SPRINKLER SYSTEM WILL BE UNDER A SEPERATE CONTRACT BY THE FIRE ALARM/SPRINKLER CONTRACTOR

[X] FIRE & SMOKE ALARMS WILL BE UNDER A SEPERATE CONTRACT BY THE FIRE ALARM/SPRINKLER CONTRACTOR

**VICINITY MAP** 



**TDLR NUMBER: TABS2024019684** 

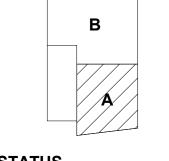
# DESCRIPTION DATE

1 CITY OF AUSTIN RESPONSE #1 06/20/24

SEAL / SIGNATURE



KEY MAP



PROJECT STATUS

PROJECT NAME

SUPER KIDS DENTAL
PROJECT ADDRESS

6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741

PROJECT NUMBER
24017

**DATE** 06/25/24

COVER PAGE & PROJECT SHEET INDEX

G000

#### PROJECT GENERAL NOTES

#### PERFORMANCE OF THE WORK

- 1. ALL PARTIES PERFORMING WORK OF THE PROJECT SHALL COMPLY WITH ALL APPLICABLE NATIONAL, FEDERAL, STATE, REGIONAL, LOCAL, AND MUNICIPAL CODES. STANDARDS. AND ORDINANCES.
- 2. PERFORMANCE OF THE WORK SHALL COMPLY WITH THE CONTRACT DOCUMENTS AND THE REQUIREMENTS, POLICIES AND PROCEDURES OF THE OWNER.
- 3. INVESTIGATE EXISTING CONDITIONS; VERIFY AND BE RESPONSIBLE FOR ALL REQUIREMENTS OF THE PROJECT. NOTIFY THE ARCHITECT IN WRITING OF ANY CONDITIONS CONTRARY TO THE CONTRACT DOCUMENTS THAT REQUIRE MODIFICATION BEFORE PROCEEDING WITH THE WORK.
- 4. ACCEPTANCE OF THE WORK BY THE OWNER SHALL BE A CONDITION OF THE FULFILLMENT OF THE CONTRACT.
- 5. MAINTAIN THROUGHOUT THE CONSTRUCTION PERIOD, A CERTIFICATE OF INSURANCE FOR ALL LIABILITIES, WITH A HOLD HARMLESS CLAUSE, PROTECTING THE OWNER AND THE ARCHITECT.

#### **BIDDING AND CONTRACT DOCUMENTS:**

- 1. THE DRAWINGS SHALL BE ISSUED TOGETHER AND COMPLETELY AS A DOCUMENT SET FOR BIDDING AND CONSTRUCTION.
- 2. THE DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY, EACH TO THE OTHER, AND WHAT IS CALLED FOR BY ONE SHALL BE AS BINDING AS IF CALLED FOR BY BOTH. FOR MATERIALS IDENTIFIED ON THE DRAWINGS, SEE THE SPECIFICATIONS FOR GENERAL, PRODUCT AND EXECUTION INFORMATION.
- 3. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO INCLUDE EVERYTHING REQUISITE AND NECESSARY TO COMPLETE THE WORK EVEN I EVERYTHING REQUIRED FOR SUCH WORK IS NOT SPECIFICALLY MENTIONED OR INDICATED.
- 4. NOTES AND REFERENCES RELATIVE TO DIFFERENT CONSTRUCTION MATERIALS, DETAILS, ASSEMBLIES AND SYSTEMS APPEAR ON VARIOUS SHEETS. SUCH NOTES AND REFERENCES ON ANY ONE SHEET ARE APPLICABLE TO RELATED DRAWINGS THROUGHOUT THE SET.
- SPECIFICATIONS BE DISCOVERED, SUBMIT WRITTEN REQUEST TO THE ARCHITECT FOR RESOLUTION OF THE DISCREPANCY.
- 6. KEYNOTES TAGGED TO THE DRAWINGS WITH NUMBERED OR LETTERED SYMBOLS ARE TYPICAL FOR ALL SIMILAR CONDITIONS WHETHER TAGGED OF
- 7. DETAILS SHOWN ARE INDICATIVE OF PROFILES AND TYPE OF DETAILING REQUIRED THROUGHOUT THE WORK.
- 8. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILS SHOWN.
- 9. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS SHALL GOVERN. PRINTE DRAWINGS MAY BE REPRODUCED AT A SCALE DIFFERENT THAN INTENDED BY THE ORIGINAL DRAWING. SUBMIT WRITTEN REQUEST TO THE ARCHITECT FOR RESOLUTION OF ANY DIMENSIONAL DISCREPANCIES.
- 10. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
- 11. VERIFY ALL DIMENSIONS, INCLUDING BUT NOT LIMITED TO EXISTING CONDITIONS, LAYOUT OF THE WORK, AND WORK ALREADY INSTALLED BEFORE PROCEEDING WITH NEW WORK.

#### COORDINATION AND SUBSTITUTION:

- 1. COORDINATE WORK OF ALL TRADES WITH ONE ANOTHER IN ORDER TO AVOID INTERFERENCES, TO PRESERVE MAXIMUM HEAD ROOM AND TO AVO OMISSIONS.
- 2. ALL ADDITIONAL COSTS, INCLUDING ALTERATION COSTS OF WORK ALREA INSTALLED, RESULTING FROM SUBMITTALS AND SHOP DRAWINGS NOT SUBMITTED IN A TIMELY MANOR, AND NOT ALLOWING RELATED WORK TO B INSTALLED FOR THE PROPER INSTALLATION OF THE SUBJECT WORK, SHAL BE THE SUBMITTING CONTRACTOR'S RESPONSIBILITY.
- 3. PROPOSED CHANGES TO ANY CONSTRUCTION MATERIALS, DETAILS, ASSEMBLIES AND SYSTEMS, ETC. SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT IN ACCORDANCE WITH THE PROJECT MANUAL
- 4. ACCEPTED SUBSTITUTIONS REQUIRE THAT THE CONTRACTOR RESPONSIBLE FOR THE PROPOSED CHANGE TO FULLY COORDINATE WITH ALL TRADES AFFECTED BY THE SUBSTITUTION WITH RESPECT TO, BUT NO LIMITED TO, DIMENSIONS, CLEARANCES, CONNECTIONS, ETC., REQUIRED FOR A FULLY FUNCTIONAL INSTALLATION. SUBSTITUTING CONTRACTOR IS RESPONSIBLE FOR ALL ADDITIONAL RELATED COSTS ASSOCIATED WITH TH SUBSTITUTION INCLUDING RELATED COSTS OF OTHER TRADES OR ALTERATION COSTS TO ADAPT ANOTHER'S INSTALLED WORK.

#### **CONSTRUCTION PREMISES:**

- 1. PROVIDE TEMPORARY FENCING AND PROTECTIONS AS REQUIRED BY THE NATIONAL, FEDERAL, STATE, REGIONAL, LOCAL, AND MUNICIPAL AUTHORITIES HAVING JURISDICTION.
- 2. PROTECT ALL EXISTING SITE ELEMENTS TO REMAIN FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. REPAIR OR REPLACE TO THE SATISFACTION OF THE OWNER, ALL ELEMENTS DAMAGED DURING THE PROJECT.
- 3. KEEP PREMISES IN A BROOM SWEPT FINISH CONDITION DURING ALL PHASES OF THE CONSTRUCTION. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING UP AND DISPOSING OF THEIR DEBRIS AND WASTE MATERIALS ON A REGULAR BASIS AND LEAVE THE PROJECT IN A BROOM SWEPT FINISH CONDITION UPON COMPLETION OF THEIR PORTION OF THE WORK.
- 4. CLEAN AND WASH ALL WINDOW GLASS, MIRRORS, FLOORS AND WALL TILES UPON COMPLETION OF THE PROJECT.

#### MISCELLANEOUS:

- 1. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO PREVENT MOLECULAR BREAKDOWN.
- 2. REFER TO DRAWINGS OF ALL DISCIPLINES FOR EQUIPMENT REQUIRING CONCRETE EQUIPMENT PADS. PROVIDE SUCH PADS, COORDINATING THEIR SIZES AND LOCATIONS. REVIEW LOCATIONS WITH ARCHITECT PRIOR TO
- 3. COMPLETELY CONNECT ALL EQUIPMENT AND PROVIDE ALL NECESSARY APPENDAGES. COMPLETED SYSTEMS SHALL BE FULLY OPERATIONAL

## ABBREVIATIONS

AVG AVERAGE

CTYD COURTYARD

AWT ACOUSTICAL WALL TREATMENT

#	POUND OR NUMBER
\$	DOLLAR (US CURRENCY)
&	AND

А	
A/C	AIR CONDITIONING
ACT	ACOUSTICAL CEILING TILE
AF	ACCESS FLOORING
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASST	ASSISTANT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AUTO	AUTOMATIC

E	В		
E	BD	BOARD	
	BLDG	BUILDING	
IF :D	BLDG(S)	BUILDING(S)	
	BLKG	BLOCKING	
	BM	BEAM	
	BOS	BOTTOM OF STEEL	
	BSMT	BASEMENT	
	BU	BUILT UP	
	BUR	BUILT UP ROOFING	

	SHEETS. SUCH NOTES AND REFERENCES ON ANY ONE SHEET ARE APPLICABLE TO RELATED DRAWINGS THROUGHOUT THE SET.	С	
	7.1 1 2.07.322 10 1.22.4123 3.10 (VIII.00 11 II.00 0.110 0.1 11 II.0 0.1 1.1 1.2 0.2 1.	CAB	CABINET
	5. SHOULD A DISCREPANCY BETWEEN NOTES, DRAWINGS AND/OR TECHNICAL	CEM	CEMENT(ITIOUS)
	SPECIFICATIONS BE DISCOVERED, SUBMIT WRITTEN REQUEST TO THE ARCHITECT FOR RESOLUTION OF THE DISCREPANCY.	CER	CERAMIC
	ARCHITECT FOR RESOLUTION OF THE DISCREPANCY.	CFCI	CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED
	6. KEYNOTES TAGGED TO THE DRAWINGS WITH NUMBERED OR LETTERED	CFT	CONDUCTIVE FLOOR TILE
	SYMBOLS ARE TYPICAL FOR ALL SIMILAR CONDITIONS WHETHER TAGGED OR	CG	CORNER GUARD
	NOT.	CIP	CAST-IN-PLACE
	7. DETAILS SHOWN ARE INDICATIVE OF PROFILES AND TYPE OF DETAILING	CJ	CONTROL JOINT
	REQUIRED THROUGHOUT THE WORK.	CL	CENTER LINE
		CLG	CEILING
	8. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILS	CLKG	CAULKING
	SHOWN.	CLR	CLEAR
	9. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS SHALL GOVERN. PRINTED	CMU	CONCRETE MASONRY UNIT
	DRAWINGS MAY BE REPRODUCED AT A SCALE DIFFERENT THAN INTENDED	COL	COLUMN
	BY THE ORIGINAL DRAWING. SUBMIT WRITTEN REQUEST TO THE ARCHITECT	CONC	CONCRETE
	FOR RESOLUTION OF ANY DIMENSIONAL DISCREPANCIES.	CONST	CONSTRUCTION
	10. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE	CONT	CONTINUOUS
DETERMINED, CONSUL	DETERMINED, CONSULT THE ARCHITECT FOR CLARIFICATION BEFORE	COORD	COORDINATE
	PROCEEDING WITH THE WORK.	CPT	CARPET
	11. VERIFY ALL DIMENSIONS, INCLUDING BUT NOT LIMITED TO EXISTING	CPTT	CARPET TILE
	CONDITIONS, LAYOUT OF THE WORK, AND WORK ALREADY INSTALLED	CT	CERAMIC TILE
	BEFORE PROCEEDING WITH NEW WORK.	CTR	CENTER

	D	
ID	D	DEEP
טו	DBL	DOUBLE
	DEMO	DEMOLISH OR DEMOLITION
Υ	DEPT	DEPARTMENT
E	DES	DESIGN(ED)
-	DF	DRINKING FOUNTAIN
	DIA OR Ø	DIAMETER
	DIFF	DIFFERENT
	DIM(S)	DIMENSIONS
	DISP	DISPENSER
	DIV	DIVISION
	DN	DOWN
	DR	DOOR
	DS	DOWNSPOUT
	DSCON	DISCONNECT
	DTL	DETAIL
	DW	DISHWASHER
	DWG	DRAWING(S)

	_	
	<u>E</u>	
	EA	EACH
	EJ	EXPANSION JOINT
	ELAST	ELASTOMERIC
	ELEC	ELECTRICAL/OR ELECTRONIC
	ELEV	ELEVATION
	EMERG	EMERGENCY
	ENGR	ENGINEER(ED)
	EP	END PANEL
	EQ	EQUAL
_	EQUIP	EQUIPMENT
F	EWC	ELECTRIC WATER CLOSET
	EXIST	EXISTING
3	EXP	EXPOSED
	EXT	EXTERIOR

F	
FAB	FABRICATION
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER & CABINET
FF	FINISHED FLOOR
FG	FINISHED GRADE
FGL	FIRE GLASS
FHC	FIRE HOSE AND CABINET
FIN	FINISH
FLDG	FOLDING
FLR	FLOOR OR FLOORING
FLSHG	FLASHING
FOC	FACE OF CONCRETE
FOS	FACE OF STUD
FP	FILLER PANEL
FPLC	FIREPLACE
FR	FIRE RATING OR FIRE RATED
FRMG	FRAMING
FRP	FIBERGLASS REINFORCED PLASTIC
FT	FOOT OR FEET
FURN	FURNITURE

FIXTURE
GAUGE
GALVANIZED
GRAB BAR
GROUND FAULT CIRCUIT INTERRUPTER
GLASS
GRILLE
GYPSUM WALL BOARD
GYPSUM

Н	
HB	HOSE BIBB
HC	HOLLOW CORE
HD	HEAD
HDWD	HARDWOOD
HDWR	HARDWARE
НМ	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HIGH POINT
HPM	HAZARDOUS PROCESS MATERIAL
HR	HOUR
HT	HEIGHT
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING

1	
ILO	IN LIEU OF
IN	INCH OR INCHES
INCL	INCLUDE(ED)
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR

JAN JANITOR

LVT LUXURY VINYL TILE

JNT	JOINT
K	
n .	
KS	KITCHEN SINK
L	
LAM	LAMINATED
LAV	LAVATORY
LB	POUND
LN	LINEN CABINET
LP	LOW POINT
LT	LIGHT
LVL	LEVEL

М	
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MC	MEDICINE CABINET
MECH	MECHANICAL
MEMB	MEMBRANE
MEZZ	MEZZANINE
MFD	MANUFACTURED
MFR	MANUFACTURER
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MLWK	MILLWORK
MOT	MOTOR OR MOTORIZED
MRGWB	MOISTURE RESISTANT GYPSUM WALL BOARD
MTD	MOUNTED
MTL	METAL
MW	MICROWAVE
MWC	METAL WALLCOVERING

N	
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE

OC	ON CENTER
OFCI	OWNER FURNISHED AND CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED AND OWNER INSTALLED
ОН	OPPOSITE HAND
ОН	OVERHANG
OPNG	OPENING(S)
OPP	OPPOSITE
OPR	OPERABLE
ORD	OVERFLOW ROOF DRAIN
ORNA	ORNAMENTAL
ОТО	OUT TO OUT
OVFL	OVERFLOW
OVHD	OVERHEAD

OVFL	OVERFLOW
OVHD	OVERHEAD
Р	
PAN	PANTRY
PBD	PARTICLE BOARD
PCC	PRE-CAST CONCRETE
PEDR	PEDESTRIAN
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLT	PLATE
PNL	PANEL
PNT	PAINT
PREFAB	PREFABRICATED
PREFIN	PREFINISHED
PRTECN	PROTECTION
PVC	POLYVINYL CHLORIDE
D	

RAD RADIUS

RB RUBBER BASE

RC RESILIENT CHANNEL

RCP REFLECTED CEILING PLAN

RD	ROOF DRAIN
RDL	ROOF DRAIN LEADER
RECES	RECESSED
REF	REFER OR REFERENCE
REFL	REFLECTED
REFR	REFRIGERATOR
REINF	REINFORCED OR REINFORCING
REQD	REQUIRED
RFG	ROOFING
RM	ROOM
RO	ROUGH OPENING
RSB	REMOVABLE SINK BASE
S	
SAT	SUSPENDED ACOUSTIC TILE CEILING
SB	SINK BASE
SC	SOLID CORE
SCH	SCHEDULE
SF	SQUARE FEET
SGL	SINGLE
SH	SHELF OR SHELVES
SHT	SHEET
SIM	SIMILAR
SLNT	SEALANT

SAT	SUSPENDED ACOUSTIC TILE CEILING
SB	SINK BASE
SC	SOLID CORE
SCH	SCHEDULE
SF	SQUARE FEET
SGL	SINGLE
SH	SHELF OR SHELVES
SHT	SHEET
SIM	SIMILAR
SLNT	SEALANT
SPEC	SPECIFICATION OR SPECIFIED
SPK	SPRINKLER(S)
SPM	SINGLE PLY MEMBRANE
SSM	SOLID SURFACE MATERIAL
SSTL	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SYS	SYSTEM OR SYSTEMS

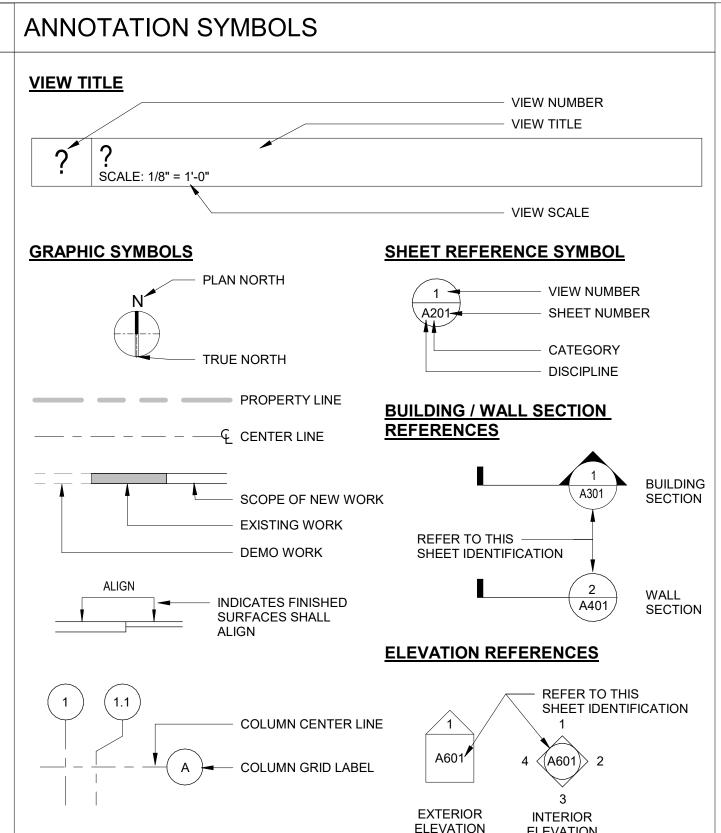
Т	
T&G	TONGUE AND GROOVE
T/D	TELEPHONE/DATA
TELE	TELECOMMUNICATIONS
TEMP	TEMPERED
THK	THICK
THR	THRESHOLD
TO	TOP OF
TOC	TOP OF CONCRETE
TOP	TOP OF PARAPET
TOS	TOP OF STEEL
TRANS	TRANSPARENT
TRD	TREAD
TW	TILT WALL
TYP	TYPICAL

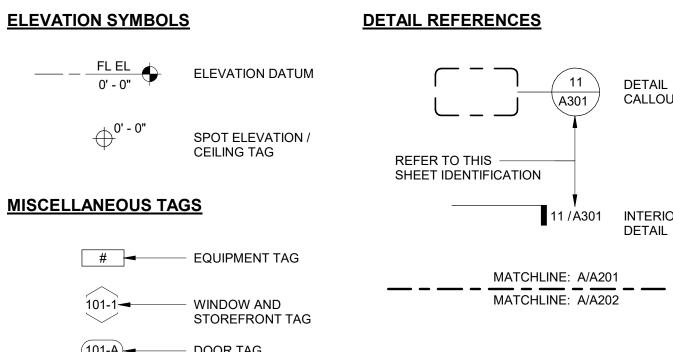
UL UNDERWRITERS LABORATORIES

UNO UNLESS NOTED OTHERWISE

UTIL	UTILITY
/	
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VP	VENT PIPE
VS	VERSUS OR VANITY SINK
VSB	VANITY SINK BASE

W	
W	WIDE
W/	WITH
W/D	WASHER/DRYER
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WH	WATER HEATER
WP	WATERPROOF/OR WEATHERPROOF
WT	WEIGHT





<u>METALS</u>

**FINISHES** 

**EARTHWORK** 

THERMAL AND MOISTURE PROTECTION

RIGID INSULATION

BATT INSULATION

FIBROUS FIRE SAFING

LOOSE FILL INSULATION

GYPSUM BOARD

TILE/ VCT/ LVT

STUCCO/ EIFS

HERRINGBONE

WOOD FLOORING/ LVT

STONE ASHLAR

SAND

CHEVRON

MATERIAL LEGEND

**BRICK - COMMON BOND** 

BRICK - STACK BOND

ARCHITECTURAL CAST STONE

CONCRETE MASONRY UNIT

GROUT

STONE

BRICK/STONE

CMU - STACKED

PLYWOOD

WOOD - CONTINUOUS

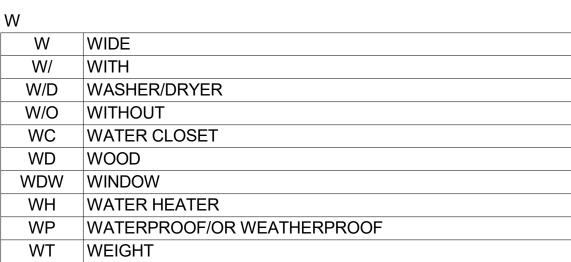
WOOD - BLOCKING

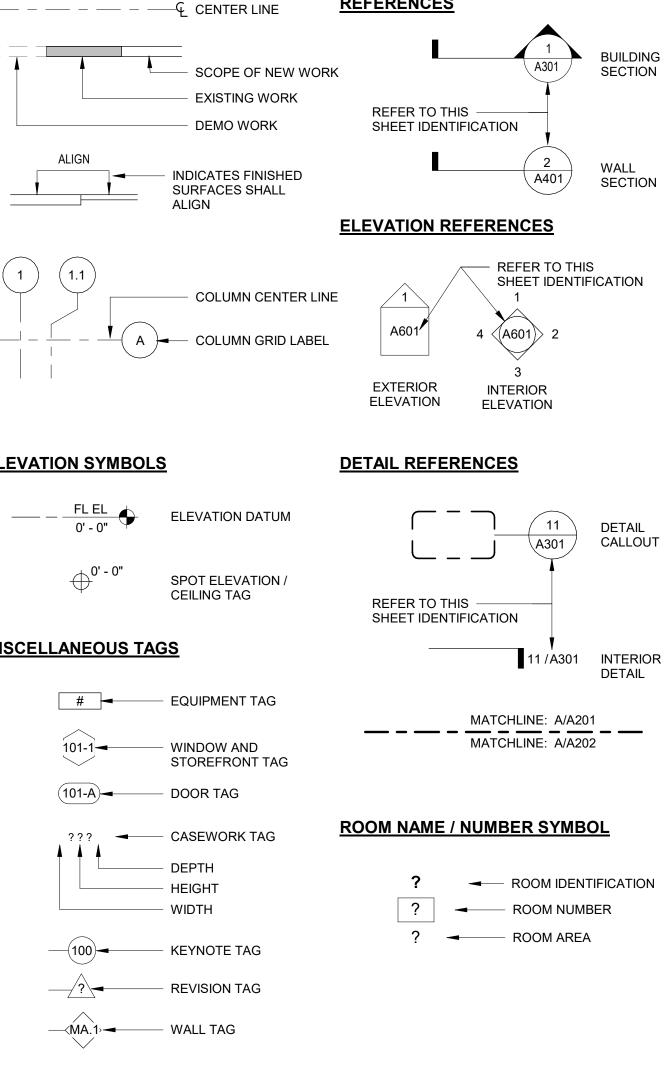
WOOD, PLASTIC AND COMPOSITES

**CONCRETE** 

**MASONRY** 









**PROJECT TEAM** SUPER KIDS DENTAL 2410 E RIVERSIDE DRIVE, SUITE 12-H AUSTIN. TX 78741 www.superkidsaustin.com

**ARCHITECT** ELEMENT ARCHITECTS, LLC. 1250 WOOD BRANCH PARK DR, SUITE 480 HOUSTON, TX 77079 (713) 874 0775 www.ElementArchitects.com

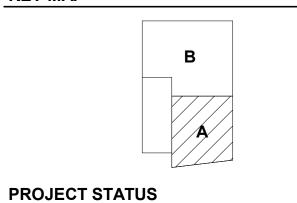
K.O. DESIGN 1327 W MAIN STREET, SUITE 7 TOMBALL, TX 77375 (832) 643 0368

DESCRIPTION

DATE



**KEY MAP** 



**ISSUE FOR PERMIT PROJECT NAME** SUPER KIDS DENTAL

PROJECT ADDRESS 6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741 **PROJECT NUMBER** 

DATE 05/30/24

> GENERAL NOTES, LEGENDS AND **ABBREVIATIONS**

> > G002

DDE REVIEW - OCCUPANCY SCHEDULE - ROOM (IBC CHAPTER 10)  ITE 201	(IBC CHAPTER 10)		36 INCHES MII				PROJECT SUMMARY: 2,189 SQUARE F	EET INTERIOR TENANT BUILD-OUT O	F A DENTAL OFFICE SPACE
CUPANCY - B (BUSINESS) EA: 2,189 S.F.	(IBC CHAPTER 10)	(IBC CHAPTER 10) MINIMUM STAIR WIDTH					- INSIDE AN EXIS (LEVEL 1). EXIST CLOSET SERVE	TING 2-STORY BUILDING WITH PARKING SHARED COMMON RESTROOMS S THE ENTIRE LEVEL 2 SUITES. THE ENTIPE IS TYPE II-B.	NG ON THE GROUND LEVEL S AND MAINTENANCE/UTILITY
CUPANCY LOAD FACTOR: 100 GROSS (BUSINESS AREAS)			44 INCHES MIN	NIMUM			PROJECT NAME: SUPER KIDS DE		
TAL OCCUPANT LOAD: 22	(IBC CHAPTER 10)	DEAD END COR	RIDORS					DE DRIVE, UNIT 201, AUSTIN, TX 78741	
			50 FT				OCCUPANCY TYPE: B (BUSINESS)		
	(IBC CHAPTER 10)	EXIT ACCESS TI	RAVEL DIS	TANCE			CONSTRUCTION TYPE: TYPE II-B (EXIST	TING BUILDING)	
			300 FT				BUILD-OUT SQ. FT.: 2,189 SF		
	(IBC CHAPTER 10)	CORRIDOR FIRE	E - RESITAN	NCE RATING	-		FIRE PROTECTION: 100% SPRINKLE		
		FIRE RES	SISTANCE RAT	rings (Hours)			CODE ANALYSIS / PROJECT INF	ORMATION	
	(IBC CHAPTER 15)	(IBC CHAPTER 15) MINIMUM ROOF COVERING CLASSIFICATION  CLASS C  2021 AUSTIN BUILDING CODE 2021 INTERNATIONAL BUILDING CODE 2021 INTERNATIONAL FIRE CODE 2021 INTERNATIONAL ENERGY CONSERVATION CODE 2021 UNIFORM MECHANICAL CODE 2021 UNIFORM PLUMBING CODE 2023 NATIONAL ELECTRIC CODE 2023 TEXAS ACCEPTABLE AREA 2021 AUSTIN BUILDING CODE 2021 INTERNATIONAL BUILDING CODE 2021 INTERNATIONAL ELECTRIC CODE 2021 INTERNATIONAL ELECTRIC CODE 2021 INTERNATIONAL ELECTRIC CODE					ATION CODE		
	(IBC CHAPTER 29)	PLUMBING FIXT					2012 TEXAS ACCESSIBILITY STANDARDS		
	OCCUPANCY WA	ATER CLOSETS		LAVATORIES		DRINKING SERVICE FOUNTAIN SINK	(IBC CHAPTER 5) ALLOWABLE B	BUILDING HEIGHT AND AREA	
	22	1 PER 25		1 PER 40		T GONTAIN GIVEN		ALLOWABLE	ACTUAL
	MALE: 11 UNISEX	MALE FEMALE	UNISEX	MALE	FEMALE	1 PER 100 1	BUILDING HEIGHT	75 FEET	32'-6"
	FEMALE: 11  REQUIRED 0	1 1	0	1	1	1 1	NUMBER OF STORIES	4	2
	PROVIDED 1	1 1	1	1	1	2 1	BUILDING AREA	69,000 SF	6,678 SF (1ST FLR) 6,711 SF (2ND FLR)
	TOTAL 1	1 1	1	1	1	2 1	(IBC CHAPTER 6) FIRE-RESISTA	NCE RATING REQUIREMENT	rs
	(IECC CHAPTER 4)	INSULATION RE	QUIREMEN	NTS			FIRE RATING REQUIREMENTS (TABLE 60	01)	
	CLIMATE ZONE: 2A (I	NON-RESIDENTIAL)					NR = NON-RATED N/C = NON-COMBUSTIBLE N/A = NOT APPLICABLE		
	COMPONENT	INSULATION CONDI		I. INSULATION QUIREMENTS		INSULATION ED FOR COMPLIANCE	PRIMARY STRUCTURAL FRAME	0 HR	TABLE 601
		INSULATION ABOVE		R-38		R-38	EXTERIOR BEARING WALLS	0 HR 0 HR	TABLE 601
	WALLS	OTHER	F	R-13 + R-5 ci	F	R-13 + R-5 ci	INTERIOR BEARING WALLS	0 HR	TABLE 601
							EXTERIOR NON-BEARING WALLS	0 HR	TABLE 705.5
							INTERIOR NON-BEARING WALLS	0 HR	TABLE 601
							FLOOR CONSTRUCTION  ROOF CONSTRUCTION	0 HR 0 HR	TABLE 601
							(IBC CHAPTER 7) FIRE SEPARA	TION DISTANCE	
							FIRE SEPARATION DISTANCE = X (FEE		IG REQUIRED
							X < 5		1
							5 <u>&lt;</u> x < 10		1
							10 <u>&lt;</u> X < 30		0
							X≥30 (IBC CHAPTER 7) MAX. AREA OF		0 S BASED ON FIRE
							SEPARATION DISTANCE AND DI		CTION
							FIRE SEPARATION DISTANCE (FEET)  0 TO LESS THAN 3	PROTECTION  UNPROTECTED, SPRINKLERED	ALLOWABLE AREA  NOT PERMITTED
							3 TO LESS THAN 5	UNPROTECTED, SPRINKLERED	15%
							5 TO LESS THAN 10	UNPROTECTED, SPRINKLERED	25%
							10 TO LESS THAN 15	UNPROTECTED, SPRINKLERED	45%
							15 TO LESS THAN 20	UNPROTECTED, SPRINKLERED	75%
							20 TO LESS THAN 25 25 TO LESS THAN 30	UNPROTECTED, SPRINKLERED UNPROTECTED, SPRINKLERED	NO LIMIT  NO LIMIT
							30 OR GREATER	UNPROTECTED, SPRINKLERED  UNPROTECTED, SPRINKLERED	NO LIMIT
							(IBC CHAPTER 7) FIRE WALL FIF		
							,	RESISTANCE RATINGS (HOURS)	
								N/A	
							(IBC CHAPTER 7) FIRE RESISTA FIRE WALLS, OR HORIZONTAL A		
								RESISTANCE RATINGS (HOURS)	
								N/A	
							(IBC CHAPTER 7) SHAFT ENCLO	SURES	
							FIRE	RESISTANCE RATING (HOURS)	
								1	
							(IBC CHAPTER 8) INTERIOR WAI	LL AND CEILING FINISH REQI	UIREMENTS
							CLASS B = FLAME SPRE	ND INDEX OF 0-25; SMOKE-DEVELOPEI AD INDEX 26-75; SMOKE DEVELOPED	INDEX 0-450
							CLASS C = FLAME SPRE	AD INDEX 76-200; SMOKE DEVELOPED	O INDEX 0-450
								ORRIDORS AND ENCLOSURE OR EXIT ACCESS STAIRWAYS AND RAMPS	OMS AND ENCLOSED SPACES
							В	С	С
							(IBC CHAPTER 9) FIRE SPRINKL	ER	
								NFPA 13 (EXISTING)	
							(IBC CHAPTER 9) FIRE ALARM A	ND DETECTION SYSTEMS	
								FIRE ALARM REQUIRED	
							SM	MOKE DETECTION REQUIRED	
							(IBC CHAPTER 9) EMERGENCY I	RESPONDER COMMUNICATION	ON COVERAGE
							EMERGENCY	RESPONDER RADIO COVERAGE (ERF	RC)
	1						THE BUILDING STRUCTURE SHALL CO	NADI V. MITH ALL ADDI IOADI E EDDO (	



**NER**PER KIDS DENTAL
0 E RIVERSIDE DRIVE, SUITE 12-H
STIN, TX 78741
v.superkidsaustin.com

HITECT
MENT ARCHITECTS, LLC.
WOOD BRANCH PARK DR,
E 480
JSTON, TX 77079
8) 874 0775
v.ElementArchitects.com

DESIGN

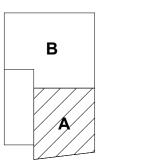
7 W MAIN STREET, SUITE 7

MBALL, TX 77375

2) 643 0368

DESCRIPTION





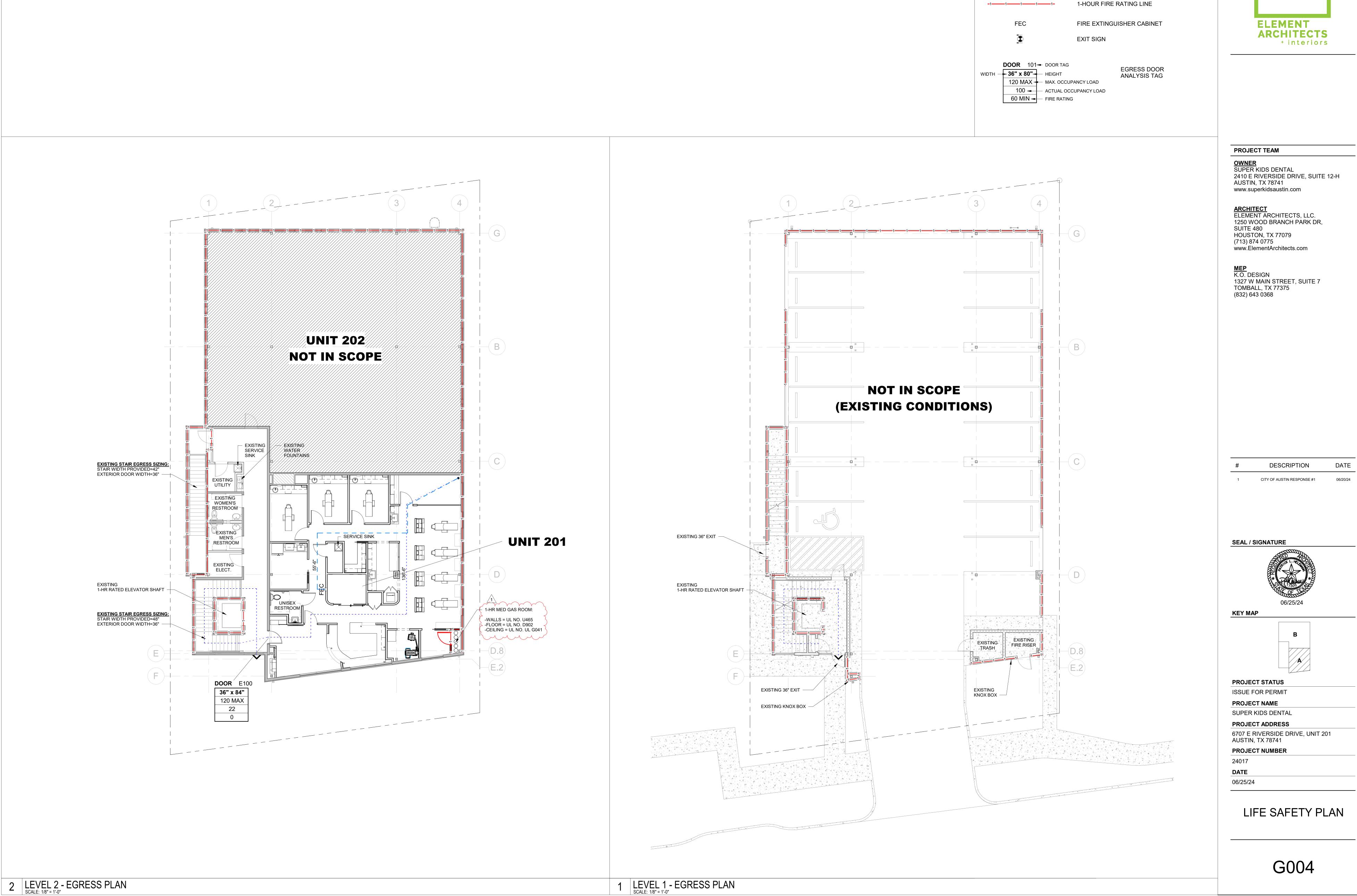
ECT STATUS FOR PERMIT ECT NAME

R KIDS DENTAL JECT ADDRESS

E RIVERSIDE DRIVE, UNIT 201 IN, TX 78741 ECT NUMBER

OJECT INFORMATION ND CODE ANALYSIS

G003



ELEMENT ARCHITECTS + interiors

LIFE SAFETY PLAN LEGEND

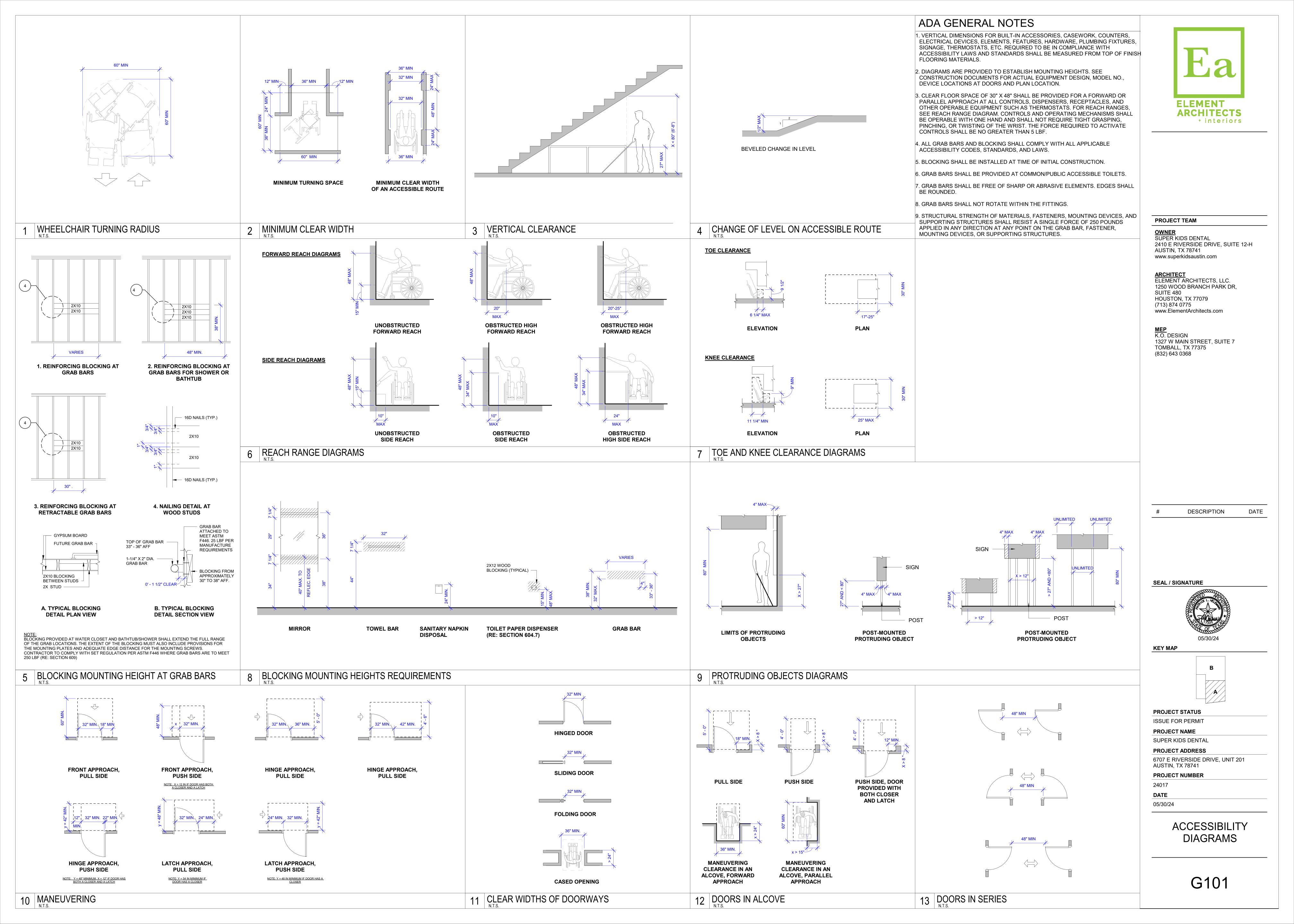
EGRESS TRAVEL DISTANCE

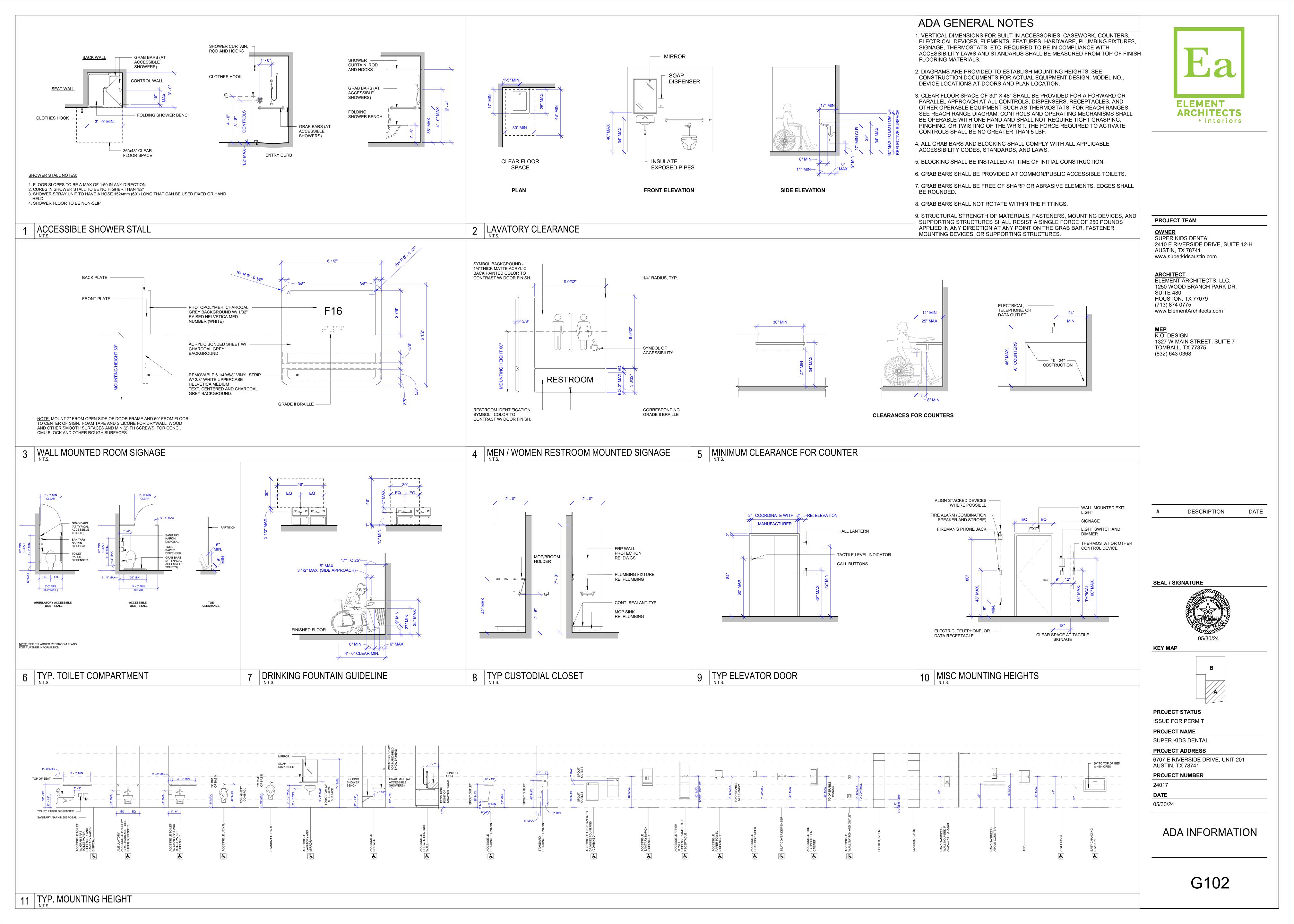
EGRESS TRAVEL DISTANCE TAG

FIRE EXTINGUISHER DISTANCE

**<** - - - - - •

XX'-XX"





# spaced 24 in. OC max. 3A. Fiber, Sprayed\* - As an alternate to Batts and Blankets (Item completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic st. PABCO GYPSUM, DIV OF PANEL REY S A - Type PRX.

#### Design No. U465 December 21, 2004 Nonbearing Wall Rating - 1 HR.

1. Floor and Ceiling Runners - (not shown) - Channel shaped runners, 3-5/8 in. wide (min), 1-1/4 in. legs, formed from min No. 25 MSG galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. 2. Steel Studs - Channel shaped, 3-5/8 in. wide (min), 1-1/4 in. legs, 3/8 in. folded back returns, formed from min No. 25 MSG galv steel

3. Batts and Blankets\* - (Optional) - Mineral wool or glass fiber batts partially or completely filling stud cavity.

See Batts and Blankets (BZJZ) category for names of Classified

3) - Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft3. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5

US GREENFIBER L L C - Cocoon2 Stabilized or Cocoon-FRM (Fire Rated Material) 3B. Fiber, Sprayed\* - As an alternate to Batts and Blankets (Item 3) and Item 3A - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to

NU-WOOL CO INC - Cellulose Insulation 4. Gypsum Board\* - 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws 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. When attached to item 6 (resilient channels) or 6A (furring channels), wallboard is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. OC.

AMERICAN GYPSUM CO - Types AG-C, AGX-1, AGX-7. BEIJING NEW BUILDING MATERIALS CO LTD - Type BPB AMERICA INC - Types 1, EGRG, ProRoc Type X, ProRoc

BPB CANADA INC - ProRoc Type C, ProRoc Type X or ProRoc Type Abuse-Resistant. CANADIAN GYPSUM COMPANY - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX.

G-P GYPSUM CORP, SUB OF GEORGIA-PACIFIC CORP - Types 5, 9, C, DAP, DD, DA, DGG, DS, GPFS6. LAFARGE NORTH AMERICA INC - Types LGFC2, LGFC2A, LGFC6, LGFC6A, LGFC-C, LGFC-C/A. NATIONAL GYPSUM CO - Types FSK, FSK-C, FSK-G, FSW-C, FSW-G, FSW, FSW-3 , FSW-5.

PACIFIC COAST BUILDING PRODUCTS INC - Type PG-C

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD - Type STANDARD GYPSUM L L C - Type SG-C. TEMPLE-INLAND FOREST PRODUCTS CORP - Type TG-C UNITED STATES GYPSUM CO - Type AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX. USG MEXICO S A DE C V - Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX. 4A. Gypsum Board\* - (As alternate to Item 4) - Nom 5/8 in. thick 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. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed. Panels attached to steel studs and floor runner with 1 in. long Type S steel screws spaced 8 in. OC when applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. CANADIAN GYPSUM COMPANY - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX. UNITED STATES GYPSUM CO - T ype AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX. USG MEXICO S A DE C V - Type AR, C, IP-AR, IP-X1, IP-X2, IPC- AR, SCX, SHX, WRC or WRX. 4B. Gypsum Board\* - (As an alternate to Items 4 or 4A) - Nom 3/4 in. thick, 4 ft wide, installed as described in Item 4A with screw length increased to 1-1/4 in. CANADIAN GYPSUM COMPANY - Types AR, IP-AR. UNITED STATES GYPSUM CO - Types AR, IP-AR.

USG MEXICO S A DE C V - Types AR, IP-AR. 5. 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.

6. Resilient Channel - (Optional-Not Shown) - 25 MSG galv steel resilient channels spaced vertically max 24 in. OC, flange portion attached to each intersecting stud with 1/2 in. long type S-12 panhead steel screws.

6A. Steel Framing Members (Not Shown)\* - As an alternate to Item 3, furring channels and resilient sound isolation clip as described below: a. Furring Channels - Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. b. Steel Framing Members\* - Used to attach furring channels (Item a) to studs (Item 1). Clips spaced 48 in. OC., and secured to studs with 1-5/8 in. wafer or hex head Type S steel screw through the center grommet. Furring channels are friction fitted into clips.

PAC INTERNATIONAL INC - Type RSIC-1.



**PROJECT TEAM** 

SUPER KIDS DENTAL 2410 E RIVERSIDE DRIVE, SUITE 12-H AUSTIN, TX 78741

www.superkidsaustin.com

ARCHITECT
ELEMENT ARCHITECTS, LLC. 1250 WOOD BRANCH PARK DR, SUITE 480 HOUSTON, TX 77079 (713) 874 0775

<u>MEP</u> K.O. DESIGN 1327 W MAIN STREET, SUITE 7 TOMBALL, TX 77375 (832) 643 0368

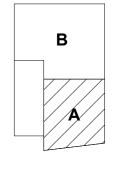
www.ElementArchitects.com

DESCRIPTION DATE CITY OF AUSTIN RESPONSE #1

**SEAL / SIGNATURE** 



**KEY MAP** 



PROJECT STATUS **ISSUE FOR PERMIT** 

PROJECT NAME SUPER KIDS DENTAL

PROJECT ADDRESS 6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741

PROJECT NUMBER

06/25/24



encountered in the field.

gn Criteria and Allowable Variances

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- · Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction

Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada eneral Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States

Design No. D902 Restrained Assembly Ratings — 1, 1-1/2, 2 and 3 Hr. Unrestrained Assembly Ratings — 0, 1, 1-1/2, 2 or 3 Hr. (See Items 4 & 6) Unrestrained Beam Ratings — 1, 1-1/2, 2 and 3 Hr.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide <u>BXUV</u> or <u>BXUV7</u>

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

(such as Canada), respectively.

SECTION A-A SEE ITEM (2

1A. Steel Joists — (Not Shown) — As an alternate to Item 1 — Composite or non-composite min 8k1 or min depth and weight shall be 8 in, and 4.9 lb/ft respectively. May be uncoated or provided with a shop coat of paint. Designed per S.J.I. specifications for a max design stress of 30, 000 psi (30 ksi). Welded or bolted to end supports. The top chords shall consist of two angles measuring 1-1/4 by 1-1/4 by 0.127 in. thick. Bottom chords shall consist of two round bars measuring 0.566 in. in diam. or two angles measuring 1 by 1 by 0.125 in. thick. Bearing plates shall consist of two angles measuring 1-1/2 by 2 by 0.188 in. thick and 5-1/16 in. long. Web members shall consist of 0.565 in. diam bars.

1. Beam — W8X28, W8x24, W6x12 or W6x9, min size, see Items 6 through 6F.

1B. Steel Joists — (Not Shown) — As an alternate to Item 1 — Composite or non-composite min 12k5 or min depth and weight shall be 12 in. and 7.1 lb/ft respectively. May be uncoated or provided with a shop coat of paint. Designed per S.J.I. specifications for a max design stress of 30, 000 psi (30 ksi). Welded or bolted to end supports. Top chords shall consist of two angles measuring 1-1/2 by 1-1/2 by 0.156 in. thick. Bottom chords shall consist of two round bars measuring 0.675 in. in diam, or two angles measuring 1 by 1 by 0.125 in. thick. Bearing plates shall consist of two angles measuring 2 by 2 by 0.192 in. thick and shall be min 4-15/16 in long. The second web member at each end shall consist of 0.654 in. diam round bar. All remaining web members, including the end web members, shall consist of 0.774 in. diam round bars. Bridging per S.J.I. specifications is required when non-composite joists are used.

1C. Steel Joists — (Not Shown) — As an alternate to Item 1 — Composite or non-composite min 12k5 or min depth and weight shall be 12 in. and 7.1 lb/ft respectively. May be uncoated or provided with a shop coat of paint. Designed per S.J.I. specifications for a max

design stress of 30, 000 psi (30 ksi). Welded or bolted to end supports. Top chords shall consist of two angles measuring 1-1/2 by 1-1/2 by 0.156 in. thick. Bottom chord shall consist of two round bars measuring 0.675 in. in diam. or two nangles measuring 1 by 1 by 0.125 in, thick, The second web member at each end shall consist of 0.654 in, diam round bar, All remaining web members, including the end web members, shall consist of 0.774 in. diam round bars. Bridging per S.J.I. specifications is required when non-composite Note: Additional beams or joists from the N series designs may be substituted for the listed beam (item 1) or joist (item 1A) respectively. When

joists are substituted, the restrained rating of the joist must be equal to or greater than the restrained rating of the assembly. Additional beam and joist substitution requirements are in the front of the Fire Resistance Directory - III. FLOOR-CEILINGS AND ROOF-CEILING, item 7 -Steel Joist or IV.

2. Normal Weight or Light Weight Concrete — Normal weight concrete, carbonate or siliceous aggregate, 3500 psi compressive strength, vibrated. Light weight concrete, expanded shale or slate aggregate by rotary-kiln method or expanded clay aggregate by  $rotary-kiln\ or\ sintered-grate\ method,\ or\ pelletized\ expanded\ blast\ furnace\ slag\ aggregate,\ 3000\ psi\ compressive\ strength,\ vibrated,\ 4$ 

entrained air.			
Restrained Assembly Rating Hr	Concrete (Type)	Concrete Unit Weight pcf	Concrete Thkns In.
1	Normal Weight	147-153	3-1/2
1-1/2	Normal Weight	147-153	4
2	Normal Weight	147-153	4-1/2
3	Normal Weight	147-153	5-1/4
1	Light Weight	107-113	2-1/2
1	Light Weight	107-120	2-5/8
1-1/2	Light Weight	107-113	3
2	Light Weight	107-113	3-1/4
2	Light Weight	107-116	3-1/4*
2	Light Weight	114-120	3-1/2
3	Light Weight	107-113	4-3/16
3	Light Weight	114-120	4-7/16

\* With 2 and 3 in. deep steel floor units only.

3. Welded Wire Fabric — 6x6 - W1.4xW1.4.

3A. Negative Reinforcement — (Optional, Not Shown) Used in lieu of Item 3 and with Items 3B or 3C. For floor spans with concrete cast continuous over the supporting beams. Deformed bars designed to resist the support moments of the concrete slab in accordance with the latest ACI Building Code Specifications.

3B. **Fiber Reinforcement\*** — (Not Shown) — Required with Item 3A. Engineered synthetic fibers added to concrete mix to control shrinkage cracks in concrete. Fibers added to concrete mix at rate of 1 lb of fiber for each cubic yard of concrete. PROPEX OPERATING COMPANY L L C — Fibermesh 150 and Fibermesh 300.

3C. Fiber Reinforcement\* — (Not Shown) — Required with Item 3A. Any fiber reinforcement bearing the UL Classification Marking for Fire Resistance, Classified for use in lieu of welded wire fabric. See Fiber Reinforcement (CBXQ) Category for names of manufacturers.

4. Steel Floor and Form Units\* — Composite or non-composite, 1-1/2, 1-5/8, 2 or 3 in. deep galv units or 4-1/2 in. deep noncomposite galv units. Fluted units may be phos/ptd. Min gauges are 22 MSG for fluted and 20/20 for cellular and partial cellular units. The following combinations of units may be used:

(1) All 24, 26, 28 or 36 in. wide cellular or partial cellular.

(3) One or two 3 in. deep, 12 in. wide, 18/18 MSG min cellular alternating with 3 in. deep fluted or other cellular. (4) Any blend of fluted and 24, 26, 28 or 36 in, wide cellular or partial cellular.

name. Cellular deck top and bottom sections may be riveted together (designated with "Fr") vs. arc spot welded, "F"

(5) Corrugated, nom 1-5/16 or 2 in, deep, 30 in, wide, 24 MSG min galv units with shear wires factory welded to deck corrugations. Welded to supports 12 in. OC through welding washers. For shear wire spacing of 8 in. or less the steel deck stress shall not exceed 20 KSI. For shear wire spacing greater than 8 in. OC but less than or equal to 12 in. OC steel deck stress shall not exceed 12 KSI. ASC STEEL DECK, DIV OF ASC PROFILES L C — 32 in. wide Types NH-32, NHN-32, NHF-32; 36 in. wide, Types BH-36, BHN-36, BHN-35-1/4, BHF-36, BHF-36A, 2WH-36, 2WHS-36, 2WHF-36, 2WHF-36, 3WXH-36, 3WXHF-36, 3WXHF-36A, 3WH-36, 3WHF-36, 3WHF-36A, 3WHF-36

CANAM GROUP INC — 24 in. wide Type P-2432 composite or 36 in. wide Type P-3623, P-3606, P-3615 and 24 in wide Type P-2432 composite, Type P-3606 and P-3615 non-composite: 24 or 36 in, wide Type 3 in, LOK-Floor: 36 in, wide Types 1.5B, 1.5BL 1.5BL and 1.5BL

DG3W-36, DG3WF-36. All units may be galvanized or Prime Shield. Non-cellular decks may be vented designated with a "V" suffix to the product

CANAM STEEL CORP — 24 in. wide Type P-2432 composite or 36 in. wide Type P-3623, P-3606, P-3615 and 24 in wide Type P-2432 composite,

Type P-3606 and P-3615 non-composite CANAM STEEL CORP — 12 or 24 in. wide, Types 1-1/2, 2, or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor and LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor Cell; 36 in. wide, Types 2 or 3 in. LOK-Floor Cell; 36 in. wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. Wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. Wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. Wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. Wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. Wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. Wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. Wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. Wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. Wide, Types 3 or 3 in. LOK-Floor Cell; 36 in. Wide, Types 3 or 3 in. Wide, Types 3 or 3 in. Wide, Types 3 or

Floor Cell; 24, 30 or 36 in. wide, Type 1-1/2 in. B-LOK and B-LOK Cell; 24 in. wide, Types N-LOK and N-LOK Cell CENTRIA, A DIVISION OF NCI GROUP, INC — QL Types, 24 in. wide, 3 or 3 inverted, UKX, 21 or 21 inverted, 2 in. 99, 121, AKX, NKX, TKX; 24 or 30 in. wide GKX, GKXH, GKX-A; 36 in. wide 2 in. 99, AKX, WKX; 12 in. wide NKC, TKC; 12 in. wide non-composite Sec 12. Side joints of 99, 121, TKC, TKX, WKX may be welded together 60 in. OC. Side joints of 99, AKX, WKX, GKX, GKX-A, TKX may be fastened together with min 1 in. long No.

CHIA TEH CONSTRUCTION MATERIAL CO LTD — 24 or 36 in. wide Mac-Lok 3; 24 in. wide CFD-3

DECK WEST INC — 36 in. wide Type B-DW, Inverted B-DW, BA-DW, Inverted BA-DW, 2-DW or 3-DW. Side joints of Type 2-DW and 3-DW may be fastened together with min 1 in. long No. 12 x 14 self-drilling, self-tapping steel screws 36 in. OC

DESIGN ASSISTANCE CONSTRUCTION SYSTEMS INC — 36 in. wide Type DACS1.5CD, or 24 in. wide Type DACS2.0CD, or DACS3.0CD

EPIC METALS CORP — 24 in. wide Types EC150, EC150 inverted, EC300, EC366, ECP150, ECP300, ECP366, ECA; 30 in. wide Types ECB150, ECBR150; 36 in. wide Types EC156, EC266, ECP266

KAM INDUSTRIES LTD, DBA CORDECK — 24 in. wide, Types 2 or 3 in. WDR

MARLYN STEEL DECKS INC — Type 1.5 CF, 2.0 CF or 3.0 CF

12x14 self-drilling, self-tapping steel screws 36 in. OC

NEW MILLENNIUM BUILDING SYSTEMS L L C — 24 or 36 in. wide Types 2.0CD, 3.0CFD, 3.0CFD, 3.0CFD, 3.0CFDES; 24, 30 or 36 in. wide Types 1.5CD, 1.5CDI, 1.5CDR, 1.5CFD. Fluted units may be phos/painted or galvanized.

STEEL MASTERS INTERNATIONAL DEPENDABLE STEEL — 36 in. wide Types 2WH-36, 3WH-36. Units may be phos/painted or galvanized.

ROOF DECK INC — 36 in. wide Types LOK-1-1/2, LOK-1-1/2R; 24 in. wide Types LOK-2, LOK-3

VERCO DECKING INC - A NUCOR CO — FORMLOK™ deck types PLB, B, BR, PLN3, N3, PLN, N, PLW2, W2, PLW3, W3. Units are min 24 in. wide and may be galvanized, phos./ptd., or mill finish. Units may be cellular or acoustical cellular, with the suffix "CD" or "CD-AC" added to the product

VALLEY JOIST+DECK — 24 or 36 in. wide Types WVC 1-1/2 or WVC 2

side through the joint of the units at 36 in. O. C. max.

wide PLW2, W2, PLW3 or W3 units, respectively; or Types PLN3-CD, N3-CD, PLN3, N3.

Type High Strength 1.5 SBI, 36 in. wide Type High Strength 1.5 SBN; Units may be phos/ptd

along side joints. For 3 Hr Rating, units with overlapping type side joints welded together 24 in. OC max.

(a) 1-1/2, 2 and 3 in. deep, 24 or 36 in. wide, 22 MSG or thicker fluted with clear spans not more than 7 ft, 8 in.

(b) 1-1/2, 2 and 3 in. deep, 24 or 36 in. wide, 20 MSG or thicker fluted with clear spans not more than 8 ft, 8 in.

is equal to the Unrestrained Beam Rating (See Item 6) and is limited to the following floor units and spans:

thick (16 MSG) galv steel, fixed to the steel work before decking is placed. In addition to the Steel Floor and Form Units, the following components are required:

chairs spaced at max 41-1/2 inches OC.

parameters referencing UL Design D989.

or 1B) shall be as follows:

name, respectively. All non-cellular deck may be vented or non-vented. 12 in. wide PLW2, W2, PLW3 or W3 units may be blended with 24 or 36 in.

VULCRAFT, DIV OF NUCOR CORP — 24, 30 or 36 in. wide Types 1.5VL, 1.5VLI, 1.5VLP, 1.5 VLR, 1.5PLVLP; 24 or 36 in. wide Types

1.5VLPA, 1.5PLVLPA, 2VLI, 2.0PLVLI, 2VLJ, 3VLJ, 3.0PLVLI, 3VLJ, 2VLP, 2.0PLVLP, 3VLP, 3.0PLVLP, 2.0PLVLPA, 2.0PLVLPA, 3.0PLVLPA, 3.0PLVLPA, 7.0PE, 1.5VL

1.5VLI, 1.5PLVLI, 1.5 VLR, 1.5VLPA, 1.5PLVLPA, 2VLI, 2.0PLVLI, 2VLJ, 3VLJ, 3.0PLVLI, 3VLJ units may be phos/ptd. 24 or 36 in. wide Types 2VLJ, 3VLJ

Spacing of welds attaching units to supports shall be 12 in. OC for 12, 24, 36 in. wide units, four welds per sheet for 30 in. wide units. 6 in. OC for

++ Side joints of Types 2VLJ or 3VLJ units may be fastened together with No. 8-3/4 in. long self-drilling Tek screws driven diagonally from the top

Alternate Construction — Non-composite units of the same type listed above may be used provided allowable loading is calculated on the basis

The Unrestrained Assembly Rating is equal to the Unrestrained Beam Rating (See Item 6) for a max 3 Hr and is limited to the following units and

(c) 1-1/2 and 2 in. deep, 24 or 36 in. wide, 16 MSG or thicker fluted and 18/18 MSG or thicker cellular with clear spans not more than 9

(d) 3 in. deep, 36 in. wide, 18 MSG or thicker fluted and 24 in. wide, 20/18 MSG or thicker cellular with clear spans not more than 13 ft,

For assemblies utilizing 3-1/4 in, light weight concrete topping with a max Restrained Assembly Rating of 2 Hr, the Unrestrained Assembly Rating

4A. Steel Floor and Form Units\* — As an alternate to Item 4. Nom 8 or 9 in. deep composite, galv steel units. Min thickness 0.0375

inch (20 MSG). Side joints of adjacent units fully overlapping, fastened together by using 1-1/4 in. long self-drilling, self-tapping steel

(a) Welded Wire Fabric — 6 X 6 - Min wire thickness W2.9 X W2.9 slab reinforcement. As an alternate, max # 4 bars spaced 12-in. OC

(b) Rib Reinforcement —Min. #4 rebar. Min concrete cover below the steel reinforcement shall be 1-9/16 in. Reinforcement support

The flute areas above the beam/joist are to be: (1) filled with concrete, (2) filled with Spray-Applied Fire Resistive Material or (3) the beam/joist coated with Spray-Applied Fire Resistive Material installed as described in the design to thickness required when all cellular Steel Floor and Form

5. Joint Cover — (Use with fluted units optional — Not Shown) — 2 in. wide cloth adhesive tape applied following the contour of the

6. Spray-Applied Fire Resistive Materials\* — Applied by spraying with water to the final thicknesses shown below. When fluted steel

deck is used and the fire protection thickness selected is based on all fluted deck, the area between the steel deck and the top flange

cellular of blended units, the area between the steel deck and the top flange of the steel beam shall be plugged. Beam surfaces must

be clean and free of dirt, loose scale, and oil. Min average density of 13 pcf with min. individual density of 11 pcf for Types II, II HS, or

refer to Design Information Section. The thickness of the Spray-Applied Fire Resistive Materials on the Structural Members (Item 1, 1A,

Min Thkns Spray Applied Resistive Mtl, In

9/16.15/16\* 5/8. 1\* 3/8.5/8\* 7/16.11/16\* 2-1/4

\* This thickness applies when optional Item 12 or 13 are used over 3-1/4 in. light weight concrete topping.

\*\* This thickness applies when optional Item 12 or 13 are used over 3-1/4 in. light weight concrete topping.

1/4 in. on the bottom chord only.

Section, Sprayed Material.

ISOLATEK INTERNATIONAL — Type 280

on the Structural Members (Item 1 and 1C) shall be as follows:

Restrained Unrestrained

Assembly Beam W6x9

+ When bottom chords consist of 1 by 1 by 0.125 in. thick steel angles, the thickness of spray-applied fire resistive material shall be increased by

ISOLATEK INTERNATIONAL — Type D-C/F, HP, II or Type II HS. Investigated for exterior use. Type EBS or Type X adhesive/surface sealer optional.

6A. Spray-Applied Fire Resistive Materials\* — Alternate to Item 6. See table below for appropriate thicknesses. When fluted steel

deck is used and the fire protection thickness selected is based on all fluted deck, the area between the steel deck and the top flange

cellular or blended units, the area between the steel deck and the top flange of the steel beam shall be plugged. Prepared by mixing

W6x9

Rating When Deck When Deck When Deck

Hr Is All Fluted Is Blend or All Cellular Is All Fluted Is Blend or All Cellular

Min Thkns Applied Resistive Mtl, In

W8x28

5/16. 7/16\* 5/16. 7/16\*

1-1/16 1-5/16

I-1/16

13/16

13/16

with water and spray-applied in one or more coats to beam surfaces which must be clean and free of dirt, loose scale and oil. Min

average density of 17.5 pcf with min individual value of 17.0 pcf. For method of density determination, see Design Information

1/2. 5/8\* 1/2. 5/8\*

1-9/16 1-7/8

1-9/16 1-7/8

\* This thickness applies when optional Items 12, 13 are used over 3-1/4 in. light weight concrete topping.

1-3/16

1-3/16

6B. Spray-Applied Fire Resistive Materials\* — Alternate to Items 6 and 6A. Prepared by mixing with water. Spray-applied in one or

scale and oil. When fluted steel deck is used and the fire protection thickness selected is based on all fluted deck, the area between

the steel deck and the top flange of the steel beam shall be filled. When fluted steel deck is used and the steel beam is sprayed with

the thicknesses applicable to cellular or blended units, the area between the steel deck and the top flange of the steel beam shall be

Min average and min individual density of 15 pcf and 14 pcf respectively for Types 300, 300AC, 300 ES, 300 HS, 300 N, 3000, 3000ES, and SB. For

Types 400, 400 AC and 400 ES min average and min individual density of 22 pcf and 19 pcf respectively. Min avg density of 44 pcf with min ind

value of 40 pcf for Types M-II and TG. Min avg density of 47 pcf, with min individual value of 43 pcf for Type M-II/P. The thickness of the material

more coats to beam surfaces to a min final thickness as shown in the tables below. Beam surfaces must be clean and free of dirt. loose

of the steel beam shall be filled. When fluted steel deck is used and the steel beam is sprayed with the thicknesses applicable to

Item 1A Item 1B

DC/F. Min average and min individual densities of 22 pcf and 19 pcf, respectively, for type HP. For method of density determination,

of the steel beam shall be filled. When fluted steel deck is used and the steel beam is sprayed with the thicknesses applicable to

See Design No. D989 for a typical illustration of the components. Consult the deck manufacturer for comprehensive load tables and design

BAILEY METAL PRODUCTS LTD — Type COMSLAB™ 210 and COMSLAB™ 225, Steel End Closure Flashing

in both directions shall be used. When re-bars are used, the concrete slab thickness shall be increased a minimum 5/16 in.

screws driven through Shear-Bond Clips (not shown) at 13-3/4 in. OC. Steel end closures flashings (not shown) made of min 0.056 inch

(a) 1-1/2, 2 and 3 in. deep, 24 or 36 in. wide, 22 MSG fluted and 20/20 MSG cellular with clear spans not more than 9 ft, 6 in.

(b) 2 and 3 in. deep, 24 or 36 in. wide, 20 MSG fluted and 20/20 MSG cellular with clear spans not more than 10 ft, 0 in.

(c) 3 in. deep, 24 in. wide, 20 MSG fluted and 20/20 MSG cellular with clear spans not more than 13 ft, 2 in.

18 in. wide and Sec. 12 units. Unless specified otherwise for specific units types, adjacent units button-punched or welded together 36 in. OC

When a superimposed load of 250 PSF is desired the spacing of welds or button-punches shall not exceed 24 in. OC along side joints.

units ++ may be used for max 2 hr Restrained Assembly Rating. 36 in. wide Types 1.5 SB, 1.5 SBR; 24 or 36 in wide Types 2.0 SB, 3.0 SB, 36 in. wide

Min Thkns Spray Applied Resistive Mtl, In

When Deck When Deck Is Is All Is Blend or All Deck Is Blend or Cellular Cellular All Fluted All Cellular or Blend 5/16, 7/16\* | 5/16, 7/16\* | 9/16+ 5/16, 7/16\* 5/16, 7/16 5/16, 7/16\* 5/16, 7/16\* 11/16 1-1/16 11/16 13/16

\* This thickness applies when optional Item 12 or 13 are used over 3-1/4 in, light weight concrete topping. + When bottom chords consist of 1 in. by 1 in. by 0.125 in. thick steel angles, the thickness of spray-applied fire resistive material shall be

BERLIN CO LTD — Types 300, 300ES, 300N, SB, or 400; Type M-II, TG and M-II/P

GREENTECH ASIA PACIFIC SDN BDH — Types 300, 300ES, 300HS, or 400; Type M-II, or M-II/P

NEWKEM PRODUCTS CORP — Types 300, 300ES, 300N, 400, or SB; Type M-II, TG and M-II/P

GREENTECH THERMAL INSULATION PRODUCTS MFG CO L L C — Types 300, 300AC, 400, or 400AC; Type M-II, TG and M-II/P

ISOLATEK INTERNATIONAL — Types 300, 300AC 300ES, 300HS, 300N, SB, 400, 400AC, 400ES, 3000 or 3000ES; Type M-II, TG and M-II/P

6C. Intumescent Fire-resistive Materials \* — As an alternate to Items 6 through 6B. For use with fluted steel floor and form units only. Min. size W8x24 or W6x12 beams shall be primed with a phenolic modified alkyd primer, a metal alkyd primer, an acrylic primer or an epoxy primer at a nominal thickness of 2 mil. Coating spray or brush applied in accordance with the manufacturer's instructions at the min dry thickness as shown in the table below. The thickness shown below includes the primer thickness. Flutes above beam to be completely filled with minimum 6 pcf mineral wool insulation, or the top flange of the beam to be protected with the same

f coating as required	on the beam.			
Minimum Dry Thickness mils	Minimum Dry Thickness mm	Beam Size	Unrestrained Beam Rating Hr	Restrained Assembly Rating Hr
53	1.34	W8x24	1	2
95	2.41	W8x24	1-1/2	3
73	1.83	W6x12	1	2
123	3.10	W6x12	1-1/2	3

BERLIN CO LTD — Type WB 3. Investigated for Interior General Purpose. Type WB 4, Investigated for Interior General Purpose. Type WB4,

GREENTECH ASIA PACIFIC SDN BDH — Type WB 3. Investigated for Interior General Purpose. Type WB 4, Investigated for Interior General Purpose. Type WB4, Investigated for Exterior Use with top coat as described in Item 6E

GREENTECH THERMAL INSULATION PRODUCTS MFG CO L L C — Type WB 3. Investigated for Interior General Purpose. Type WB 4,

Investigated for Interior General Purpose. Type WB4, Investigated for Exterior Use with top coat as described in Item 6E

WB4. Investigated for Exterior Use with top coat as described in Item 6E

ISOLATEK INTERNATIONAL — Type SprayFilm-WB 3 and Type WB 3. Investigated for Interior General Purpose. Type SprayFilm-WB 4 and Type WB 4, Investigated for Interior General Purpose. Type SprayFilm-WB 4 and Type WB4, Investigated for Exterior Use with top coat as described in

NEWKEM PRODUCTS CORP — Type WB 3. Investigated for Interior General Purpose. Type WB 4, Investigated for Interior General Purpose. Type

6D. Intumescent Fire-resistive Materials \* — As an alternate to Items 6 through 6C. For use with normal weight concrete. Min. size W8x28 beams shall be primed with a phenolic modified alkyd primer a metal alkyd primer, an acrylic primer or an epoxy primer at a nominal thickness of 2 mil. Coating spray or brush applied in accordance with the manufacturer's instructions at the min dry thickness as shown in the table below. The thickness shown below includes the primer thickness. The top surface of the top flange where fluted

Minimum Dry Thickness mils	Minimum Dry Thickness mm	Steel Floor Units	Unrestrained Beam Rating Hr	Restrained Assembl Rating Hr
103	2.62	Fluted or Cellular	1-1/2	2
179	4.55	Cellular	1-1/2	3
341	8.67	Cellular	2	3

Investigated for Exterior Use with top coat as described in Item 6E

GREENTECH ASIA PACIFIC SDN BDH — Type WB 3. Investigated for Interior General Purpose. Type WB 4. Investigated for Interior General Purpose. Type WB 4, Investigated for Exterior Use with top coat as described in Item 6E

GREENTECH THERMAL INSULATION PRODUCTS MFG CO L L C — Type WB 3, Investigated for Interior General Purpose. Type WB 4, Investigated for Interior General Purpose. Type WB 4, Investigated for Exterior Use with top coat as described in Item 6E

WB 4, Investigated for Interior General Purpose. Type SprayFilm-WB 4 and Type WB 4, Investigated for Exterior Use with top coat as described in

ISOLATEK INTERNATIONAL — Type SprayFilm-WB 3 and Type WB 3. Investigated for Interior General Purpose. Type SprayFilm-WB 4 and Type

NEWKEM PRODUCTS CORP — Type WB 3. Investigated for Interior General Purpose. Type WB 4, Investigated for Interior General Purpose. Type

6E. Top Coat — Type SprayFilm — TOPSEAL and Type TOPSEAL required for Exterior Use, applied at a minimum dry thickness of 14

See Classification information in the Mastic and Intumescent Coating (CDWZ) category, Isolatek International, for mixing requirements. 6F. Intumescent Fire-resistive Materials \* — As an alternate to Items 6 through 6D. For use with normal weight or light weight

concrete and fluted steel floor and form units only. Min size W8x24 beams shall be primed with a phenolic modified alkyd primer at a thickness of 2 mils or a epoxy primer at a nominal thickness of 1 mil. Coating spray or brush applied in accordance with the manufacturer's instructions at the thicknesses shown below. The thickness includes the thickness of primer. The top surface of the top

flange where fluted units are used must be protected with the coating material at the same min dry thickness or filled with nominal 4 pcf mineral wool.

Minimum Dry Thickness mils	Minimum Dry Thickness mm	Beam Size	
35	0.88	W8x24	1
66	1.68	W8x24	1-

WB4, Investigated for Exterior Use with top coat as described in Item 6E

GREENTECH ASIA PACIFIC SDN BDH — Type WB-5. Investigated for Interior General Purpose

GREENTECH THERMAL INSULATION PRODUCTS MFG CO L L C — Type WB-5. Investigated for Interior General Purpose

ISOLATEK INTERNATIONAL — Type WB-5. Investigated for Interior General Purpose

NEWKEM PRODUCTS CORP — Type WB 5, Investigated for Interior Conditioned Space and Interior General Purpose. 6G. Sprayed Fiber Insulation\* — (Optional, Not Shown) — Spray applied fiber insulation applied over Spray-Applied Fire Resistive Material (Item 6) on both steel floor and form units (Item 4) and supports (Item 1). Sprayed fiber insulation may be over Spray-Applied

#### Fire Resistive Material (Item 6) according to the following tables Allowable Spray-Applied Fiber Insulation Thickness Over Beam Installed SFRM Thickness (in.) on

	13	15	17.5	22	22 (Type HP)	44	47
3/8	6-3/4	4	4- 11/16	5-7/8	8	8	8
7/16	6-1/2	3-3/4	4-3/8	5-1/2	8	8	8
1/2	6-1/4	3-1/2	4- 1/16	5-1/8	8	8	8
9/16	6- 1/16	3- 3/16	3-3/4	4- 11/16	8	8	8
5/8	5- 13/16	2- 15/16	3- 7/16	4- 5/16	8	8	8
11/16	5- 9/16	2- 11/16	3-1/8	3- 15/16	8	8	8
3/4	5- 5/16	2- 7/16	2- 13/16	3- 9/16	8	8	8
13/16	5-1/8	2-1/8	2-1/2	3-1/8	8	8	8
1	4- 7/16	1- 5/16	1- 9/16	1- 15/16	7-7/16	6-5/16	6- 11/16
1-1/16	4- 3/16	1- 1/16	1-1/4	1- 9/16	7-1/16	5-1/2	5-7/8
1-3/16	3- 11/16	9/16	5/8	13/16	6-5/16	3- 15/16	4-3/16

1-5/16	3-1/4	0	0	0	5-1/2	2-3/8	2-1/2
1-9/16	2- 5/16	0	0	0	3-15/16	0	0
1-5/8	2- 1/16	0	0	0	3-9/16	0	0

Allowable Spray-Applied Fiber Insulation Thickness Over Joist Installed SFRM Thickness (in.) on Joist

installed SFRIVI I nickness (in.) on Joist		SFRIVI Dens	ity (pci)		8				
	13	15	22	22 (Type HP)	44	47			
9/16	8	8	8	8	8	8			
13/16	8	8	8	8	8	8			
1	8	8	8	8	8	8			
1-1/8	7-7/8	7-1/2	8	8	8	8			
1-1/4	7-7/16	6-15/16	8	8	8	8			
1-3/8	6-15/16	6-7/16	8	8	8	8			
1-9/16	6-1/4	5-5/8	8	8	8	8			
1-3/4	5-9/16	4-13/16	7-1/16	8	8	8			
2-1/16	4-7/16	3-1/2	5-1/8	7-7/16	8	8			
2-1/4	3-11/16	2-11/16	3-15/16	6-5/16	7-7/8	8			
3-1/4	0	0	0	0	0	0			

INTERNATIONAL CELLULOSE CORP — Type K13, URE-K, or Sonospray FC

Installed SFRM

6H. Sprayed Fiber Insulation\* — (Optional, Not Shown) — Spray applied fiber insulation, Classified for Noncombustible Building Materials (BICW), having a maximum applied density of 3.5 pcf, applied over Spray-Applied Fire Resistive Material (Item 6) on both steel floor and form units (Item 4) and supports (Item 1). Sprayed fiber insulation may be over Spray-Applied Fire Resistive Material (Item 6) according to the following

**Allowable Spray-Applied Fiber Insulation Thickness Over Beam** 

Thickness (in.) on Beam							
	13	15	17.5	22	22 (Type HP)	44	47
5/16	5	5	5	5	5	5	5
3/8	5	5	5	5	5	5	5
7/16	5	5	5	5	5	5	5
1/2	5	5	5	5	5	5	5
9/16	5	5	5	5	5	5	5
5/8	5	5	5	5	5	5	5
11/16	5	5	5	5	5	5	5
3/4	5	4 13/16	5	5	5	5	5
13/16	5	4 9/16	5	5	5	5	5
15/16	5	4	4 11/16	5	5	5	5
1	4 7/8	3 3/4	4 3/8	5	5	5	5
1 1/16	4 5/8	3 1/2	4 1/16	5	5	5	5
1 1/8	4 7/16	3 3/16	3 3/4	4 11/16	5	5	5
1 3/16	4 3/16	2 15/16	3 7/16	4 5/16	5	5	5
1 5/16	3 11/16	2 7/16	2 13/16	3 9/16	5	5	5
1 7/16	3 1/4	1 7/8	2 3/16	2 3/4	5	5	5
1 9/16	2 13/16	1 5/16	1 9/16	1 15/16	4 11/16	3 15/16	4 3/16
1 5/8	2 9/16	1 1/16	0	1 9/16	4 5/16	3 1/8	3 3/8
1 3/4	2 1/16	9/16	0	13/16	3 9/16	1 9/16	1 11/16
1 7/8	1 5/8	0	0	0	2 3/4	0	0
2 1/4	1/4	0	0	0	3/8	0	0
2 5/16	0	0	0	0	0	0	0

#### Allowable Spray-Applied Fiber Insulation Thickness Over Joist

Installed SFRM Thickness (in.)		SFRM Density (pcf)						
on Joist	13	15	22	22 (Type HP)	44	47		
9/16	5	5	5	5	5	5		
13/16	5	5	5	5	5	5		
1	5	5	5	5	5	5		
1 1/8	5	4 13/16	5	5	5	5		
1 1/4	5	4 5/16	5	5	5	5		
1 3/8	5	3 3/4	5	5	5	5		
1 9/16	5	2 15/16	4 5/16	5	5	5		
1 3/4	5	2 1/8	3 1/8	5	5	5		
2 1/16	5	13/16	1 3/16	5	5	5		
2 1/4	5	0	0	5	5	5		
3 1/4	0	0	0	0	0	0		

#### THERMACOUSTICS IND — Type TC-417

7. Shear Connector Studs — (Optional) — Studs, 3/4 in. diam by 3 in. long, for 1-1/2 in. deep form units to 5-1/4 in. long for 3 in. deep form units, headed type or equivalent per AISC specifications. Welded to the top flange of the beam through the steel form

8. Lath Hanger — (Optional, Not Shown) For use in caged beams with Items 6, 6A or 6B Galv steel 6 SWG min diam spaced 27 in. O.

9. Clips — (Optional, Not Shown) For use in caged beams with Items 6, 6A or 6B No. 24 MSG spring steel pushed on to top and bottom flanges of beam spaced 6 in. O. C. max.

10. Metal Lath — (Optional, Not Shown) — For use in caged beams with Items 6, 6A or 6B 3/8 in. diamond mesh or rib lath, 3.4 lbs per sq yd expanded steel attached to beam with clips spaced 6 in. OC max; or tied to lath hangers with 18 SWG galv steel wire spaced

11. **Electrical Inserts\*** — (Not Shown) — Classified as "Outlet Boxes and Fittings Classified for Fire Resistance".

12. Mineral and Fiberboards\* — (Optional, Not Shown. Not for use with Item 4A) — Applied over concrete floor with no restriction on board thickness. When mineral and fiber boards are used, the unrestrained beam rating shall be increased by a minimum of 1/2 hr. See Mineral and Fiber Board (CERZ) category for names of manufacturers.

13. Foamed Plastic\* — (Optional, Not Shown. Not for use with Item 4A) — Consisting of polyisocyanurate or urethane roof insulations. Applied over concrete floor with no restrictions on thickness. When polyisocyanurate or urethane insulation is used, the unrestrained beam rating shall be increased by a minimum of 1/2 hr. See Foamed Plastic (CCVW) for list of manufacturers.

14. **Insulating Concrete** — (Optional, Not Shown) — Various types of insulating concrete prepared and applied as follows: A. Vermiculite Concrete - Blend 6 to 8 cu ft of Vermiculite Aggregate\* to 94 lb Portland cement and air entraining agent. Min thickness of 2 in. as measured to the top surface of the structural concrete or foamed plastic (Item 15) when it is used. See Vermiculite Aggregate (CJZZ) category for B. Cellular Concrete-Roof Topping Mixture\* - Concentrate mixed with water and Portland cement per manufacturer's specifications. Min.

thickness of 2-in. as measured to the top surface of the structural concrete or foamed plastic (Item 15 and 15A) when used. Cast dry density and 28-day min compressive strength of 190 psi as determined with ASTM C495-66. AERIX INDUSTRIES — Cast dry density of 37 (+ or -) 3.0 pcf

CELCORE INC — Type Celcore with cast dry density of 31 (+ or - 3.0) pcf or Type Celcore MF with cast dry density of 29 (+ or - 3.0) pcf

ELASTIZELL CORP OF AMERICA — Type II, with a cast dry density of 39 (+ or - 3.0) pcf

SIPLAST INC — Mix #1, Cast dry density of 32 (+ or -) 3 pcf SIPLAST INC — Mix #2, Cast dry density of 36 (+ or -) 3 pcf

> C. Cellular Concrete-Roof Topping Mixture\* - Foam concentrate mixed with water, Portland cement and UL Classified Vermiculite Aggregate per manufacture's application instructions. Cast dry density of 33 (+ or -) 3 pcf and 28 day compressive strength of min 250 psi as determined in

AERIX INDUSTRIES — Mix #3

ELASTIZELL CORP OF AMERICA — Type II. Mix #1 of cast dry density 39 (+ or -) 3.0 pcf, Mix #2 of cast dry density 40 (+ or -) 3.0 pcf, Mix #3 of

D. Perlite Concrete - 6 cu ft of Perlite Aggregate\* to 94 lb of Portland Cement and 1-1/2 pt air entraining agent. Min thickness 2 in. as measured to the top surface of structural concrete or foamed plastic (Item 15A) when it is used. See Perlite Aggregate (CFFX) in Fire Resistance Directory for names of Classified companies.

15. Foamed Plastic\* — (Optional, Not Shown) — For use only with vermiculite (Item 14A) or cellular (Item 14B) concretes-Rigid

polystyrene foamed plastic insulation having slots and/or holes sandwiched between vermiculite concrete slurry which is applied to the normal or light weight concrete surface and vermiculite concrete topping (Item 14A). See Foamed Plastic\* (BRYX) category in Building Materials Directory or Foamed Plastic\* (CCVW) Category in Fire Resistance Directory for list of 15A. Foamed Plastic\* — (Not Shown) — For use only with cellular or perlite concrete. Nominal 24 by 48 in. polystyrene foamed

plastic insulation boards having a density of 1.0 (+ or - 0.1) pcf, encapsulated within concrete topping. Each insulation board shall contain six nominal 3 in. diameter holes oriented in two rows of three holes each with the holes spaced 12 in. OC transversely and 16 in. OC longitudinally See Foamed Plastic\* (BRYX) category in Building Materials Directory or Foamed Plastic\* (CCYW) category in Fire Resistance Directory for list of Classified companies.

16. Roof Covering Materials\* — (Optional, Not Shown) — Consisting of materials compatible with insulations described herein which provide Class A, B or C coverings See Built-Up Roof Covering Materials in Building Materials Directory.

17. Insulated Concrete — (Optional, Not Shown) — various types of insulated concrete prepared and applied in the thickness A. Vermiculite Concrete — Mix consists of 6 cu ft of Vermiculite Aggregate\*, 94 lbs of Portland cement and 6 ox of air entraining agent. Thickness to be 2 in min from the top plane of steel roof deck. ELASTIZELL CORP OF AMERICA — Types MS16-U, MSV 200.

B. Perlite Concrete — Mix consists of 6.2 cu ft Perlite Aggregate\* to 94 lbs of Portland cement and 1-1/2 pt air entraining agent. Compressive strength 80 psi min. See Perlite Aggregate (CFFX) category for names of Classified companies.

18. Wall and Partition Facings and Accessories — (Optional, Not Shown) Sound barrier for use with Items 19, 20 or 21: Acoustic Sleeper Pads stapled or adhered to the underside of the subflooring panels spaced 24 in. OC. STC ARCHITECTURAL PRODUCTS L L C DBA STC SOUND CONTROL — Acoustic Sleeper

19. Structural Cement Fiber Units\* — (Optional, Not Shown) - (For use with item 18) - Min 3/4 in. thick tongue and groove noncombustible structural cement fiber board loosely laid over concrete. CORNERSTONE INNOVATIVE SPECIALTIES, LLC — Versaroc

ECTEK INTERNATIONAL INC — Armoroc Panel

UNITED STATES GYPSUM CO — USG Structural Panel

Service, Always look for the Mark on the product.

20. Building Units\* — (Optional, Not Shown) - (For use with item 18) - Panels loosely laid over concrete. DRAGONBOARD USA L L C — Type DragonBoard, DragonBoard Flooring

HUBER ENGINEERED WOODS L L C — Type 3/4 in. Shiplap Edge Exacor™ Board, 5/8 in. Tapered Edge Exacor™ Board, 1/2 in. Tapered Edge

21. Wood Structural Panels — (Optional, Not Shown) - (For use with Item 18) - Min 23/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor," loosely laid over concrete, as one layer or as two layers.

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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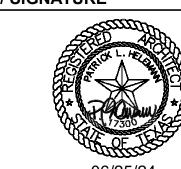
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ELEMENT ARCHITECTS, LLC. 1250 WOOD BRANCH PARK DR, SUITE 480 HOUSTON, TX 77079 (713) 874 0775 www.ElementArchitects.com

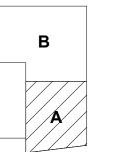
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DESCRIPTION CITY OF AUSTIN RESPONSE #1

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**KEY MAP** 



PROJECT STATUS

PROJECT NAME SUPER KIDS DENTAL

**ISSUE FOR PERMIT** 

PROJECT ADDRESS 6707 E RIVERSIDE DRIVE, UNIT 201

PROJECT NUMBER

06/25/24

AUSTIN, TX 78741

UL NO. D902





Design/System/Construction/Assembly Usage Disclaimer

Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and

BXUV.G041 | UL Product iQ

- use of UL Certified products, equipment, system, devices, and materials.
  Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product
  manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for
  each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials
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and alternate methods of construction.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design Criteria and Allowable Variances

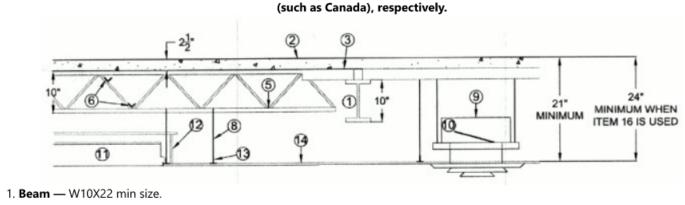
#### Design No. G041

November 21, 2022

Restrained Assembly Rating - 1-1/2 and 2 Hr. (See Item 13A)
Unrestrained Assembly Ratings - 1 and 2 Hr. (See Item 13A)
Unrestrained Beam Ratings - 1 and 2 Hr. (See Item 13A)
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

used — See Guide <u>BXUV</u> or <u>BXUV7</u>



2. **Normal Weight Concrete** — Carbonate or siliceous aggregate, 145 ± 3 pcf unit weight. 3000 psi min compressive strength.

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3. **Metal Lath** — 3/8 in. rib, 3.4 lb., per sq yd., expanded steel. Tied to each joist at every other rib and midway between joists at side lap with No. 18 SWG galy, steel wire.

3A. **Steel Floor or Form Units\*** — (Not shown) As an alternate to Item 3, Composite 1-1/2 in. deep, 30, 35 or 36 in. wide, galv steel units. Min gauge is 22 MSG. Welded to supports 12 in. O.C. Adjacent units button-punched, welded or screwed together 36 in. OC max along side joints. The concrete thickness shall be measured to the top plane of the steel deck.

INTSEL STEEL EAST LLC — 36 in. wide Type 1.5" COMPOSITE/FLOOR.

VULCRAFT, DIV OF NUCOR CORP — Types 1.5VL, 1.5VLI, 1.5PLVLI, 1.5SB, 1.5SBR, 1.5SBN, 1.5SBN

4. Welded Wire Fabric — (Not Shown) Min. 6 x 6 in., No 8/8 SWG, or as required by the latest ACI code.

5. **Steel Joists** — Type 10K1 min size, spaced 24 in. O.C. welded to end supports.

6. **Bridging** — Angle iron with 1-1/4 in. legs by 1/8" thick welded to top and bottom chord of each joist as per joist manufacturer's instructions.

7. **Cold Rolled Channels** — (Not Shown) Min 1/8 in. thick cold-rolled steel channels, 1-1/2 in. deep with 1/2 in. flanges. Two channels tied together back to back with 18 SWG galv steel wire placed on and wire-tied to top of joist lower chord with min 16 SWG galv steel wire, spaced as required to provide attachment provision for ceiling hanger wires between steel joists.

8. **Hanger Wire** — No. 12 SWG galv steel wire, twist-tied to bottom chord of joists or cold-rolled steel channels. Hanger wires spaced 48 in. OC along main runners. Hanger wires also to occur at all four corners of light fixtures, at midspan of cross tees adjacent to light fixtures and air duct outlets, and adjacent to each main runner splice. Hanger wire twist tied with minimum 3 twists.

9. **Air Duct** — No. 20 gauge galv. steel. Total area of duct opening not to exceed 54 sq in. per each 100 sq ft. of ceiling area. Area of individual duct opening not to exceed 113 sq in. Max dimension of opening 12 in. Duct support spaced not more than 48 in. O.C. Duct supported by a trapeze comprising of 1/8 in. dia. steel wire rope and Unistrut channel. Wire rope suspended from the bottom chord of the joist by a beam clip or looped around the bottom chord of the Joist or the Cold Rolled Channels and tied together by a wire rope clamp. The wire rope at the bottom looped through the web openings of a 22 in. long, 1-5/8 in. by 1-5/8 in. Unistrut channel, and the wire rope tied together with a wire rope clamp. Duct placed on the Unistrut channel and secured to Unistrut channel with No. 10 by 3/4 in. long self-drilling hex head steel screws. Duct opening protected with two layers of 1-1/4 in. thick mineral wool insulation placed around the opening at the bottom of the duct and on the top over the duct opening. Mineral wool insulation to cover the Steel Member Framing cavity around the duct opening.

10. **Damper** — No. 14 MSG galv steel. Protected on both surfaces with 1/16 in. thick ceramic fiber paper and held open with a 160° F fusible link (Bearing the UL Listing Mark). Damper to overlap duct outlet by min 1 in.

11. **Fixtures, Recessed Light** — For Use with Steel Framing Members, (Bearing the UL Listing Mark). Recessed light fixture with NEMA Type F steel housing, 1 by 2 ft., 1 by 4 ft., 2 by 2 ft. or 2 by 4 ft. size. Fixture provided by fixture support steel tee frame, frame to be suspended at the four corners by hanger wires. See Item 8. Size of steel framing member module to be nominally 2 in. wider and longer than the nominal fixture size. Fixtures spaced so their area does not exceed 15.3 sq ft. per each 100 sq ft. of ceiling area. Wired in conformance with the National Electrical Code.

12. Fixture Protection — Gypsum Board\* — Gypsum board shall be as per Item 14 when Batts and Blankets are not used, and as per Item 14A when Batts and Blankets Item 16 is used. Cut to form a five sided enclosure, rectangular in cross-section, at least 1-1/2 in. higher than the NEMA Type F light fixture housing (Item 11). The fixture protection enclosure is to be installed in the grid module prior to installation of the NEMA Type F light fixture. The fixture protection side and end pieces rest on the web of the cross tees and are wire tied together at the corners with 16 gauge galvanized wire ties. The adjacent pieces at each corner to be tied together at two equally spaced locations. The top piece rests on the top edges of the side and end pieces without mechanical attachment. The dimensions of the fixture protection pieces for the various sizes of NEMA Type F fixtures are tabulated below:

NEMA Type F				
Fixture Size	1 by 2 ft.	1 by 4 ft.	2 by 2 ft.	2 by 4 ft.

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Top Piece <sup>1</sup> , in.	16 x 28	16 x 52	28 x 28	28 x 52				
Side Piece, in.	7 x 28	7 x 52	7 x 28	7 x 28				
End Piece, in.	7 x 12-1/4	7 x 12-1/4	7 x 24-1/4	7 x 24-1/4				
<sup>1</sup> Top piece may be formed by narrow width pieces provided the joints between the narrow width piece are covered by a 6 in. wide piece.								

13. **Steel Framing Members\*** — Main runners, cross tees, and wall angles as listed below: a. **Main Runners** — Nom 12 ft. long, 1-1/2 in. wide face, spaced 4 ft. OC.

b. **Cross Tees** — Nom 4 ft. long, installed perpendicular to the main runners, spaced 24 in. OC. Additional cross tees used at 6 in. from each side of butted gypsum board end joints. When **Batts and Blankets\*** (Item 16) are used, cross tees spaced 16 in. OC. with additional cross tees 8 in. away from each side of butted gypsum board end joints. The cross tees shall be riveted with 1/8 in. dia. rivets to the wall angle and to the main tee where the cross tee does not align with slot in the main tee. When NEMA Type F (Item 11) light fixtures are used, nom 4 ft. long cross tees, installed perpendicular to main runners shall frame the two opposite sides of the light fixture. Additional cross tees shall be used to frame the other two sides of the light fixture.

c. **Wall Angle** — Galv steel angle with 1-1/2 in. legs attached to walls at perimeter of ceiling with fasteners at 16 in. OC. to support steel framing member ends and for screw-attachment of the gypsum board. **CERTAINTEED CORP** — Types DWS12-13-20, DWS4.16-13-20, DWS4-13-20, DWS2-13-20, DWS2.16-13-20 and DWA1.5-1

CERTAINTEED CORP — Types EZDWS12-13-18, EZDWS4.16-13-18, EZDWS4-13-18, EZDWS2-13-18, EZDWS2.16-13-18 and DWA1.5-1.5

13A. **Alternate Steel Framing Members\*** — (Not Shown) — When Ratings are limited to 1 Hr Unrestrained Assembly Rating and Unrestrained Beam Rating and 1-1/2 Hr Restrained Assembly Rating. When batts and Blankets Item 16 is not used and as an alternate to Items 13a. through 13c - Main runners nom 12 ft long, spaced 72 in. OC. Cross tees, nom 6 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional 6 ft long cross tees required at each gypsum board end joint with butted gypsum board end joints centered between cross tees spaced 8 in. OC. When NEMA Type F (Item 11A) light fixtures are used, nom 6 ft long cross tees installed perpendicular to main runners and spaced nom 14 in., 26 in. or 50 in. OC, dependent upon fixture size and orientation. Nominal 14 in., 26 in. and/or 50 in. cross tees used in combination with the 6 ft long cross tees to create modules to accommodate nom 1 by 2 ft, 1 by 4 ft, 2 by 2 ft and 2 by 4 ft NEMA Type F fixtures. Additional lengths of cross tee to be installed between the 6 ft long cross tees at each end of each nominal 14 in., 26 in. or 50 in. long cross tee forming a light fixture module. Ends of these additional lengths of cross tee are to engage cross tee slots at end of fixture and are to be riveted to nom 6 ft long cross tee on each side of 1 by 4 ft or 2 by 4 ft light fixture which is installed with its long dimension parallel with the main runners. Ends of these additional short lengths of cross tee are to engage rout of main runner at one end and are to be riveted to nom 50 in. long cross tee at opposite end. The main runners and cross tees may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation.

CERTAINTEED CORP — Types DWS12-13-20, DWS6-13-20, DWS4.16-13-20, DWS4-13-20, DWS2-13-20, DWS2.16-13-20 and DWA1.5-1

14. **Gypsum Board\*** — To be used with Item 13 when **Batts and Blankets\*** (item 16) are not used, 1/2 in. thick, 4 ft. wide by 10 ft. long with the long dimension parallel to the main runners; sheets fastened to cross tees with screws spaced 8 in. OC adjacent to end joints with additional screws located 1-1/2 in and 4 in. from the sides. Screws spaced 12 in. OC along each cross tee in the field with the first and last screw spaced max. 6 in. from the side of the Gypsum Board. End joints to be staggered 4 ft. and to occur over cross tees. Additional cross tees to be located 6 in. from and on each side of the end joints. Gypsum board sheets screw attached to leg of wall angle with drywall screws spaced 12 in. OC. Joints to be covered with joint tape and joint compound. **CERTAINTEED GYPSUM INC** — Type C

14A. **Gypsum Board\*** — To be used with Item 13 when **Batts and Blankets\*** (Item 16) is used - 5/8 in. thick, 4 ft. wide by 10 ft. long with the long dimension parallel to the main runners, sheets fastened to cross tees with screws spaced 8 in. OC adjacent to end joints, 8 in. OC along each cross tee in the field; at the side and end joints screw shall be located 1-1/2 in. from the board edges. End joints to be staggered 4 ft. and to occur over cross tees. Additional cross tees to be located 6 in. from and on each side of the end joints. Joints to be covered with joint tape and joint compound **CERTAINTEED GYPSUM INC** — Type C

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14B. **Gypsum Board\*** — When alternate **Steel Framing Members** Item 13A is used and when Batts and Blankets Item 16 is not used, 1/2 in. thick, 4 ft. wide by 10 ft. long gypsum board sheets installed with long dimension (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners with a minimum of 50 percent of side joints shall occur beneath the Main Tees. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip with hold down clips to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in. drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. Joints to be covered with paper tape and joint compound.

CERTAINTEED GYPSUM INC — Type C

15. **Drywall Screws** — No. 6 Type S, bugle head, self-drilling, self-tapping steel screws. Screw length shall be 1-1/4 in. long when 1/2 in. thick Gypsum Board is used and 1-7/8 in. long when 5/8 in thick gypsum wall is used. Heads to be slightly indented in face of wallboard and covered with joint compound.

16. **Batts and Blankets\*** — (Optional, Not Shown) - For use with **Gypsum Board\*** (Item 14A) - 3-1/2 inch thick min. density 0.9 lb/ft<sup>3</sup> unfaced fiberglass batt insulation bearing the UL Classification Marking for Surface Burning Characteristics, having a flame spread value of 25 or less and a smoke spread value of 50 or less. Insulation fitted in the concealed space, draped over steel framing members/gypsum board ceiling membrane and light fixture protection.

17. **Discrete Products Installed in Air-handling Spaces\*** — Automatic Balancing Valve/Damper (Not Shown - Optional) — For use with item 10. Valve/Damper to be provided with ducted installation with steel duct per damper manufacturer's instructions. Automatic Balancing Valve/Damper shall be installed within duct such that it is not directly above the ceiling radiation damper.

METAL INDUSTRIES INC — Model ABV-4, ABV-5, ABV-6

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Last Updated on 2022-11-21

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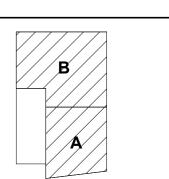
# DESCRIPTION DATE

1 CITY OF AUSTIN RESPONSE #1 06/20/24

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KEY MAP



PROJECT NAME
SUPER KIDS DENTAL

PROJECT STATUS

PROJECT ADDRESS

6707 E RIVERSIDE DRIVE, UNIT 201
AUSTIN, TX 78741

PROJECT NUMBER 24017

06/25/24

UL NO. G041



XHEZ.F-A-2054 | UL Product iQ

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   Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for
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XHEZ - Through-penetration Firestop Systems

#### See General Information for Through-penetration Firestop Systems

#### System No. F-A-2054

#### January 21, 2020

.........

#### F Rating — 3 Hr T Ratings — 0 and 3 Hr (See Item 3)

L Rating (Without Movement) At Ambient — Less Than 1 CFM/sq ft (See Item 3 and

#### L Rating (Without Movement) At 400 F — Less Than 1 CFM/sq ft (See Item 3 and

W Rating (Without Movement) — Class 1 (See Items 3, 4 and 4A)

M Rating (Movement) — See Table 2

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1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete

1A. **Floor Assembly - (Optional - Not Shown)** — The fire rated unprotected concrete and steel floor assembly shall be constructed of the materials and in the manner specified in the individual D900 Series designs in the UL Fire Resistance

Directory and as summarized below:

A. **Concrete** — Min 4-1/2 in (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³)

B. **Steel Floor and Form Units\*** — Composite or non-composite max 3 in. (76 mm) deep galv steel fluted units as specified in the individual Floor-Ceiling Design.

2. **Firestop Device\*** — Cast in place firestop device permanently embedded during concrete placement or grouted in concrete assembly in accordance with accompanying installation instructions. The devices may extend a max 2 in. (51 mm) above the

top surface of the concrete.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 680-75/2.5"N, CP 680-110/4"N, CP 680-160/6"N, CP 680-P 2", CP 680-P 3", CP 680-P 4", CP 680-P 6", CP 680-PX 2", CP 680-PX 3"

3. **Through Penetrants** — One nonmetallic pipe or conduit to be installed within the firestop system. Pipe or conduit to be rigidly supported on both sides of floor assembly. **For W Rating with Water Barrier Module, pipe shall be installed from bottom of device.** The following types and sizes of nonmetallic pipes or conduits may be used:

A. **Polyvinyl Chloride (PVC) Pipe** — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Pipe-Nom 6 in. (152 mm) diam (or smaller) SDR11 or SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

C. **Rigid Nonmetallic Conduit+** — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).

D. Cross Linked Polyethylene (PEX) Tubing — Nom 4 in. (102 mm) diam (or smaller) SDR 9 PEX tubing for use in

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closed (process or supply) piping systems.

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The firestop devices and nonmetallic penetrants shall be sized as follows in Table 1 below:

Table 1

Nom Pipe Diameter ++ Firestop Device 1/2 in. to 2 in. (19 mm to 51 mm) CP 680-75/2.5"N CP 680-P 2" CP 680-PX 2" 3 in. (76 mm) CP 680-110/4"N 0 and 3+ CP 680-P 3", CP 680-PX 3", CP 680-P 4" 4 in. (102 mm) CP 680-110/4"N CP 680-P 4" 6 in. (152 mm) CP 680-160/6"N CP 680-P 6"

+3 hr T Rating applies when CP 680-P(X) 3" and CP 680-P 4" devices are used. 3 hr T Rating also applied when CP 680-110/4"N device is used provided that min 4 in. (102 mm) thickness of nom 4 pcf (64 kg.m<sup>3</sup>) mineral wool batt insulation tightly packed within annulus between pipe and wall of CP 680-110/4"N device.

++ L Rating applies only to CP 680-P(X) devices and only when the nom diam of pipe equals size of device (2 in. diam pipe in 2" device etc.) L Rating does not apply to CP 680N devices.

+++ T Rating is 0 hr for firestop systems with M Rating (Movement)

4. Firestop Device — Top seal plug for use with CP 680-P(X) 2" device installed in accordance with the manufacturer's instructions. The Top Seal Plug is optional for nom 1-1/2 in. (38 mm) pipes and conduits. Top Seal Plugs are required for all pipes and conduits less than nom 1-1/2 in. (38 mm). W Rating applies only to the IPS Top Seal Plug and nom 2 in. diam penetrants and CPS Top Seal Plug for nom 1/2 to 2 in. (13 to 51 mm) diam penetrants.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — IPS and CPS Top Seal Plugs

4A. Firestop Device\* - Water Barrier Module — (Optional, Not Shown) - Alternate to Top Seal Plug (Item 4). Applies to nom 2", 3", 4" and 6" water barrier modules used in combination with the CP 680-P(X) 2", CP 680-P(X) 3", CP 680-P 4" and CP 680-P 6" devices, respectively, and supplied by device manufacturer. Module is threaded onto top of device. W Rating applies only when water barrier module is used and nom diam of penetrant equals size of device.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — Water Barrier Module

The M Rating for the firestop system is dependent on the variables as noted in Table 2 below.

#### Table 2

Movement Direction	Penetrant Item	Nominal Penetrant Diameter	Device Size	Movement	Sealant Depth	L Rating	W Rating
Υ	3A	2 in.	2 in.	100%**	N/A	N/A	N/A
Z	3A	2 in.	2 in.	3.21 in.	N/A	N/A	N/A

\*\* Percentage movement based on the minimum distance between penetrant OD and device ID.

#### 6/12/24, 3:57 PM

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada),

+Bearing the UL Listing Mark

<u>Last Updated</u> on 2020-01-21 Last Updated on 2020-01-21

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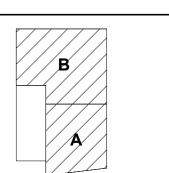
# DESCRIPTION DATE

1 CITY OF AUSTIN RESPONSE #1 06/20/24

SEAL / SIGNATURE



KEY MAP



PROJECT NAME
SUPER KIDS DENTAL

PROJECT STATUS

PROJECT ADDRESS

6707 E RIVERSIDE DRIVE, UNIT 201
AUSTIN, TX 78741

PROJECT NUMBER
24017

DATE
06/25/24

THROUGH-PENETRATION FIRESTOP SYSTEM



#### UL Product **iQ**®

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 Authorities Having Jurisdiction should be consulted before construction. • Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for

compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field. • When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for

each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.

Only products which bear UL's Mark are considered Certified.

XHEZ - Through-penetration Firestop Systems

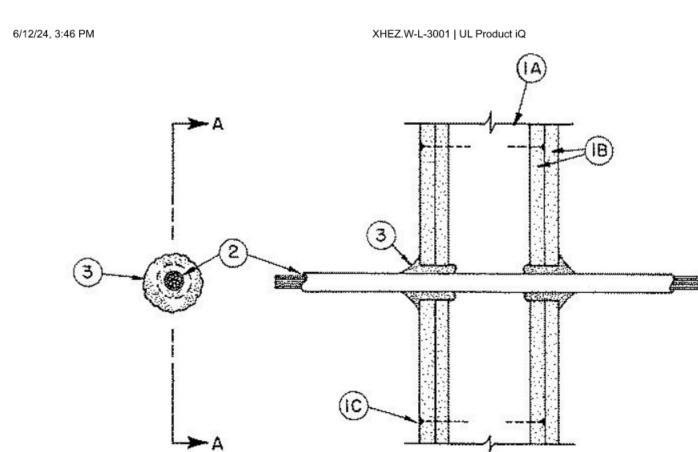
See General Information for Through-penetration Firestop Systems

System No. W-L-3001

September 07, 2004 F Ratings — 1 and 2 Hr (See Item 1)

T Ratings — 3/4, 1, 1-1/2 and 2 Hr (See Item 2) L Rating At Ambient — 15 CFM/sq ft (See Item 3)

L Rating At 400 F — less than 1 CFM/sq ft (See Item 3)



#### SECTION A-A

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC with nom 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-5/8 in. wide by 1-3/8 in. deep channels spaced max 24 in OC.

B. Gypsum Board\* — Nom 1/2 or 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers and sheet orientation shall be as specified in the individual Wall or Partition Design. Diam of circular through opening to be 3/8 in. to 5/8 in. larger than outside diam of cable or cable bundle.

C. Fasteners — When wood stud framing is employed gypsum wallboard layers attached to studs with cement coated nails as specified in the individual Wall or Partition Design. When steel channel stud framing is employed, gypsum wallboard attached to studs with Type S self-drilling, self-tapping bugle-head steel screws as specified in the individual Wall or Partition Design. The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. Cables — Individual cable or max 1 in. diam cable bundle installed in through opening with an annular space of min 0 in. (point contact) to max 3/4 in. Cable to be rigidly supported on both sides of wall assembly. The following types and sizes of cables may be used:

A. Max 150 pair No. 24 AWG copper conductor telephone cable with polyvinyl chloride (PVC) insulation and jacket materials. When max 25 pair telephone cable is used, T Rating is 2 hr. When 50 to 150 pair telephone cable is used in 1 hr fire rated wall, T Rating is 3/4 hr. When 50 to 150 pair telephone cable is used in 2 hr fire rated wall, T Rating is 1 hr.

XHEZ.W-L-3001 | UL Product iQ

C. Multiple fiber optical communication cable jacketed with PVC and having a max outside diam of 5/8 in. When fiber optic cable is used, max T Rating is 2 hr.

D. Max 12 AWG multiconductor (max seven conductors) power/control cable with cross-linked polyethylene (XLPE) insulation and XLPE or PVC jacket materials. When multiconductor power/control cable is used, max T Rating is 2

E. Max four conductor with ground No. 2 AWG (or smaller) aluminum SER cables with polyvinyl chloride insulation amd jacket materials.

3. Fill, Void or Cavity Materials\* — Caulk, Sealant or Putty — Caulk or putty fill material installed to completely fill annular space between cable and gypsum wallboard on both sides of wall and with a min 1/4 in. diam bead of caulk or putty applied to perimeter of cable(s) at its egress from each side of the wall. 3M COMPANY — MP+ putty, CP 25WB+ caulk or FB-3000 WT sealant. (Note: L Ratings apply only when Type CP 25WB+ caulk or FB-

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada),

<u>Last Updated</u> on 2004-09-07

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**PROJECT TEAM** 

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SUPER KIDS DENTAL 2410 E RIVERSIDE DRIVE, SUITE 12-H

AUSTIN, TX 78741 www.superkidsaustin.com ARCHITECT
ELEMENT ARCHITECTS, LLC.

1250 WOOD BRANCH PARK DR,

www.ElementArchitects.com MEP K.O. DESIGN 1327 W MAIN STREET, SUITE 7

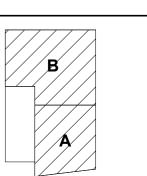
DESCRIPTION

CITY OF AUSTIN RESPONSE #1

**SEAL / SIGNATURE** 



**KEY MAP** 



PROJECT STATUS **ISSUE FOR PERMIT** 

PROJECT NAME SUPER KIDS DENTAL

PROJECT ADDRESS

6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741

PROJECT NUMBER

06/25/24

THROUGH-WALL PENETRATION



https://iq.ulprospector.com/en/profile?e=177233

3000 WT sealant is used.)

UL Product **iQ**®



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- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and
- use of UL Certified products, equipment, system, devices, and materials. Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance
- encountered in the field. • When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for
- and alternate methods of construction.

Only products which bear UL's Mark are considered Certified.

XHEZ - Through-penetration Firestop Systems

each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials

XHEZ7 - Through-penetration Firestop Systems Certified for Canada See General Information for Through-penetration Firestop Systems

See General Information for Through-penetration Firestop Systems Certified for Canada

ANSI/UL1479 (ASTM E814)

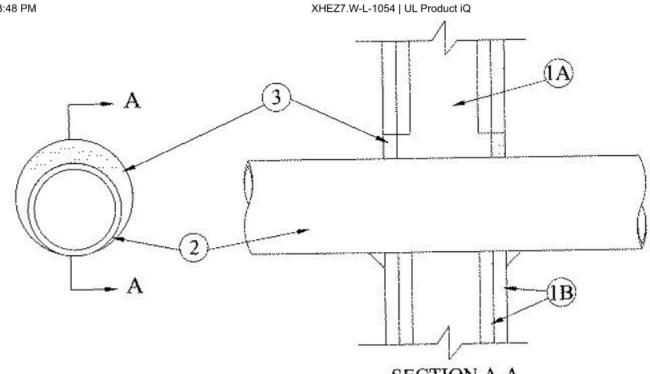
#### System No. W-L-1054

January 21, 2020

CAN/ULC S115

F Ratings —1 and 2 Hr (See Items 1 and 3)	F Ratings — 1 and 2 Hr (See Items 1 and 3)
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating (Without Movement) at Ambient — Less Than 1 CFM/sq ft	FH Ratings —1 and 2 Hr (See Items 1 and 3)
L Rating (Without Movement) at 400°F — Less Than 1 CFM/sq ft	FTH Rating — 0 Hr
M Rating (Movement) — See Table 1	FTH Rating — 0 Hr
	L Rating at Ambient — Less Than 5.1 L/s/m <sup>2</sup>
	L Rating at 204°C — Less Than 5.1 L/s/m <sup>2</sup>

6/12/24, 3:48 PM



1. Wall Assembly — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. For M Rating, steel studs to be min 3-5/8 in. (92 mm) wide. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 to 6 in. (102 to 152 mm) wider and 4 to 6 in. (102 to 152 mm) higher than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. (51 to 76 mm) clearance is present between the penetrating item and the framing on all four sides.

B. Gypsum Board\* — 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 32-1/4 in. (819 mm) for steel stud walls. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls.

The F and FH Ratings of the firestop system are equal to the fire rating of the wall assembly. The M Rating is applicable only to 1 hr rated walls.

2. Through-Penetrants — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. to max 2-1/4 in. (57 mm). Pipe may be installed with continuous point contact. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

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XHEZ7.W-L-1054 | UL Product iQ

A. Steel Pipe — Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe — Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.

C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or 6 in. (152 mm) . diam steel

D. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.

E. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) regular (or heavier) copper pipe.

3. Fill, Void or Cavity Material\* — Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point or continuous contact locations between pipe and wall, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the pipe wall interface on both surfaces of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant

The M Rating for the firestop system is dependent on the variables as noted in the Table 1 below.

Movement Direction	Penetrant Item	Nominal Penetrant Diameter	Annular Space	Movement	Sealant Depth	F Rating	L Rating with Moveme
Υ	2A, 2C*	2 in.	Max 2-1/4 in.	5%	5/8 in.	1 hr	N/A
Z	2A, 2C*	2 in.	2-1/4 in.	0.25 in.	5/8 in.	1 hr	N/A

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2020-01-21

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**PROJECT TEAM** 

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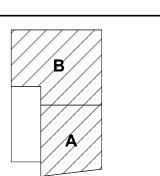
MEP K.O. DESIGN 1327 W MAIN STREET, SUITE 7 TOMBALL, TX 77375 (832) 643 0368

DESCRIPTION CITY OF AUSTIN RESPONSE #1

**SEAL / SIGNATURE** 



**KEY MAP** 



PROJECT STATUS

ISSUE FOR PERMIT **PROJECT NAME** 

SUPER KIDS DENTAL

PROJECT ADDRESS 6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741

**PROJECT NUMBER** 

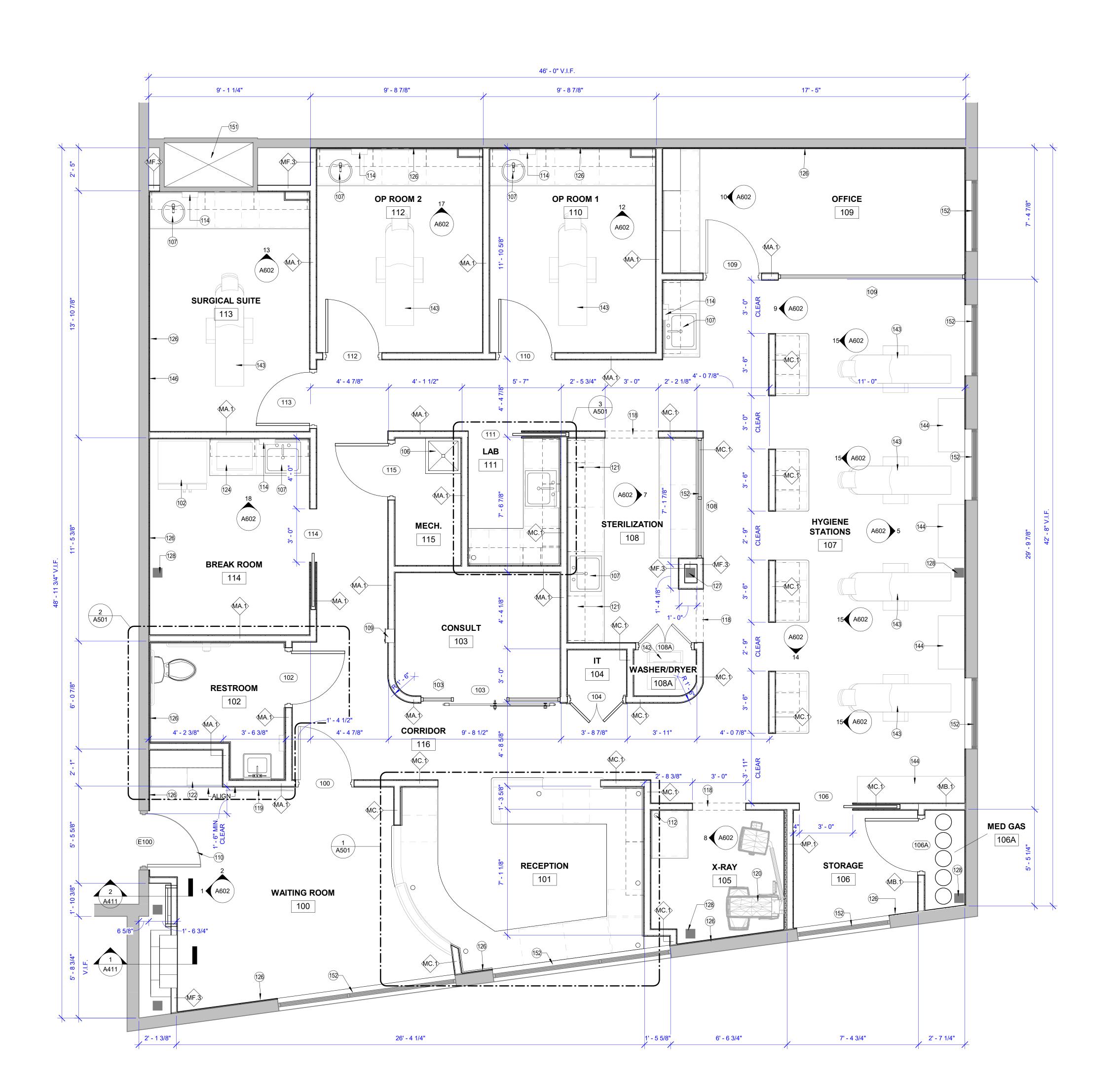
24017

DATE 06/25/24

> THROUGH-WALL PENETRATION METAL CONDUIT



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#### FLOOR PLAN GENERAL NOTES

1. FIELD VERIFY EXISTING BUILDING DIMENSIONS PRIOR TO CONSTRUCTION. IF DIMENSION DIFFERS, NOTIFY THE ARCHITECT PRIOR TO INSTALLATION.

2. DO NOT SCALE DRAWING IF DIMENSIONS ARE IN QUESTION. OBTAIN CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING THE WORK.

3. THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO FAMILIARIZE THEMSELVES WITH THE SCOPE OF WORK AND TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO THE BIDDING. ANY UNCLEAR ITEMS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING PRIOR TO SUBMITTING THE PROPOSAL.

4. THE ARCHITECT AND ARCHITECT'S CONSULTANTS SHALL NOT BE HELD RESPONSIBLE FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL, OR DISPOSAL OF, OR EXPOSURE OF PERSONS TO HAZARDOUS MATERIALS IN ANY FORM AT THE PROJECT SITE, INCLUDING, BUT NOT LIMITED TO ASBESTOS PRODUCT, POLYCHLORINATED BIPHENYL (PLB) OR OTHER SUBSTANCES.

5. THE ARCHITECT AND ARCHITECT'S CONSULTANTS SHALL NOT BE HELD RESPONSIBLE FOR DEMOLITION OR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTIONS WITH THE WORK PERFORMED BY THE CONTRACTOR. THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT HIS WORK IN ACCORDANCE WITH THE SCOPE OF WORK AS DEFINED WITHIN THE CONSTRUCTION DOCUMENTS.

#### 6. PARTITIONS:

A. DO NOT SCALE DRAWINGS, DIMENSIONS GOVERNING. DIMENSIONS ARE TO THE FACE OF THE STUD, EXCEPT FOR INTERIOR ELEVATIONS, WHICH IS FROM FINISH FACE TO FINISH FACE.

B. PARTITIONS THAT ALIGN WITH EXISTING BUILDING PARTITIONS SHALL ALIGN WITH THE FINISHED FACE OF NEW GYPSUM LAYER.

C. GYPSUM BOARD ABOVE CEILING TO BE TAPED AND FLOATED ONLY.

D. INSTALL 5/8" WATER RESISTANT GYPSUM BOARD AT ALL PLUMBING CHASES AND WET AREAS.

E. REFER TO SHEET A811 FOR PARTITION TYPE INFORMATION.

F. INTERIOR PARTITIONS SHALL BE TYPE MB.1 UNLESS NOTED OTHERWISE. REFER TO SHEET A811 FOR PARTITION TYPES.

7. LOCATE CONTROL JOINTS IN GYPSUM BOARD PARTITIONS AS FOLLOWS

A. PARTITIONS OR FURRINGS EXCEEDING 30'-0" SPANS HORIZONTAL OR VERTICAL

B. WHERE A PARTITION ABUTS A STRUCTURAL ELEMENT OR DISSIMILAR WALL

C. AT CHANGES WITHIN PLANE OR PARTITION

D. AT EXPANSION JOINTS

E. AT BOTH JAMS OF INTERIOR AND EXTERIOR DOOR FRAMES AND WINDOW FRAMES, ABOVE AND BELOW FOR FULL HEIGHT OF WALL

8. DRAWINGS NOTED AS "N.T.S." OR "NTS" ARE NOT TO SCALE.

9. DIMENSIONS NOTED AS "FIELD VERIFY" OR "V.I.F." OR "VIF" SHALL BE MEASURED AND CONFIRMED AT THE PROJECT SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCH. BEFORE INCORPORATING INTO THE WORK.

10. DIMENSIONS NOTED AS "CLEAR" OR "CLEAR INSIDE" REQUIRE SPECIFIC COORDINATION AMONG DISCIPLINES AND/ OR MANUFACTURERS.

11. TYPICAL INTERIOR DOOR ROUGH OPENING TO BEGIN 6-INCHES FROM CORNERS, U.N.O.

12. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR BRACING AND BLOCKING OF WALLS RECEIVING MILLWORK, SHELVING, TOILET ACCESSORIES, EQUIPMENT, ETC. ALL WOOD BLOCKING, GROUNDS, ROUGH BUCKS, AND MISCELLANEOUS BLOCKING IS TO BE FIRE-RETARDANT TREATED.

13. THE GENERAL CONTRACTOR IS TO NOTIFY ARCHITECT IF FLOOR PENETRATIONS CONFLICT WITH STRUCTURAL ELEMENTS, DUCTWORK, ETC., PRIOR TO PROCEEDING WITH WORK.

14. THE GENERAL CONTRACTOR SHALL CONFIRM ALL OWNER FURNISHED, OWNER INSTALLED (O.F.O.I.) AND OWNER FURNISHED, CONTRACTOR INSTALLED (O.F.C.I.) ITEMS WITH THE ARCHITECT AND THE OWNER PRIOR TO EXECUTION OF CONTRACT. TO CONFIRM ALL DIMENSIONAL, ARCHITECTURAL, AND MEP REQUIREMENTS AS CONFIGURED IN THESE DOCUMENTS.

15. FOR TYPICAL MOUNTING HEIGHTS REFER TO SHEETS G101 & G102.

16. FOR ROOM FINISHES REFER TO FINISH SCHEDULE & FINISH PLANS.

17. CLOSE ALL JOINTS BETWEEN PLUMBING FIXTURES, ACCESSORIES & DISSIMILAR MATERIALS W/ SEALANT (I.E. SINKS & ACCESSORIES TO WALL).

18. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS. REFER TO FINISH SCHEDULE FOR FURTHER INFORMATION

19. ALL FLOOR SLOPES TO FLOOR DRAINS SHALL NOT EXCEED 1:48

#### KEYNOTE SCHEDULE

KEY VALUE	KEYNOTE TEXT
102	REFRIGERATOR (O.F.C.I.)
106	MOP SINK (RE:PLUMBING DWGS.)
107	SINGLE BOWL STAINLESS STEEL SINK, (RE: PLUMBING DWGS.)
109	FIRE EXTINGUISHER CABINET (F.E.C.), STEEL, SEMI-RECESSED 2-1/2", LARSEN'S MODEL NO. 2409-6R. FIRE EXTINGUISHER, LARSEN'S MODEL NO. MP5, MOUNT 27" AFF
110	EXISTING 3'-0" WIDE DOOR AND FRAME TO REMAIN
112	3" DIAMETER GROMMETS W/ PLATE COVER, BLACK COLOR FINISH
114	SURFACE MOUNTED PAPER TOWEL DISPENSER; RE: G101 FOR MOUNTING HEIGHT & A501 FOR TOILET ACCESSORY SCHEDULE
118	7'-0" HIGH X 3'-0" WIDE GYP CASED OPENING, PAINTED GYP (PT-1)
119	WALL MOUNTED TV MONITOR (O.F.C.I.), GC TO PROVIDE BLOCKING, TV MOUNT, POWER AND DATA, RE: ELECT DWGS.
120	ORTHOPANTOMOGRAPH MACHINE, GC TO COORDINATE WITH OWNER'S CONSULTANT AND REFER TO MANUFACTURER REQUIREMENTS FOR BLOCKING REQUIREMENTS
121	MILLWORK (BY OTHERS)
122	UNDERCOUNTER FRIDGE (O.F.C.I.)
124	MICROWAVE (O.F.C.I.)
126	PROVIDE NEW 5/8" GYP BOARD OVER EXISTING METAL STUD WALL
127	FURROUT AROUND EXISTING COLUMN TO BE FIELD VERIFIED
128	PAINT EXISTING COLUMN, PT-1 (RE: FINISH SCHEDULE)
142	STACKABLE WASHER/DRYER (O.F.C.I.)
143	DENTAL CHAIRS (BY OTHERS)
144	BENCH WITH VINYL CUSHION, FB-01 (RE: FINISH SCHEDULE)
146	TRIPLE OUTLET STATION, RE: MIDWEST DENTAL STUPLY FOR DETAILS
151	EXISTING MECHANICAL SHAFT, G.C. TO VERIFY EXACT LOCATION IN

**152** HORIZONTAL ALUMINUM BLINDS (C.F.C.I.)



PROJECT TEAM

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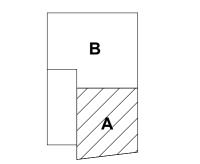
DESCRIPTION

DATE

SEAL / SIGNATURE



KEY MAP



PROJECT STATUS

ISSUE FOR PERMIT
PROJECT NAME

PROJECT ADDRESS

6707 E RIVERSIDE DRIVE LINI

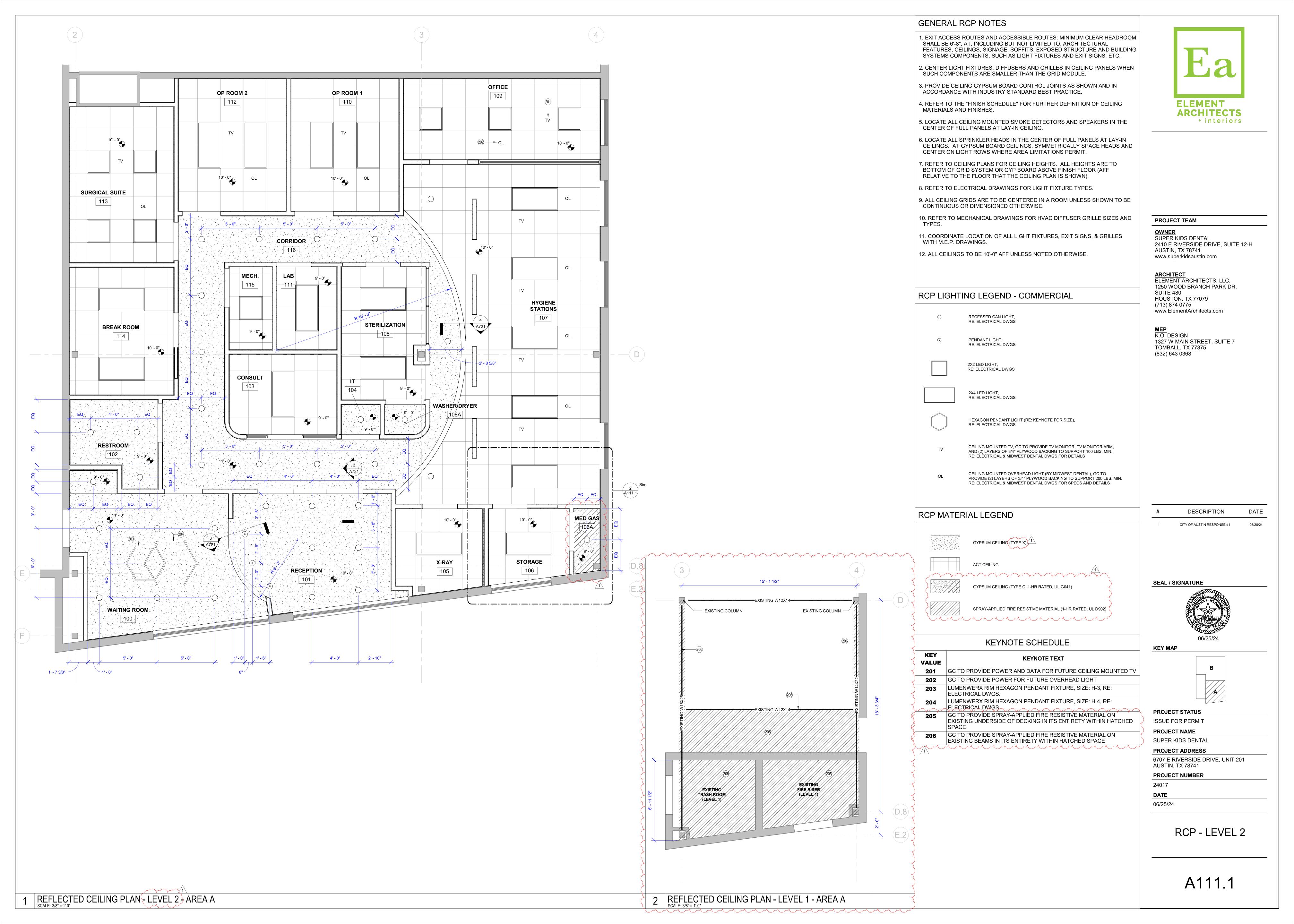
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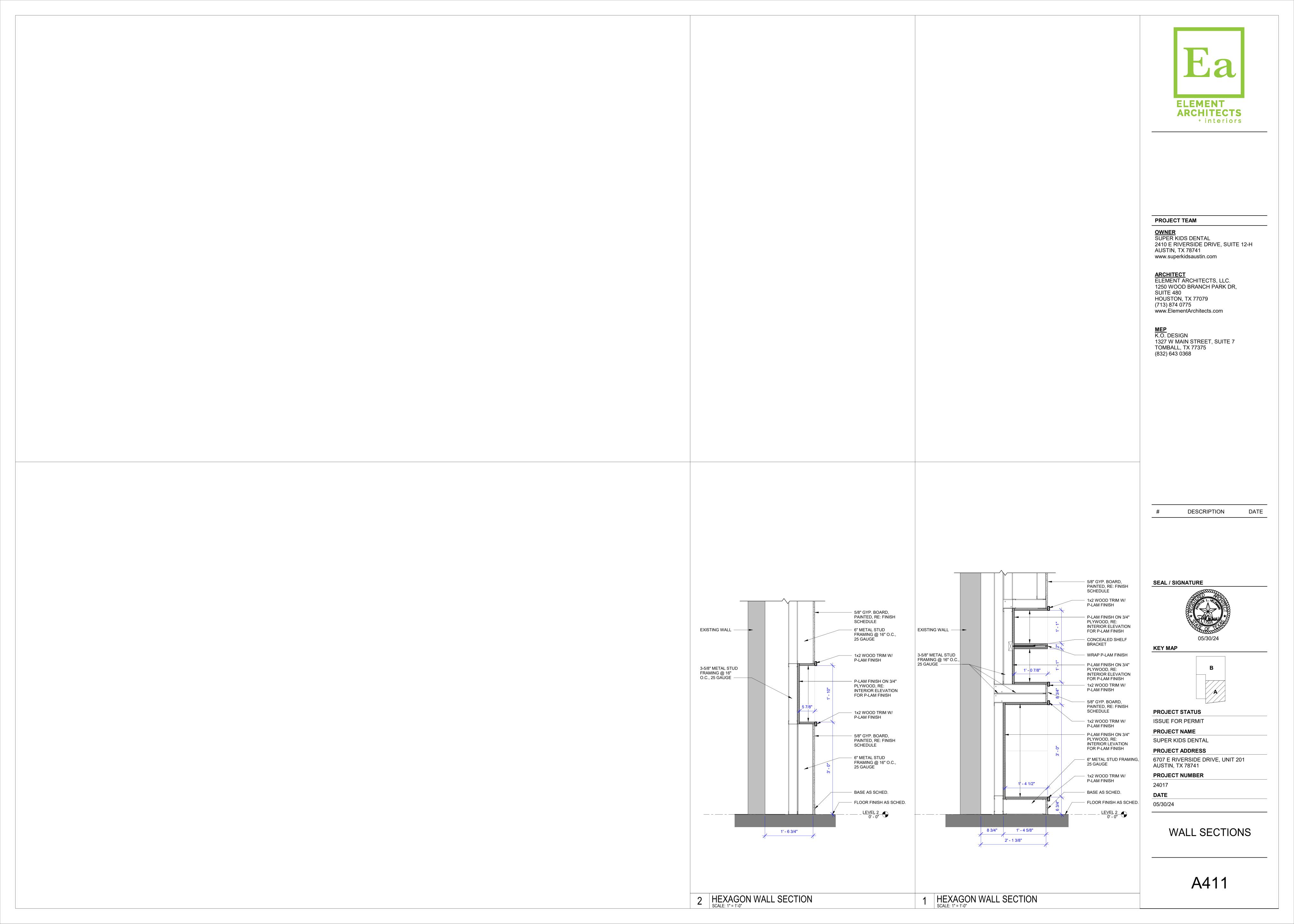
24017 **DATE** 05/30/24

FLOOR PLAN - LEVEL 2

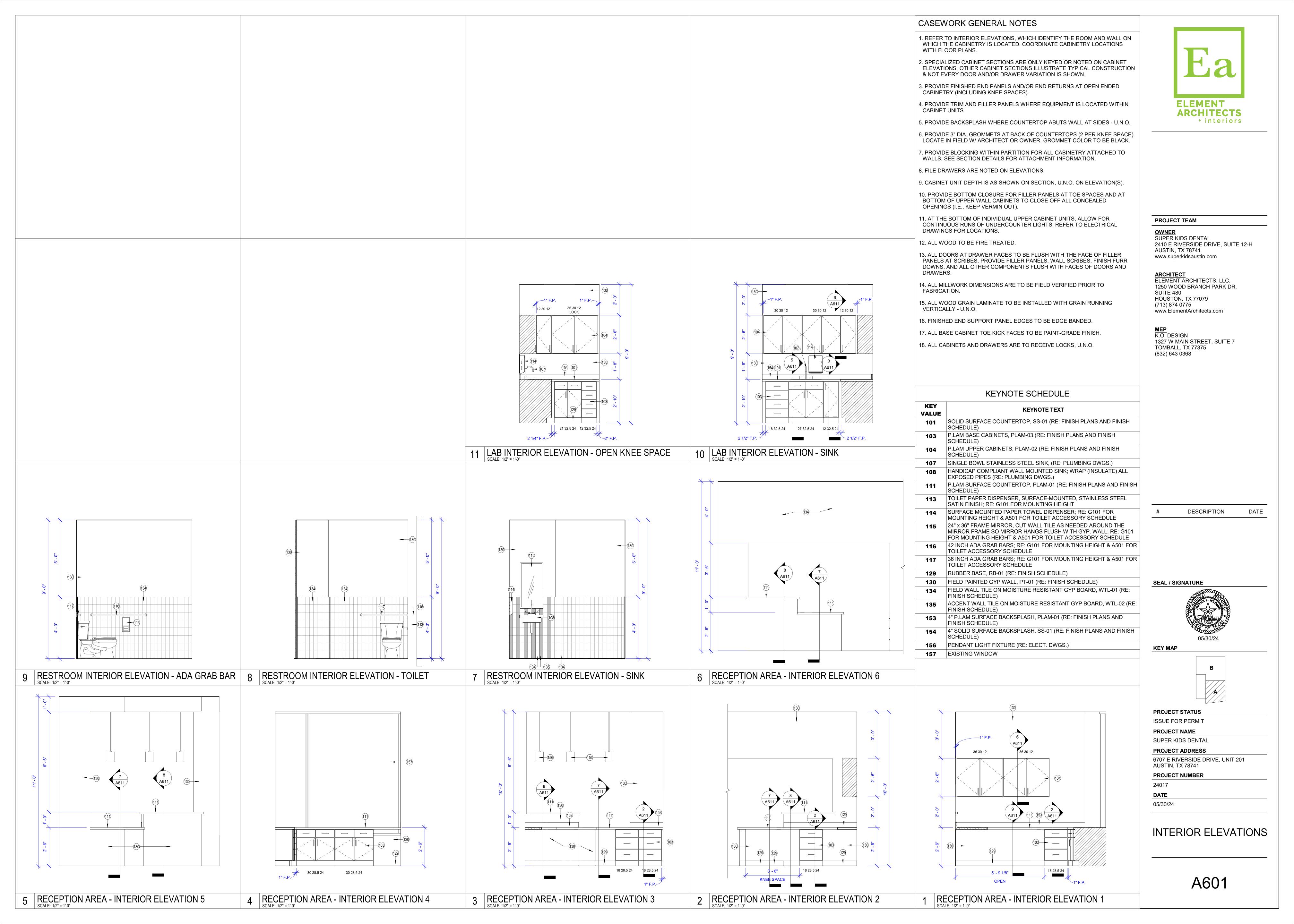
A111

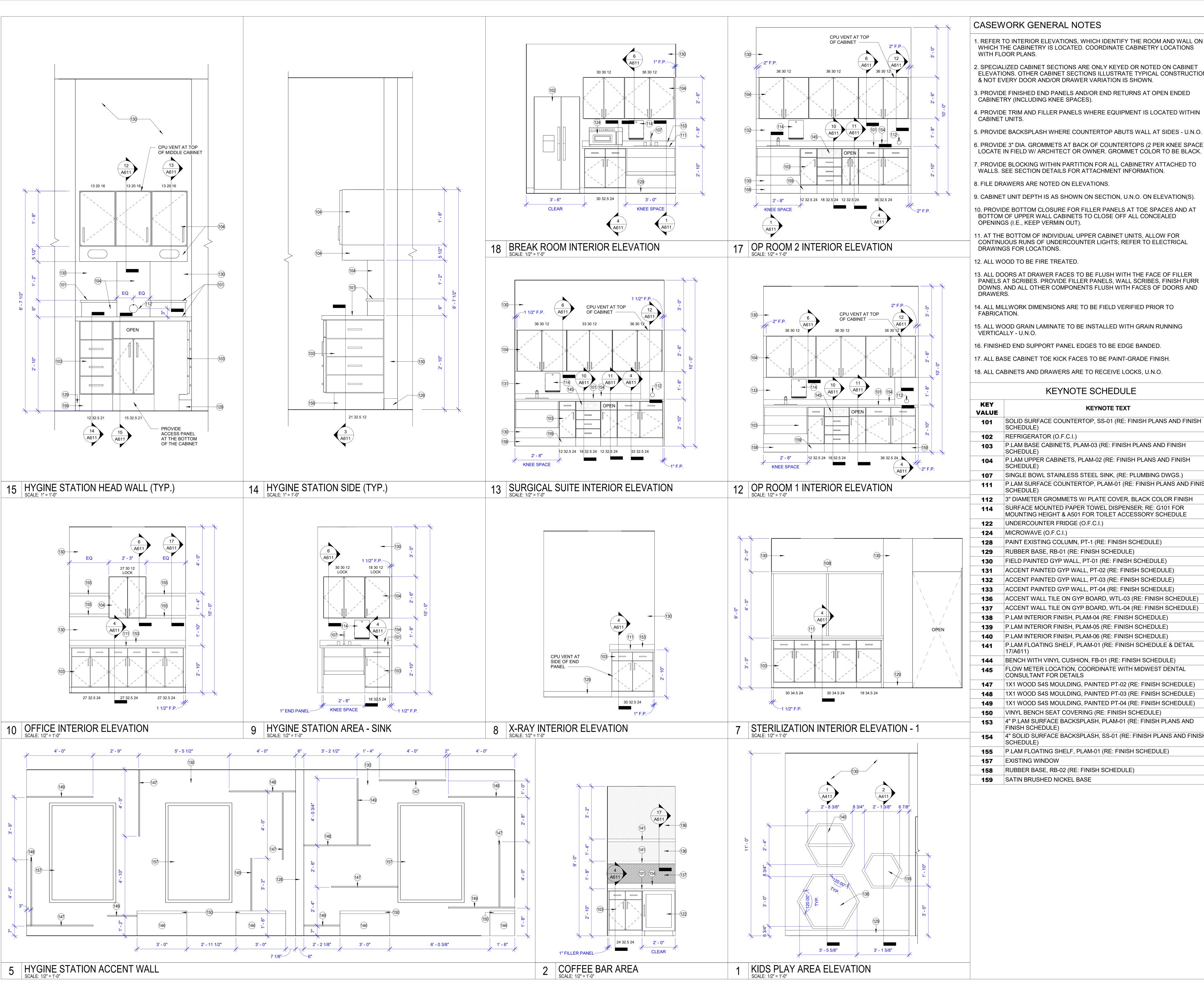
1 FLOOR PLAN - LEVEL 2





	TOILET ACCESSORY SCHEDULE  ITEM: MANUFACTURER: COLOR: MODEL #:  24" X 36" CHANNEL FRAME BOBRICK STAINLESS STEEL B-165  SURFACE MOUNTED TOILET PAPER DISPENSER BOBRICK STAINLESS STEEL B-6857  SURFACE MOUNTED PAPER TOWEL DISPENSER BOBRICK STAINLESS STEEL B-262  36" GRAB BAR BOBRICK STAINLESS STEEL B-6806  42" GRAB BAR BOBRICK STAINLESS STEEL B-6806	KEY VALUE  107 SINGLE BOWL STAINLESS STEEL SINK, (RE: PLUMBING DWGS.)  108 HANDICAP COMPLIANT WALL MOUNTED SINK; WRAP (INSULATE) ALL EXPOSED PIPES (RE: PLUMBING DWGS.)  111 P.LAM SURFACE COUNTERTOP, PLAM-01 (RE: FINISH PLANS AND FINISH SCHEDULE)  112 3" DIAMETER GROMMETS W/ PLATE COVER, BLACK COLOR FINISH SCHEDULE)  113 TOILET PAPER DISPENSER, SURFACE-MOUNTED, STAINLESS STEEL SATIN FINISH; RE: G101 FOR MOUNTING HEIGHT  114 SURFACE MOUNTED PAPER TOWEL DISPENSER; RE: G101 FOR MOUNTING HEIGHT & A501 FOR TOILET ACCESSORY SCHEDULE  115 24" x 36" FRAME MIRROR, CUT WALL TILE AS NEEDED AROUND THE MIRROR FRAME SO MIRROR HANGS FLUSH WITH GYP. WALL; RE: G101 FOR MOUNTING HEIGHT & A501 FOR TOILET ACCESSORY SCHEDULE  116 42 INCH ADA GRAB BARS; RE: G101 FOR MOUNTING HEIGHT & A501 FOR TOILET ACCESSORY SCHEDULE  117 36 INCH ADA GRAB BARS; RE: G101 FOR MOUNTING HEIGHT & A501 FOR TOILET ACCESSORY SCHEDULE  119 WALL MOUNTED TV MONITOR (O.F.C.I.), GC TO PROVIDE BLOCKING, TV MOUNT, POWER AND DATA, RE: ELECT DWGS.		ELEMENT ARCHITECTS + interiors
				OWNER SUPER KIDS DENTAL 2410 E RIVERSIDE DRIVE, SUITE 12-H AUSTIN, TX 78741 www.superkidsaustin.com  ARCHITECT ELEMENT ARCHITECTS, LLC. 1250 WOOD BRANCH PARK DR, SUITE 480 HOUSTON, TX 77079 (713) 874 0775 www.ElementArchitects.com  MEP K.O. DESIGN 1327 W MAIN STREET, SUITE 7 TOMBALL, TX 77375 (832) 643 0368
				# DESCRIPTION DATE  SEAL / SIGNATURE  05/30/24  KEY MAP
S-77  LAB  111  111  110  110  110  110  110  1	7'-8 3/4"  7'-8 3/4"  RESTROOM  102  9  102  ALIGN  115  AA601  TO BEQ  EQ  EQ  EQ  AAA  AAA  AAA  AAA  AAA		2'-10 1/2" 3'-1 3/4" 2'-5 1/8"  RECEPTION 101 112 112 112 112 112 112 112 112 112	PROJECT STATUS ISSUE FOR PERMIT PROJECT NAME SUPER KIDS DENTAL PROJECT ADDRESS 6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741 PROJECT NUMBER 24017 DATE 05/30/24  ENLARGED PLANS
3 ENLARGED FLOOR PLAN - LAB 111	2 ENLARGED FLOOR PLAN - RESTROOM 102 SCALE: 1/2" = 1'-0"	1 ENLARGED FLOOR PLAN - RECEPTION 101 SCALE: 1/2" = 1'-0"		A501





#### **CASEWORK GENERAL NOTES**

1. REFER TO INTERIOR ELEVATIONS, WHICH IDENTIFY THE ROOM AND WALL ON WHICH THE CABINETRY IS LOCATED. COORDINATE CABINETRY LOCATIONS

2. SPECIALIZED CABINET SECTIONS ARE ONLY KEYED OR NOTED ON CABINET ELEVATIONS. OTHER CABINET SECTIONS ILLUSTRATE TYPICAL CONSTRUCTION

& NOT EVERY DOOR AND/OR DRAWER VARIATION IS SHOWN. 3. PROVIDE FINISHED END PANELS AND/OR END RETURNS AT OPEN ENDED

4. PROVIDE TRIM AND FILLER PANELS WHERE EQUIPMENT IS LOCATED WITHIN

6. PROVIDE 3" DIA. GROMMETS AT BACK OF COUNTERTOPS (2 PER KNEE SPACE).

7. PROVIDE BLOCKING WITHIN PARTITION FOR ALL CABINETRY ATTACHED TO

8. FILE DRAWERS ARE NOTED ON ELEVATIONS.

9. CABINET UNIT DEPTH IS AS SHOWN ON SECTION, U.N.O. ON ELEVATION(S).

10. PROVIDE BOTTOM CLOSURE FOR FILLER PANELS AT TOE SPACES AND AT BOTTOM OF UPPER WALL CABINETS TO CLOSE OFF ALL CONCEALED

11. AT THE BOTTOM OF INDIVIDUAL UPPER CABINET UNITS, ALLOW FOR CONTINUOUS RUNS OF UNDERCOUNTER LIGHTS; REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS.

13. ALL DOORS AT DRAWER FACES TO BE FLUSH WITH THE FACE OF FILLER PANELS AT SCRIBES. PROVIDE FILLER PANELS, WALL SCRIBES, FINISH FURR DOWNS, AND ALL OTHER COMPONENTS FLUSH WITH FACES OF DOORS AND

14. ALL MILLWORK DIMENSIONS ARE TO BE FIELD VERIFIED PRIOR TO

15. ALL WOOD GRAIN LAMINATE TO BE INSTALLED WITH GRAIN RUNNING

16. FINISHED END SUPPORT PANEL EDGES TO BE EDGE BANDED.

17. ALL BASE CABINET TOE KICK FACES TO BE PAINT-GRADE FINISH.

18. ALL CABINETS AND DRAWERS ARE TO RECEIVE LOCKS, U.N.O.

#### KEANUTE CUREDI II E

	KEYNOTE SCHEDULE						
	KEY VALUE	KEYNOTE TEXT					
	101	SOLID SURFACE COUNTERTOP, SS-01 (RE: FINISH PLANS AND FINISH SCHEDULE)					
,	102	REFRIGERATOR (O.F.C.I.)					
	103	P.LAM BASE CABINETS, PLAM-03 (RE: FINISH PLANS AND FINISH SCHEDULE)					
	104	P.LAM UPPER CABINETS, PLAM-02 (RE: FINISH PLANS AND FINISH SCHEDULE)					
	107	SINGLE BOWL STAINLESS STEEL SINK, (RE: PLUMBING DWGS.)					
	111	P.LAM SURFACE COUNTERTOP, PLAM-01 (RE: FINISH PLANS AND FINISH SCHEDULE)					
	112	3" DIAMETER GROMMETS W/ PLATE COVER, BLACK COLOR FINISH					
	114	SURFACE MOUNTED PAPER TOWEL DISPENSER; RE: G101 FOR MOUNTING HEIGHT & A501 FOR TOILET ACCESSORY SCHEDULE					
	122	UNDERCOUNTER FRIDGE (O.F.C.I.)					
	124	MICROWAVE (O.F.C.I.)					
	128	PAINT EXISTING COLUMN, PT-1 (RE: FINISH SCHEDULE)					
l							

RUBBER BASE, RB-01 (RE: FINISH SCHEDULE) FIELD PAINTED GYP WALL, PT-01 (RE: FINISH SCHEDULE) ACCENT PAINTED GYP WALL, PT-02 (RE: FINISH SCHEDULE) ACCENT PAINTED GYP WALL, PT-03 (RE: FINISH SCHEDULE) ACCENT PAINTED GYP WALL, PT-04 (RE: FINISH SCHEDULE)

ACCENT WALL TILE ON GYP BOARD, WTL-03 (RE: FINISH SCHEDULE) ACCENT WALL TILE ON GYP BOARD, WTL-04 (RE: FINISH SCHEDULE) P.LAM INTERIOR FINISH, PLAM-04 (RE: FINISH SCHEDULE)

P.LAM INTERIOR FINISH, PLAM-05 (RE: FINISH SCHEDULE) P.LAM INTERIOR FINISH, PLAM-06 (RE: FINISH SCHEDULE) P.LAM FLOATING SHELF, PLAM-01 (RE: FINISH SCHEDULE & DETAIL

BENCH WITH VINYL CUSHION, FB-01 (RE: FINISH SCHEDULE) FLOW METER LOCATION, COORDINATE WITH MIDWEST DENTAL CONSULTANT FOR DETAILS 1X1 WOOD S4S MOULDING, PAINTED PT-02 (RE: FINISH SCHEDULE)

1X1 WOOD S4S MOULDING, PAINTED PT-04 (RE: FINISH SCHEDULE) VINYL BENCH SEAT COVERING (RE: FINISH SCHEDULE)

4" P.LAM SURFACE BACKSPLASH, PLAM-01 (RE: FINISH PLANS AND FINISH SCHEDULE) 4" SOLID SURFACE BACKSPLASH, SS-01 (RE: FINISH PLANS AND FINISH

155 P.LAM FLOATING SHELF, PLAM-01 (RE: FINISH SCHEDULE)

**EXISTING WINDOW** 

RUBBER BASE, RB-02 (RE: FINISH SCHEDULE)

159 SATIN BRUSHED NICKEL BASE

#### PROJECT TEAM

#### SUPER KIDS DENTAL 2410 E RIVERSIDE DRIVE, SUITE 12-H

**ELEMENT** 

**ARCHITECTS** 

+ interiors

AUSTIN, TX 78741 www.superkidsaustin.com

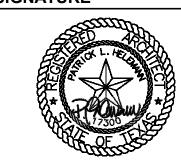
ARCHITECT
ELEMENT ARCHITECTS, LLC. 1250 WOOD BRANCH PARK DR, SUITE 480 HOUSTON, TX 77079 (713) 874 0775 www.ElementArchitects.com

MEP K.O. DESIGN 1327 W MAIN STREET, SUITE 7 TOMBALL, TX 77375 (832) 643 0368

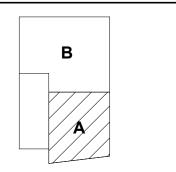
DESCRIPTION

DATE

**SEAL / SIGNATURE** 



**KEY MAP** 



PROJECT STATUS

ISSUE FOR PERMIT

**PROJECT NAME** SUPER KIDS DENTAL

PROJECT ADDRESS

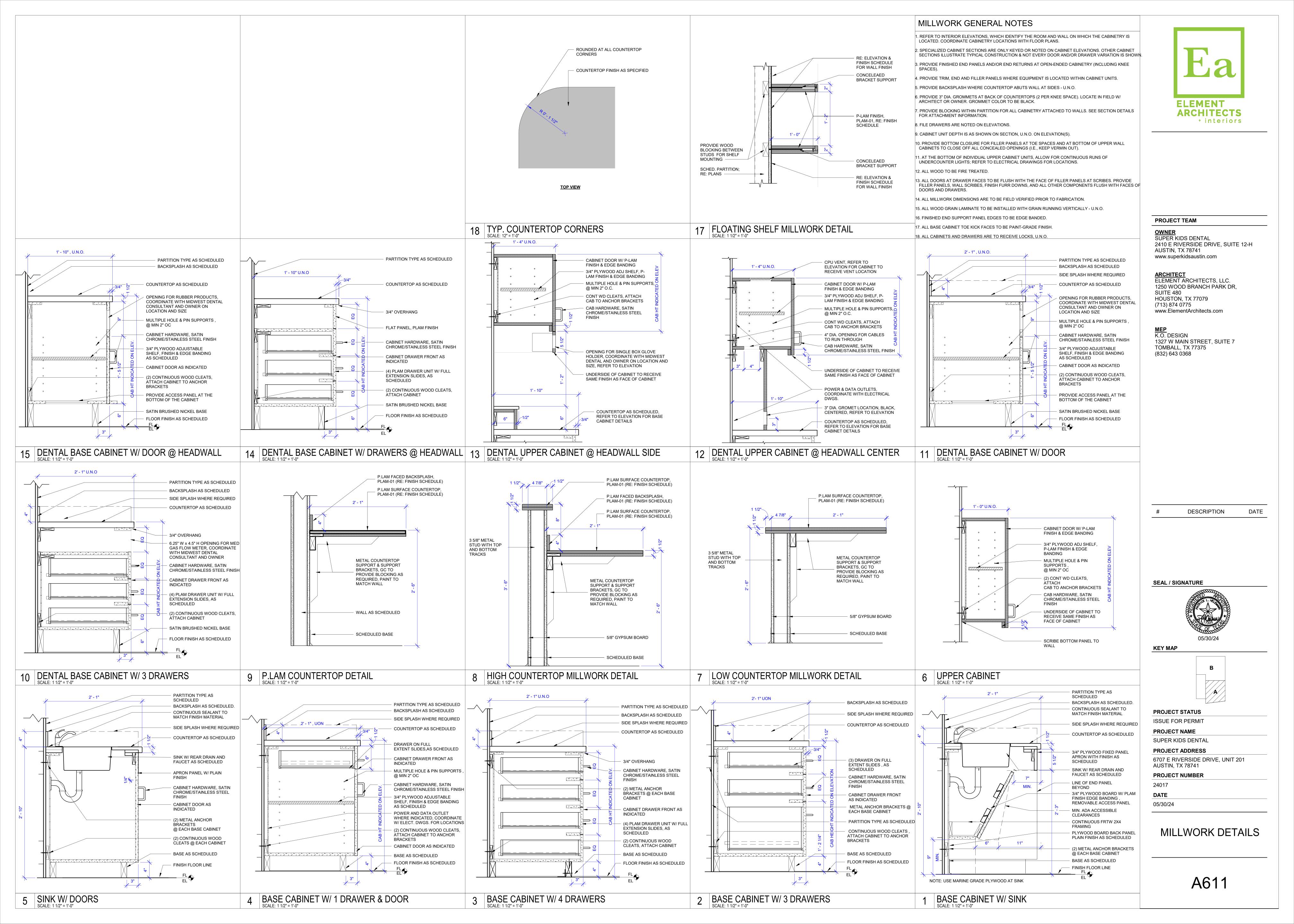
6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741

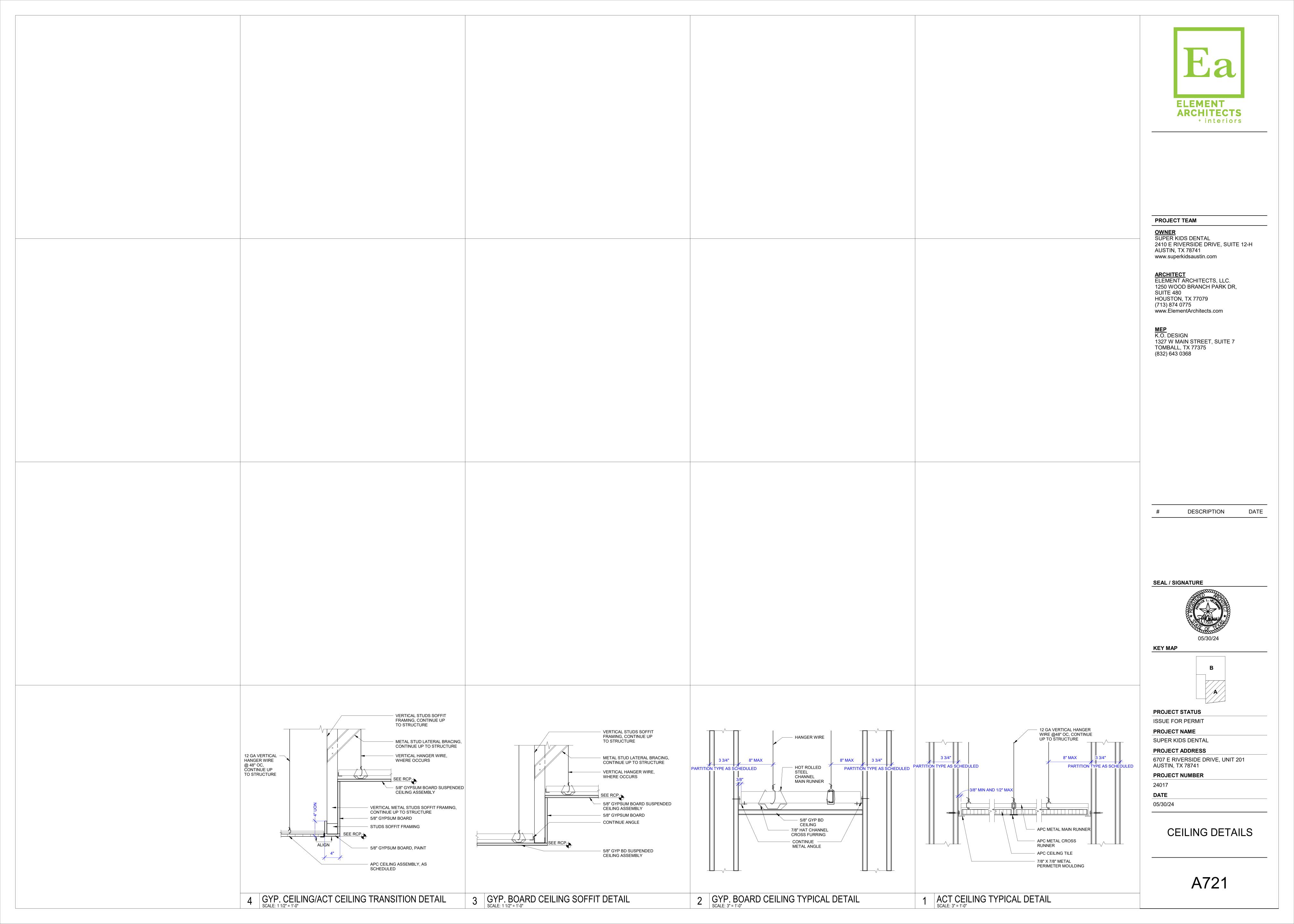
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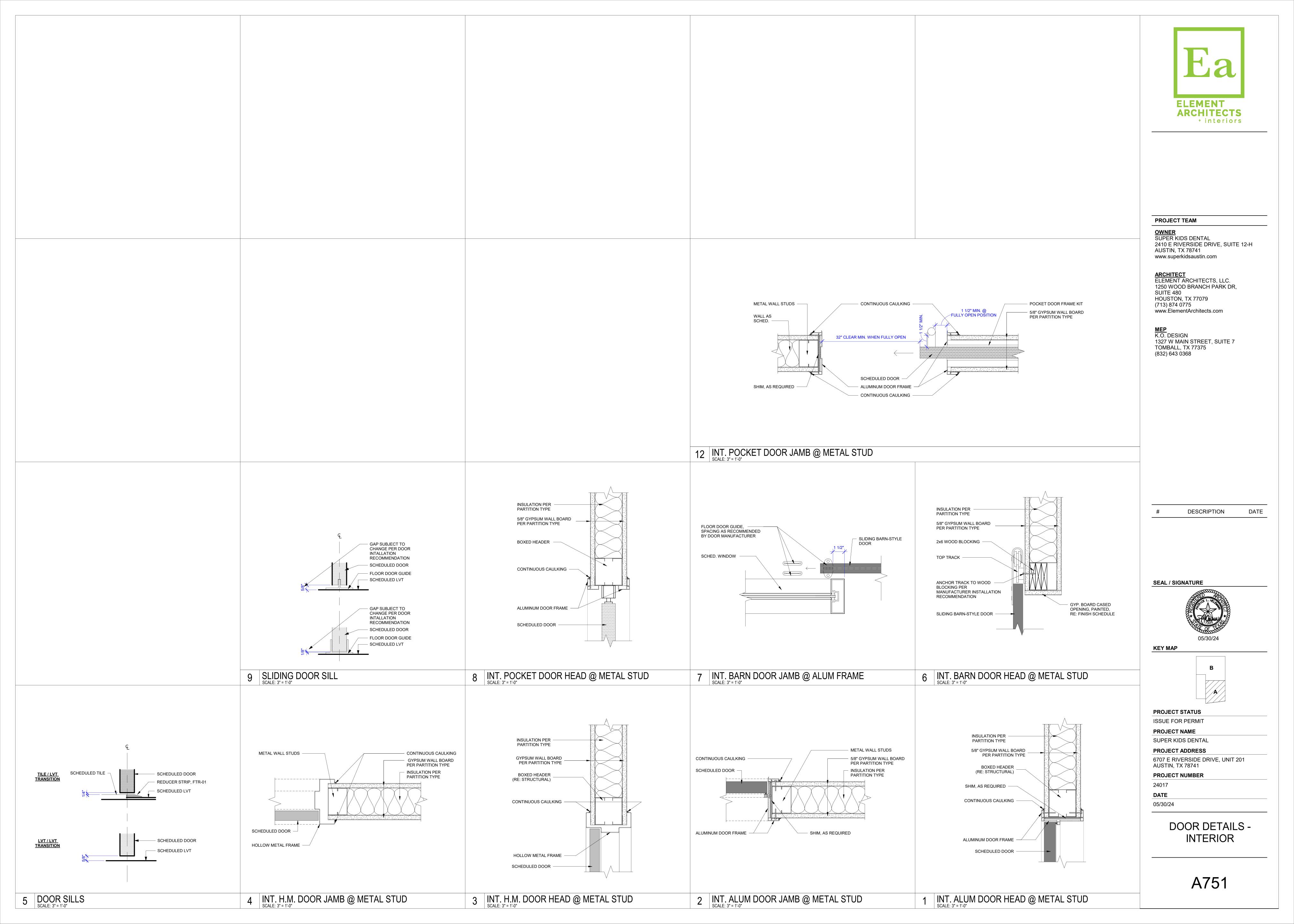
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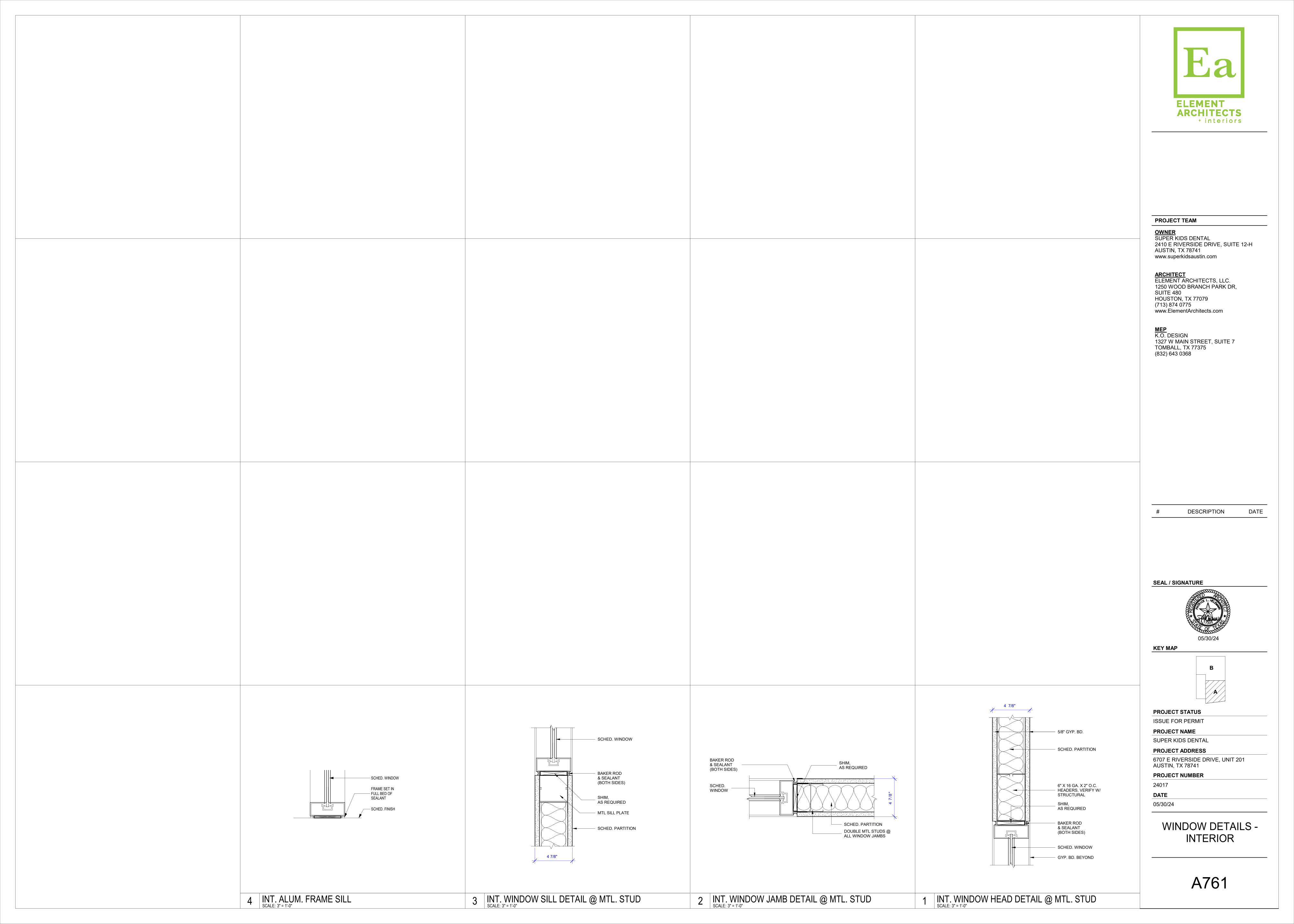
INTERIOR ELEVATIONS

A602









									DOOR SCHEDULE							GENERAL DOOR NOTES
DOOD		ROUGH	OPENING	DOOL	2	DOOR	FRAME		DOOR FINISH		DETAILS					
DOOR NUMBER	ROOM NAME	WIDTH	HEIGHT	PANE		FRAME MATERIAL	FRAME FINISH	PANEL MATERIAL	PANEL FINISH	HEAD	JAMB	SILL	HARDWARE GROUP NO.		COMMENTS	1. CONTRACTOR SHALL VERIFY ALL HEAD, PROPER DOOR FIT AND OPERATION.
100	WAITING ROOM	3' - 0"	7' - 0"	0' - 1 3	4" 2	ALUM	CLEAR ANODIZED	SCPL/GLASS	PLAM-03/GL-1	1/A751	2/A751	5/A751	101			
102	RESTROOM	3' - 0"	7' - 0"	0' - 1 3	4" 1	ALUM	CLEAR ANODIZED	SCPL	PLAM-03	1/A751	2/A751	5/A751	341C			2. CONTRACTOR TO FIELD VERIFY ALL DOC
103	CONSULT	3' - 0"	7' - 0"	0' - 1'	4	ALUM	CLEAR ANODIZED	GLASS/ALUM	GL-2/CLEAR ANODIZED				001		OPENING WIDTH TO BE 3'-0", BARN-STYLE DOOR WIDTH TO BE 3'-6". ENSURE 32" OF CLEAR WIDTH IS MAINTAINED WHEN IN FULLY OPEN POSITION. PROVIDE SOFT CLOSE HARDWARE.	ORDERING.  3. VERIFY ALL DOOR & FRAME ROUGH REQUESTION MANUFACTURER.
104	IT	3' - 0"	7' - 0"	0' - 1 3	8" 5	ALUM	CLEAR ANODIZED	SCPL	PLAM-03	1/A751	2/A751	5/A751	212S			WATOTALK.
106	STORAGE	3' - 0"	7' - 0"	0' - 1 1	2" 3	ALUM	CLEAR ANODIZED	SCPL	PLAM-03				953L		ENSURE 32" OF CLEAR WIDTH IS MAINTAINED WHEN IN FULLY OPEN POSITION. PROVIDE SOFT CLOSE HARDWARE.	4. LEVER U-SHAPED HANDLES REQUIRED A LOCATIONS.
106A	MED GAS	3' - 0"	7' - 0"	0' - 1 3	4" 1	HM	PT-05	HM	PT-05	3/A751	4/A751	5/A751	201C	1-HR		
108A	WASHER/DRYER	3' - 0"	7' - 0"	0' - 1 3	8" 5	ALUM	CLEAR ANODIZED	SCPL	PLAM-03	1/A751	2/A751	5/A751	412S			5. ALL DOOR HARDWARE INSTALLED AT RATE GREATER IN RATING THAN THE DOOR.
109	OFFICE	3' - 0"	7' - 0"	0' - 1 3		ALUM	CLEAR ANODIZED	SCPL/GLASS	PLAM-03/GL-1	1/A751	2/A751	5/A751	103			
110	OP ROOM 1	3' - 0"	7' - 0"	0' - 1 5		ALUM	CLEAR ANODIZED	SCPL	PLAM-03	1/A751	2/A751	5/A751	403			6. ALL RATED DOOR ASSEMBLIES SHALL BE
111	LAB	3' - 0"	7' - 0"	0' - 1 1	2" 3	ALUM	CLEAR ANODIZED	SCPL	PLAM-03				953L		ENSURE 32" OF CLEAR WIDTH IS MAINTAINED WHEN IN FULLY OPEN POSITION. PROVIDE SOFT CLOSE HARDWARE.	CLOSER WHERE REQUIRED.
112	OP ROOM 2	3' - 0"	7' - 0"	0' - 1 5	8" 1	ALUM	CLEAR ANODIZED	SCPL	PLAM-03	1/A751	2/A751	5/A751	403			7. ALL GLAZING IN A FIRE RATED DOOR SYS  MATCH THAT OF THE DOOR SYSTEM.
113	SURGICAL SUITE	3' - 0"	7' - 0"	0' - 1 5	8" 1	ALUM	CLEAR ANODIZED	SCPL	PLAM-03	1/A751	2/A751	5/A751	403			MATCH THAT OF THE BOOK STSTEM.
114	BREAK ROOM	3' - 0"	7' - 0"	0' - 1 1	2" 3	ALUM	CLEAR ANODIZED	SCPL	PLAM-03				923		ENSURE 32" OF CLEAR WIDTH IS MAINTAINED WHEN IN FULLY OPEN POSITION. PROVIDE SOFT CLOSE HARDWARE.	8. INSTALL SHIMS BETWEEN THE DOOR FRA SHALL BE A SHIM AT EACH HINGE AND ON
115	MECH.	3' - 0"	7' - 0"	0' - 1 3	4" 1	ALUM	CLEAR ANODIZED	SCPL	PLAM-03	1/A751	2/A751	5/A751	203S			
E100	WAITING ROOM	3' - 0"	7' - 0"	0' - 1 3	8" EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXST		PROVIDE OFFICE FUNCTION LOCK SET, RE: HARDWARE GROUP NO. EXST BELOW	9. ALL GLAZING LOCATED IN DOORS TO BE
																10. WHEN APPLYING SEALANT, DO NOT PLU
HARD	WARE GROUP NO.															11. ALL FRAMES AND SEALS TO BE THOROUS STRIPPED TO PREVENT AIR LEAK AND TRA
																12. ANCHORING OF DOOR PRODUCTS SHOUTO THE MANUFACTURER'S INSTRUCTIONS
HARE	WARE GROUP NO. 001					HARE	OWARE GROUP NO. 403									13. INTERIOR FINISH FLOOR MATERIAL SURI EXCEED MAX 1/2" HEIGHT ABOVE EXTERIO

#### DESCRIPTION

SLIDING GLASS DOOR

	HARDWARE	DOOR MFG.
HARDWARE G	ROUP NO. 101	

CATALOG NUMBER

8400 10" X 2" LDW B-CS

PERIMETER SEAL BY FRAME

WS406/407CCV

SLIDING HARDWARE BY GLASS

FINISH MFR

■ 630 IVE

■ 630 IVE

#### QTY DESCRIPTION CATALOG NUMBER FINISH MFR 3 EA HINGE 5BB1 4.5 X 4.5 ■ 652 IVE 626 SCH 1 EA ENTRANCE LOCK ND53HD ATH 1 EA SFIC CORE 626 SCH 1 EA SURFACE CLOSER 1461 REG X MTG BRKT, SPCR & 🖹 689 LCN

#### **HARDWARE GROUP NO. 103**

1 EA KICK PLATE

1 EA WALL STOP

1 SET SEAL

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MF
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRANCE LOCK	ND53HD ATH	626	SC
1	EA	SFIC CORE	80-037	626	SC
1	EA	WALL STOP	WS406/407CCV	630	IVE
1	SET	SEAL	PERIMETER SEAL BY FRAME		

#### **HARDWARE GROUP NO. 201C**

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MF
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ND80HD ATH	626	SC
1	EA	SFIC CORE	80-037	626	SC
1	EA	SURFACE CLOSER	1461 SCUSH X MTG BRKT, SPCR & PLATE	689	LCI
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	488SBK PSA H & J	BK	ZE

#### HARDWARE GROUP NO. 203S

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ND80HD ATH	626	SCH
1	EA	SFIC CORE	80-037	626	SCH
1	EA	OH STOP	90S	630	GLY
1	SET	SEAL	PERIMETER SEAL BY FRAME MFR.		

#### HARDWARE GROUP NO. 212S

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	SET	CONST LATCHING BOLT	FB61P	630	IVE
1	EA	DUST PROOF STRIKE	DP2	626	IVE
1	EA	STOREROOM LOCK	ND80HD ATH	626	SCH
1	EA	SFIC CORE	80-037	626	SCH
2	EA	OH STOP	450S	652	GLY
1	SET	MEETING STILE	8193AA (2 PCS - 1 SET)	AA	ZER
1	SET	SEAL	PERIMETER SEAL BY FRAME		
			MFR.		

#### **HARDWARE GROUP NO. 341C**

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PRIVACY LOCK W/ OUTSIDE INDICATOR	ND40S ATH OS-OCC	626	SCH
1	EA	SURFACE CLOSER	1461 SCUSH X MTG BRKT, SPCR & PLATE	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	SET	SEAL	PERIMETER SEAL BY FRAME		

QTY		DESCRIPTION	CATALOG NUMBER	<b>FINISH</b>	MF
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PASSAGE SET	ND10S ATH	626	SC
1	EA	WALL STOP	WS406/407CCV	630	IVE
1	SET	SEAL	PERIMETER SEAL BY FRAME MFR.		

#### HARDWARE GROUP NO. 412S

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	SET	CONST LATCHING BOLT	FB61P	630	IVE
1	EA	DUST PROOF STRIKE	DP2	626	IVE
1	EA	PASSAGE SET	ND10S ATH	626	SCH
2	EA	OH STOP	450S	652	GLY
1	SET	MEETING STILE	8193AA (2 PCS - 1 SET)	AA	ZER
1	SET	SEAL	PERIMETER SEAL BY FRAME		

MFR.

#### **HARDWARE GROUP NO. 923**

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	POCKET DOOR KIT	9850 SERIES X SIZE AS REQ		HAG
1	EA	LONG DOOR PULL	(1 SET) PR 9266F 12" (MOUNT BACK TO BACK)	630	IVE
		NOTE	BALANCE OF HARDWARE BY DOOR MFR		

\*\*HARDWARE SET IS A GUIDELINE\*\* -VERIFY AND COORDINATE ALL HARDWARE WITH DOOR/FRAME MANUFACTURER PRIOR TO

-CONFIRM TRACK CAN SUPPORT DOOR WEIGHT AND SIZE. -PROVIDE STOP IN TRACK TO KEEP DOOR 4" INTO OPENING WHEN IN FULLY OPEN POSITION. -ENSURE 32" OF CLEAR WIDTH IS MAINTAINED IN OPENING.

#### HARDWARE GROUP NO. 953L

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	POCKET DOOR KIT	9850 SERIES X SIZE AS REQ			HAG
1	EA	POCKET DOOR LOCK	CLASSROOM LOCK 2001ADAP- 3ST W/PULLS		626	ACC
1	EA	SFIC CORE	80-037		626	SCH
1	EA	SFIC MORTISE CYL.	80-132 X CAM/COLLARS AS REQ (MULLION)		626	SCH
		NOTE	BALANCE OF HARDWARE BY DOOR MFR			
	1	1 EA 1 EA 1 EA	1 EA POCKET DOOR KIT 1 EA POCKET DOOR LOCK 1 EA SFIC CORE 1 EA SFIC MORTISE CYL.	1 EA POCKET DOOR KIT 9850 SERIES X SIZE AS REQ 1 EA POCKET DOOR LOCK CLASSROOM LOCK 2001ADAP- 3ST W/PULLS 1 EA SFIC CORE 80-037 1 EA SFIC MORTISE CYL. 80-132 X CAM/COLLARS AS REQ (MULLION) NOTE BALANCE OF HARDWARE BY	1 EA POCKET DOOR KIT 9850 SERIES X SIZE AS REQ 1 EA POCKET DOOR LOCK CLASSROOM LOCK 2001ADAP- 3ST W/PULLS 1 EA SFIC CORE 80-037 1 EA SFIC MORTISE CYL. 80-132 X CAM/COLLARS AS REQ (MULLION) NOTE BALANCE OF HARDWARE BY	1 EA POCKET DOOR KIT 9850 SERIES X SIZE AS REQ 1 EA POCKET DOOR LOCK CLASSROOM LOCK 2001ADAP- 3ST W/PULLS 1 EA SFIC CORE 80-037 626 1 EA SFIC MORTISE CYL. 80-132 X CAM/COLLARS AS REQ 626 (MULLION) NOTE BALANCE OF HARDWARE BY

\*\*HARDWARE SET IS A GUIDELINE\*\* -VERIFY AND COORDINATE ALL HARDWARE WITH DOOR/FRAME MANUFACTURER PRIOR TO -CONFIRM TRACK CAN SUPPORT DOOR WEIGHT AND SIZE.

-ENSURE 32" OF CLEAR WIDTH IS MAINTAINED IN OPENING.

-DOOR LOCKED/UNLOCKED BY TURN PIECE OR KEY. -ALWAYS FREE EGRESS BY LEVER. -PROVIDE STOP IN TRACK TO KEEP DOOR 4" INTO OPENING WHEN IN FULLY OPEN POSITION.

## **HARDWARE GROUP NO. EXST**

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
	EXISTING DOOR	REUSE EXISTING HARDWARE.		
		REMOVE AND REPLACE		
		DAMAGED OR INOPERABLE		
		HARDWARE.		

NOTE: CONTRACTOR TO FIELD VERIFY CONDITION OF EXISTING HARDWARE. NOTIFY ARCHITECT IF ANY HARDWARE IS DAMAGED OR INOPERABLE PRIOR TO REMOVING AND

REPLACING. ADD LOCK AS REQUIRED TO MATCH NEW KEY SYSTEM.

#### ENERAL DOOR NOTES

- CONTRACTOR SHALL VERIFY ALL HEAD, JAMB, AND SILL CONDITIONS FOR PROPER DOOR FIT AND OPERATION.
- CONTRACTOR TO FIELD VERIFY ALL DOOR FRAME DEPTHS PRIOR TO ORDERING.
- VERIFY ALL DOOR & FRAME ROUGH REQUIREMENTS WITH DOOR
- LEVER U-SHAPED HANDLES REQUIRED AT ALL HANDICAP ACCESSIBLE LOCATIONS.
- . ALL DOOR HARDWARE INSTALLED AT RATED DOORS SHALL BE EQUAL OR
- . ALL RATED DOOR ASSEMBLIES SHALL BE EQUIPPED WITH AN APPROVED CLOSER WHERE REQUIRED.
- . ALL GLAZING IN A FIRE RATED DOOR SYSTEM IS TO HAVE A RATING TO MATCH THAT OF THE DOOR SYSTEM.
- INSTALL SHIMS BETWEEN THE DOOR FRAME AND FRAMING STUDS. THERE SHALL BE A SHIM AT EACH HINGE AND ONE FOR THE LOCK STRIKE.
- . ALL GLAZING LOCATED IN DOORS TO BE TEMPERED.
- . WHEN APPLYING SEALANT, DO NOT PLUG WEEP HOLES.
- . ALL FRAMES AND SEALS TO BE THOROUGHLY CAULKED AND WEATHER STRIPPED TO PREVENT AIR LEAK AND TRANSMISSION OF SOUND.
- . ANCHORING OF DOOR PRODUCTS SHOULD ALWAYS BE DONE ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
- . INTERIOR FINISH FLOOR MATERIAL SURFACE AT DOORS SHALL NOT EXCEED MAX 1/2" HEIGHT ABOVE EXTERIOR FINISH SURFACE AND MAX 1/4" VERTICAL CHANGE THRESHOLD.
- 14. THRESHOLDS AT ENTRY DOORS TO MEET ALL ACCESSIBILITY REQUIREMENTS.
- 15. IF DOORS HAVE A PRIVACY LOCK-SET, LOCK-SET MUST BE PUSH-BUTTON TYPE.
- 16. ACCESSIBLE TOILET ROOM DOORS TO BE SELF-CLOSING.
- 17. 10" MIN. TO DOOR BOTTOM RAIL FOR ENTRANCE DOORS, PANELED, AND DOORS WITH GLASS.
- 18. ALL AUTOMATIC DOOR CLOSERS SHALL BE INSTALLED INSIDE THE ROOM THE DOOR IS TO SERVE.
- 19. ALL DOOR HINGES TO BE 'NICKEL' FINISH. DO NOT PAINT.
- 20. MAIN FRONT EXIT DOORS REQUIRING THE USE OF A KEY, SHALL HAVE A SIGN READILY VISIBLE THAT READS "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED" IN ONE INCH LETTERS CONTRASTING BACKGROUND.

#### DOOR ABBREVIATIONS

ACS	ACCESS CONTROL SYSTEM
AL	ALUMINUM
AL/GL	ALUMINUM & GLASS
нм	HOLLOW METAL

**HOLLOW METAL & GLASS** SOLID CORE PLASTIC LAMINATE

#### GLAZING SCHEDULE

GL-1 1/4" INCH TEMPERED GLASS

GL-2 1/2" INCH TEMPERED GLASS

DOOR WIDTH

RE: SCHED.

TYPE 1

HOLLOW METAL DOOR FRAME

**DOOR WIDTH** 

RE: SCHED.

TYPE 2

ALUMINUM DOOR FRAME

DESCRIPTION

**ELEMENT** 

PROJECT TEAM

AUSTIN, TX 78741

SUITE 480

(713) 874 0775

K.O. DESIGN

(832) 643 0368

SUPER KIDS DENTAL

www.superkidsaustin.com

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1327 W MAIN STREET, SUITE 7

2410 E RIVERSIDE DRIVE, SUITE 12-H

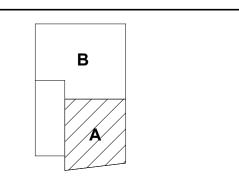
**ARCHITECTS** 

+ interiors

**SEAL / SIGNATURE** 



**KEY MAP** 



PROJECT STATUS **ISSUE FOR PERMIT** 

PROJECT NAME

SUPER KIDS DENTAL

PROJECT ADDRESS

6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741

**PROJECT NUMBER** 

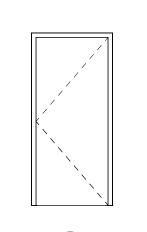
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05/30/24

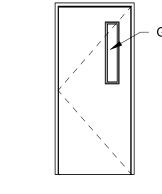
DOOR SCHEDULE & DOOR TYPE LEGEND

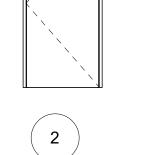
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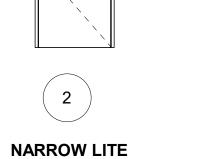
#### DOOR ABBREVIATIONS PROVIDE WOOD BLOCKING

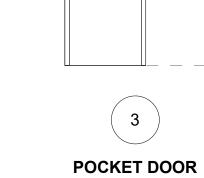


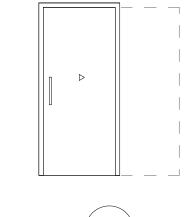
DOORS LEGEND



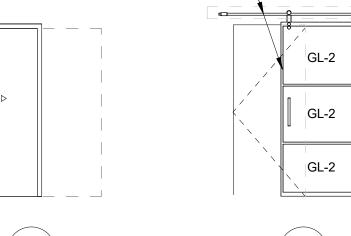


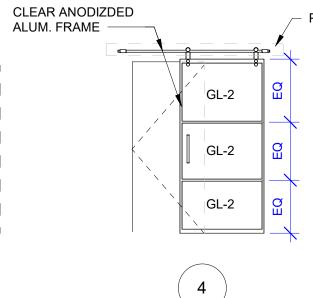




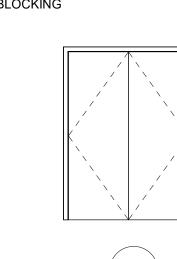


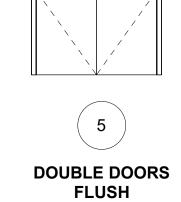
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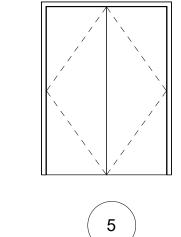




BARN-STYLE DOOR FULL GLASS







	STOREFRONT AND ALUMINIUM FRAME SCHEDULE									GENE	
Mark	ROUGH (	OPENING	STOREFRONT	FRAME	FRAME FINISH	GLAZING TYPE		DETAILS			
IVIAIK	WIDTH	HEIGHT	ELEVATION	MATERIAL	FRAIVIE FIIVION	GLAZING I TPE	HEAD	JAMB	SILL	COMMENTS	1. ALL G 2. CONT
103	7' - 10"	7' - 0"	С	ALUM	CLEAR ANODIZED	GL-2	1/A761	2/A761	4/A761		OPER/
108	6' - 9"	4' - 0"	A	ALUM	CLEAR ANODIZED	GL-1	1/A761	2/A761	3/A761		3. VERIF 4. CONT
109	10' - 6"	10' - 0"	В	ALUM	CLEAR ANODIZED	GL-2	1/A761	2/A761	4/A761	INSTALL WINDOW FILM WF-01, RE: FINSH SCHEDULE, COORDINATE WITH OWNER PRIOR TO INSTALLATION	5. SEE W

#### ENERAL WINDOW NOTES

ALL GLAZING TO MEET STATE, LOCAL AND FEDERAL CODES.
CONTRACTOR TO VERIFY ALL HEAD, JAMB, AND SILL CONDITIONS FOR PROPER WINDOW FIT AND 3. VERIFY ALL WINDOW FRAME ROUGH REQUIREMENTS WITH WINDOW MANUFACTURER.
4. CONTRACTOR TO FIELD VERIFY ALL WINDOW OPENING SIZES PRIOR TO INSTALLATION.
5. SEE WINDOW ELEVATIONS FOR GLASS TYPES AND LOCATIONS.
6. ALL WINDOWS AT STAIR ENCLOSURE SHALL BE SAFETY GLAZED WITH TEMPERED GLASS.

GL-1 1/4" INCH TEMPERED GLASS

GLAZING SCHEDULE

GL-2 1/2" INCH TEMPERED GLASS



#### **PROJECT TEAM**

<u>OWNER</u> SUPER KIDS DENTAL 2410 E RIVERSIDE DRIVE, SUITE 12-H AUSTIN, TX 78741 www.superkidsaustin.com

ARCHITECT
ELEMENT ARCHITECTS, LLC.
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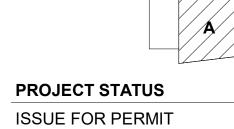
MEP K.O. DESIGN 1327 W MAIN STREET, SUITE 7 TOMBALL, TX 77375 (832) 643 0368

DESCRIPTION

**SEAL / SIGNATURE** 



**KEY MAP** 



ISSUE FOR PERMIT

PROJECT NAME SUPER KIDS DENTAL

**PROJECT ADDRESS** 

6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741

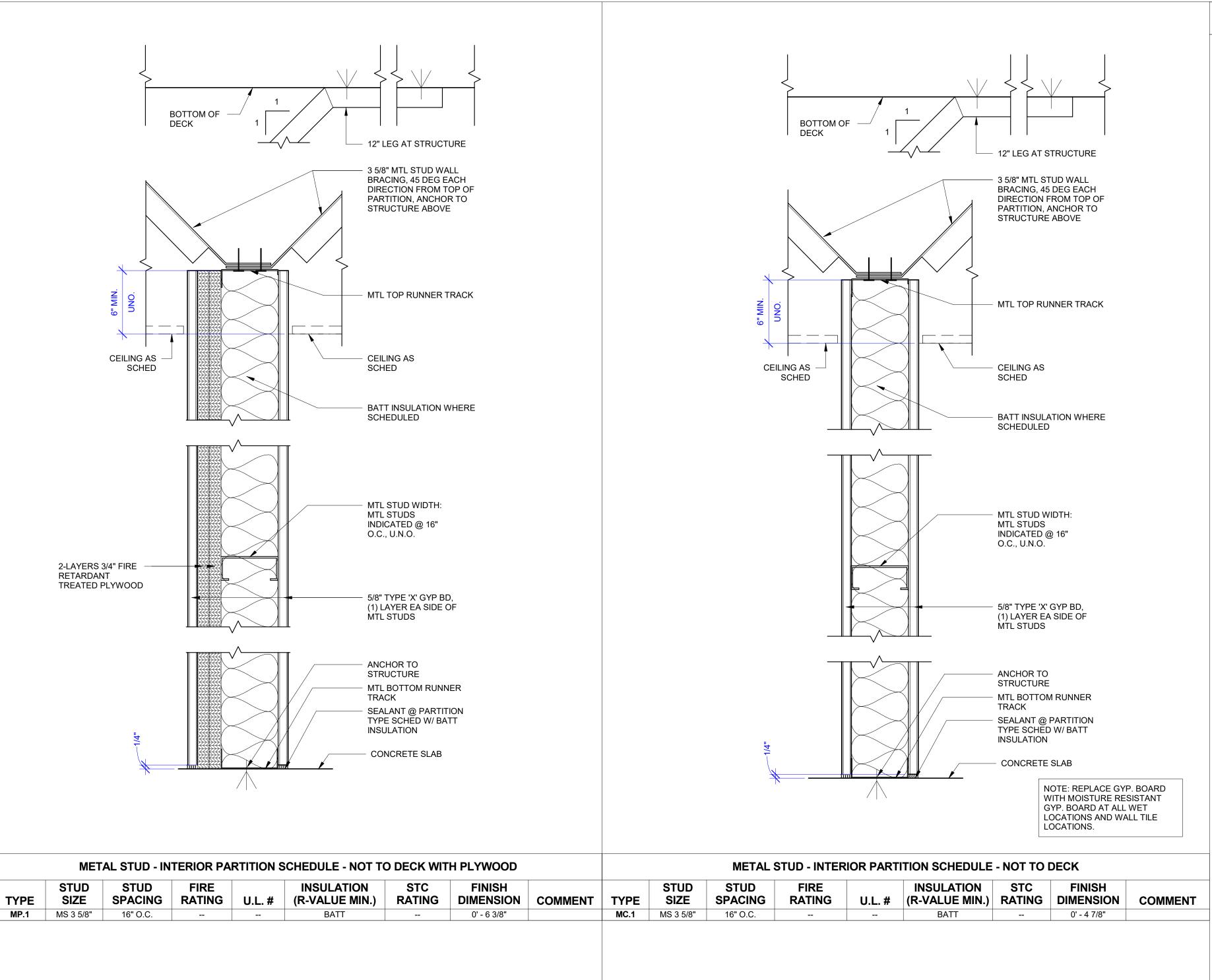
PROJECT NUMBER

05/30/24

WINDOW & STOREFRONT SCHEDULE

A802

STOREFRONT ELEVATIONS					
6' - 9"  EQ EQ  GL-1 GL-1  FINISH FLOOR	BUTT JOINT  GL-2  GL-2  WINDOW FILM, WF-01  RE: FINISH SCHEDULE	7' - 10" 1' - 10" 3' - 0" 3' - 0"  GL-2  GL-2  GL-2			
A	В	C			



# ALL PENETRATIONS WITH CONT. FIRE RATED SEALANT. FULL HEIGHT OF PARTITION, U.N.O. - 1-HR. FIRE CAULKING, BOTH SIDES BOTTOM OF DECK MTL TOP RUNNER SLOTTED DEFLECTION TRACK, AS INDICATED ON REFERENCED DETAIL - MTL TOP RUNNER SLOTTED DEFLECTION TRACK, AS INDICATED ON REFERENCED DETAIL - 3 5/8" MTL STUD WALL BRACING, 45 DEG EACH DIRECTION FROM TOP OF PARTITION, ANCHOR TO STRUCTURE ABOVE, PROVIDE ON ONE SIDE WHERE REQUIRED DUE TO CEILING CONDITIONS. - MTL STUDS AS SCHEDULED MTL STUDS AS SCHEDULED 5/8" GYP BD, (1) LAYER 5/8" GYP BD, (1) LAYER EA SIDE OF MTL STUDS

#### GENERAL PARTITION NOTES

- 1. REFER TO FINISH SCHEDULE FOR APPLIED FINISHES TO BOTH SIDES OF WALLS.
- 2. REFER TO BRACING DETAILS FOR SUPPORT OF THE TOP OF EACH PARTITION TYPE AND BRACING OF PARTITIONS THAT EXCEED THE LIMITING HEIGHT OF PARTITION TYPES.
- 3. MOISTURE RESISTANT CEMENT BOARD TO BE INSTALLED ON ALL 'WET WALLS' AND WALLS WITH TILE.

#### **INTERIOR METAL STUD PARTITION NOTES:**

- 1. ALL METAL STUD PARTITIONS SHALL BE 25 GAUGE METAL STUDS AT 16" O.C. U.N.O. IF THE LIMITING HEIGHT FOR A 25 GUAGE STUD PARTITION IS EXCEEDED, INCREASE GUAGE OF STUDS. NOTIFY ARCH. PRIOR TO INSTALLATION.
- 2. PROVIDE 20 GUAGE METAL STUDS, IN LIEU OF 25 GUAGE METAL STUDS, AT STUD WALL WITH TILE FINISHES.
- 3. METAL STUDS PARTITION BRACING.
- A. WHERE BRACING METHODS BETWEEN THIS SHEET AND STRUCT. CONFLICT, STRUCT. SHALL OVERRIDE, NOTIFY ARCH. PRIOR TO INSTALLATION. B. PROVIDE INTERMEDIATE BRACING AT ALL METAL STUD PARTITIONS THAT EXCEED THE VERTICAL LIMIT HEIGHT OF METAL STUDS. C. ALL BRACING SHALL BE AT STUD POINTS.
- RIDGELY BRACE ALL DOOR FRAMES AT THE HEAD, HINGE, AND STRIKE SIDES, RIGIDLY BRACE ALL WINDOW FRAMES AT THE HEAD, JAMBS, AND SILL.
- 5. LOCATE CONTROL JOINTS IN GYPSUM BOARD PARTITIONS AS FOLLOWS:
- A. PARTITIONS OR FURRINGS EXCEEDING 30'-0" SPANS HORIZ. OR VERT.
- B. WHERE A PARTITION ABUTS A STRUCTURAL ELEMENT OR DISSIMILAR WALL.
- C. AT CHANGES WITHIN PLANE OR PARTITION.
- D. AT EXPANSION JOINTS.
- E. AT BOTH JAMBS OF INTERIOR AND EXTERIOR DOOR FRAMES AND WINDOW FRAMES, ABOVE AND BELOW FOR FULL HEIGHT OF WALL.
- 6. FIRE RATED PARTITIONS:
- A. REFER TO THE UL FIRE RESISTANCE DIRECTORY FOR DETAILED DESCRIPTIONS OF FIRE RATED PARTITIONS.
- B. PROVIDE TYPE 'X' FIRE RESISTIVE GYPSUM BOARD 5/8" THICK, U.N.O.
- C. FILL ALL GAPS AND DECK VOIDS WITH CONT. FIRESAFING INSULATION.
- D. SEAL BOTTOM OF PARTITION ON BOTH SIDES, PARTITION PERIMETER, AND
- PARTITIONS WITH SOUND ATTENUATION BATT INSULATION BLANKETS:
- A. PROVIDE FULL THICK SOUND ATTENUATION BATT INSULATION BLANKETS
- B. FILL ALL GAPS AND DECK VOIDS WITH CONT. SOUND ATTENUATION SAFING INSULATION
- C. TAPE AND BED OR CAULK ALL JOINTS BETWEEN GYPSUM BOARD PANELS.
- D. SEAL BOTTOM OF PARTITION ON BOTH SIDES, PARTITION PERIMETER, AND ALL PENETRATIONS WITH CONT. ACOUSTICAL SEALANT (USE SEALANT INDICATED IN ITEM ABOVE, IN LIEU OF ACOUSTICAL SEALANT, AT PARTITIONS DESIGNATED AS FIRE-RATED PARTITIONS)



#### PROJECT TEAM

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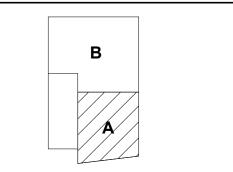
DESCRIPTION

**SEAL / SIGNATURE** 



05/30/24

**KEY MAP** 



PROJECT STATUS **ISSUE FOR PERMIT** 

**PROJECT NAME** 

SUPER KIDS DENTAL

PROJECT ADDRESS 6707 E RIVERSIDE DRIVE, UNIT 201

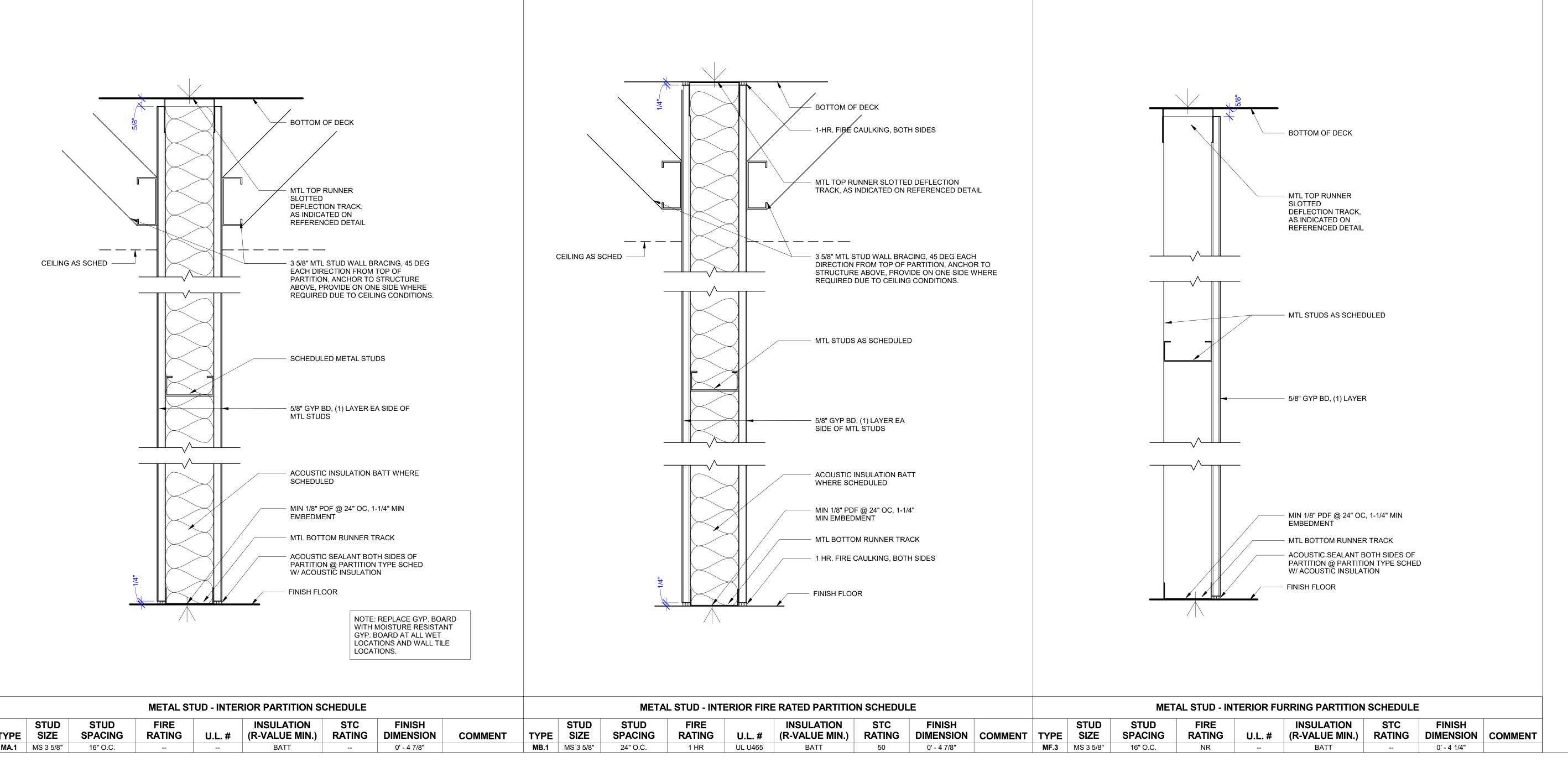
AUSTIN, TX 78741

PROJECT NUMBER

DATE 05/30/24

> WALL PARTITION SCHEDULE

> > A811





IA - OVERALL FINISH FLOOR PLAN - LEVEL 1
SCALE: 3/8" = 1'-0"





PROJECT TEAM

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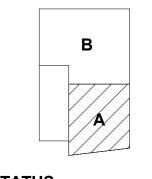
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AUSTIN, TX 78741

PROJECT NUMBER

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FINISH FLOOR PLAN -AREA A - LEVEL 1

IA211

	G	<b>ENERAL</b>	- ROOM	FINIS	SH SCHEDU	JLE
ROOM NAME	RM#	WALL FINISH	FLOOR FINISH	CEILING FINISH	BASE FINISH	NOTES
LEVEL 2						
WAITING ROOM	100	PT-01	LVT-01	GYP	RB-01	
RECEPTION	101	PT-01	LVT-01	GYP	RB-01	
RESTROOM	102	PT-01, WTL-01, WTL-02	FTL-01	GYP	WTL-01, WTL-02	
CONSULT	103	PT-01	LVT-01	ACT	RB-01	
IT	104	PT-01	LVT-01	GYP	RB-01	
X-RAY	105	PT-01	LVT-01	ACT	RB-01	
STORAGE	106	PT-01	LVT-01	ACT	RB-01	
MED GAS	106A	PT-01	LVT-01	GYP	RB-01	
HYGIENE STATIONS	107	PT-01	LVT-01	ACT	RB-01	
STERILIZATION	108	PT-01	LVT-01	ACT	RB-01	
WASHER/DRYER	108A	PT-01	LVT-01	GYP	RB-01	
OFFICE	109	PT-01	LVT-01	ACT	RB-01	
OP ROOM 1	110	PT-01, PT-04	LVT-01	ACT	RB-02	
LAB	111	PT-01	LVT-01	ACT	RB-01	
OP ROOM 2	112	PT-01, PT-03	LVT-01	ACT	RB-02	
SURGICAL SUITE	113	PT-01, PT-02	LVT-01	ACT	RB-02	
BREAK ROOM	114	PT-01	LVT-01	ACT	RB-01	
MECH.	115	PT-01	LVT-01	ACT	RB-01	
CORRIDOR	116	PT-01	LVT-01	GYP	RB-01	

			FINIS	SH LEGE	ND	
ITEM:	MANUFACTURER:	DESCRIPTION:	COLOR:	SIZE:	LOCATION:	NOTES:
				LVT		
_VT-01	MANNINGTON	FIELD LVT	STRUCTURE- POINT	12" X 24"	@ ALL FLOORS	TBD
				TILE		
FTL-01	DALTILE	RESTROOM FLOOR TILE	PORTFOLIO-WHITE	24" X 24"	RESTROOM FLOOR	TBD
WTL-01	AMERICAN OLEAN	RESTROOM WALL TILE	COLOR STORY- ICE WHITE	3"X 6"	RESTROOM WALLS (FIELD TILE)	VERTICAL STACK PATTERN
WTL-02	AMERICAN OLEAN	RESTROOM ACCENT WALL TILE	COLOR STORY- GREEN APPLE	3"X 6"	RESTROOM WALLS (ACCENT TILE)	VERTICAL STACK PATTERN
WTL-03	DALTILE	COFFEE BAR ACCENT WALL TILE	KEYSTONES-ARCTIC WHITE- HEXAGON	1.5" X 1.5"	UPPER COFFEE BAR WALL	TBD
NTL-04	DALTILE	COFFEE BAR ACCENT WALL TILE (2)	KEYSTONES-SEA BREEZE- HEXAGON	1.5" X 1.5"	LOWER COFFEE BAR WALL	TBD
			FLOOR	TRANSITION		
FTR-01	SCHLUTER	FLOOR TRANSITION STRIP	SCHIENEPROFILE- TBD	TBD	BETWEEN HALLWAY AND RESTROOM	COLOR TO MATCH BATHROOM FIXTURES
				BASE		
RB-01	TARKETT	RUBBER BASE	GRAY HAZE	4"	@ ALL WALLS EXCLUDING SURGICAL SUITE, OP ROOM 1 & 2	TBD
RB-02	TARKETT	RUBBER BASE	GRAY HAZE	6"	@ SURGICAL SUITE, OP ROOM 1 & OP ROOM 2.	TBD
				PAINT		
PT-01	SHERWIN WILLIAMS	FIELD PAINT	SW 7009 PEARLY WHITE	N/A	@ ALL WALLS BESIDES INDICATED.	TBD
PT-02	SHERWIN WILLIAMS	SURGICAL SUITE ACCENT WALL/ PLAY AREA NOOK	SW 6508 SECURE BLUE	N/A	SURGICAL SUITE ACCENT WALL AND PLAY AREA NOOK	TBD
PT-03	SHERWIN WILLIAMS	OP ROOM 2 ACCENT WALL/ PLAY AREA NOOK	SW 6689 OVERJOY	N/A	OP ROOM 2 ACCENT WALL AND PLAY AREA NOOK	TBD
PT-04	SHERWIN WILLIAMS	OP ROOM 1 ACCENT WALL/ PLAY AREA NOOK	SW 9030 LIMON FRESCO	N/A	OP ROOM 1 ACCENT WALL AND PLAY AREA NOOK	TBD
PT-05	SHERWIN WILLIAMS	HOLLOW METAL DOORS AND FRAMES	SW 7029 AGREEABLE GRAY	N/A	OP ROOM 1 ACCENT WALL AND PLAY AREA NOOK	TBD
			W	INDOW FILM		
WF-01	NATIONAL WALLCOVERING	WINDOW FILM	CONFETTI STANDARD REPEAT LSWF017	IN/A	OFFICE CURTAIN WALL	PATTERN TO EXTEND TO BOTTOM OF GLASS CURTAIN WALL.
			PLAS	STIC LAMINAT		
PLAM-01	WILSONART	PLASTIC LAMINATE COUNTERTOPS	WHITE CARRERA	N/A	AT BREAKROOM, OFFICE, STERILIZATION, X-RAY, AND RECEPTION MILLWORK.	TBD
PLAM-02	WILSONART	PLASTIC LAMINATE UPPER CABINETS	VAPOR STRANDZ	N/A	AT ALL MILLWORK UPPER CABINETS.	TBD
PLAM-03	ARBORITE	PLASTIC LAMINATE LOWER CABINETS	WILLOW GRAY	N/A	AT ALL MILLWORK LOWER CABINETS, DOOR PANELS	TBD
PLAM-04	NEVAMAR	PLASTIC LAMINATE HEXAGON WALL (1)	SUNKEN TREASURE	N/A	ON THE INTERIOR OF HEXAGON SHAPES, WITH	TBD
PLAM-05	NEVAMAR	PLASTIC LAMINATE HEXAGON WALL (2)	HONEY PLANTAIN	N/A	ON THE INTERIOR OF HEXAGON SHAPES, WITH CORRESPONDING COLOR.	TBD
PLAM-06	NEVAMAR	PLASTIC LAMINATE HEXAGON WALL (3)	PEAR GREEN	N/A	ON THE INTERIOR OF HEXAGON SHAPES, WITH CORRESPONDING COLOR.	TBD
			SOLID SI	URFACE COU		
SS-01	PORCELANOSA HOUSTON	SOLID SURFACE COUNTERTOP	POLAR STONE	N/A	AT OP 1 AND 2, SURGICAL SUITE, HYGINE STATIONS, AND LAB MILLWORK.	TBD
			LIGH	ITING FIXTUR	ES	
LF-01	LAI HOUSTON- LUMENWORX	RIM HEXAGON PENDANT	WHITE	36 5/8"	WAITING ROOM	TBD
LF-02	LAI HOUSTON- LUMENWORX	RIM HEXAGON PENDANT	WHITE	24 5/8"	WAITING ROOM	TBD
LF-03	LAI HOUSTON- LEVITON	3.5" DOWNLIGHT PENDANT	WHITE	3.5"	ABOVE RECEPTION DESK	TBD
			cus	HION FABRIC		
=B-01	MOMENTUM	CUSHION FABRIC	LAKE	N/A	HYGINE STATION BENCHES	TBD

#### FINISH PLAN GENERAL NOTES

- 1. PROVIDE MOISTURE RESISTANT GYPSUM BOARD IN WET AREAS WITH HIGH MOISTURE CONTENT, I.E. RESTROOMS. PROVIDE WATER-RESISTANT GYPSUM BACKING BOARD AS A BASE FOR ANY WALL AND CEILING TILE OR WALL AND CEILING PANELS IN WET AREAS. CORROSION-RESISTANT FASTENERS TO BE USED IN WET AREAS AS WELL.
- 2. ALL FLOORING FINISH TRANSITIONS TO BE MADE AT CENTERLINE OF DOORS AND CASED OPENING FRAMES, UNLESS OTHERWISE SHOWN. PROVIDE RUBBER FLOOR TRANSITION STRIP BETWEEN CPT AND LVT /TILE AND LVT/CPT & CONCRETE; UNLESS NOTED OTHERWISE. SUBMIT SAMPLE FOR ARCHITECT'S APPROVAL. REFER TO THE ACCESSIBILITY INFORMATION SHEET PROVIDED FOR ADDITIONAL TRANSITION REQUIREMENTS.
- 3. CONTRACTOR TO INSTALL ACCESSORIES AS DIRECTED BY DESIGNER AND/OR OWNER.
- 4. ALL CASING CORNERS TO BE MITERED, U.N.O.
- 5. ALL DIMENSIONS TO FINISHED FACE OF PARTITIONS, U.N.O.
- 6. ANY DESIRED SUBSTITUTIONS MUST BE SUBMITTED IN WRITING TO THE OWNER COMPLETE WITH SAMPLES, TECHNICAL INFORMATION AND PRODUCT LITERATURE. THE OWNER RESERVES THE RIGHT TO REJECT A REQUESTED SUBSTITUTION FOR ANY REASON. ANY UNAUTHORIZED SUBSTITUTION SHALL BE REPLACED BY THE REASONABLE PARTY AT NO COST TO THE OWNER OR DESIGNER.
- 7. ALL INSTALLATIONS SHALL CONFORM WITH THE INDUSTRY STANDARDS AND FOLLOW RECOMMENDATIONS AND STANDARDS SET FORTH BY THE MANUFACTURERS.
- 8. PAINTING CONTRACTOR SHALL REFERENCE FINISH SCHEDULE FOR EXACT PRODUCT DESCRIPTION AND INSTALLATION METHOD/ MATERIALS/ SURFACE PREPARATION. PRIOR TO APPLICATION, SUBMIT FINISH SAMPLES TO OWNER FOR APPROVAL PRODUCT MINIMUM OF TWO COATS OF PAINT OR COAT-TO-COVER DEPENDING UPON SUBSTRATE CONDITION. FOR SPECIAL MAINTENANCE FINISH COATINGS CONTRACTOR SHALL TAKE CARE TO FOLLOW MANUFACTURER'S APPLICATION AND SURFACE PREPARATIONS EXACTLY.
- 9. TRIM, CASINGS AND DOORS TO BE PAINTED AS NOTED IN THE FINISH SCHEDULE ON IA003. 10. PROVIDE BALI ALUMINUM HORIZONTAL BLINDS AT ALL EXTERIOR WINDOWS.



**PROJECT TEAM** 

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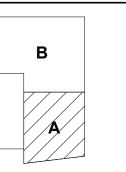
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PROJECT STATUS

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SUPER KIDS DENTAL

PROJECT ADDRESS

6707 E RIVERSIDE DRIVE, UNIT 201 AUSTIN, TX 78741

PROJECT NUMBER

05/30/24

FINISH SCHEDULES

IA901

# MECHANICAL SPECIFICATIONS

- I. THE CONTRACTOR SHALL PROVIDE A COMPLETE AND FUNCTIONAL AIR CONDITIONING SYSTEM. ALL APPURTENANCES REQUIRED BUT NOT SHOWN SHALL BE PROVIDED.
- 2. THE CONTRACTOR SHALL COORDINATE WITH OTHER DISCIPLINES. ALL VOLTAGES AND POWER REQUIREMENTS SHALL BE COORDINATED WITH THE ELECTRICAL CONTRACTOR.
- 3. THE EXHAUST FANS SHALL BE MANUFACTURED BY COOK, GREENHECK, OR ACME.
- 4. DUCTWORK SHALL BE GALVANIZED SHEETMETAL CONSTRUCTED TO SMACNA STANDARDS FOR 2" WG PRESSURE. EXHAUST DUCTS SHALL BE CONSTRUCTED TO 2" NEG. PRESSURE. SEAL ALL SEAMS IN THE DUCT WITH HARDCAST IRON GRIP UNLESS OTHERWISE INDICATED.
- 5. SUPPLY, RETURN AND EXHAUST DUCTWORK SHALL BE EXTERNALLY WRAPPED WITH 1-1/2" MINIMUM DUCT INSULATION. THE INSULATION SHALL BE MANUFACTURED BY OWENS CORNING, SCHULLER, KNAUF, OR CERTAINTEED. THE INSTALLED R-VALUE OF THE INSULATION SHALL BE 6.0 OR BETTER WITH VAPOR BARRIER. THE INSULATION SHALL BE STAPLED ON 6" CENTERS AND SEALED WITH PRESSURE SENSITIVE TAPE. THE R-VALUE MUST BE INDICATED ON THE EXTERIOR SIDE OF THE INSULATION FOR THE CITY INSPECTOR TO VERIFY.
- 6. THE AIR DEVICES SHALL BE MANUFACTURED BY TITUS, KRUEGER OR NAILOR.
- 7. FLEXIBLE DUCTWORK TO BE INSULATED WITH R-6 INSULATION. INSULATION SHALL BE UL 181 LABELED. PROVIDE WITH 1" OVERLAP. INSTALL AND SUPPORT PER MANUFACTURERS INSTRUCTIONS. INSULATED FLEXIBLE DUCTWORK TO BE 20/50 RATED FOR SMOKE AND FLAME.

#### MECHANICAL CONTRACTOR NOTES

CONTRACTOR TO BE AWARE OF OBSTRUCTIONS AND BE PREPARED TO OFFSET DUCT AND PIPING BOTH VERTICALLY AND HORIZONTALLY TO ROUTE MECHANICAL SYSTEM. CONTRACTOR SHALL MAINTAIN FREE AREA OF DUCTWORK. CONTRACTOR SHALL SUBMIT RFI'S FOR ALL CHANGES PRIOR TO INSTALLATION. CONTRACTOR SHALL REFER TO DETAILS FOR DETAILED INSTALLATION INSTRUCTION.

	SYMBOL LEGEND
SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
GENERAL	
<b>#</b>	KEY NOTE TAG
<b>#</b>	NOTE SPECIFIC TO DETAIL TAG
<b>#</b>	REVISION TAG
	NEW EQUIPMENT
DUCTWORK	<
	SUPPLY AIR DUCTWORK
	RETURN AIR AND OUTSIDE AIR DUCTWORK
	EXHAUST AIR DUCTWORK
~	FLEXIBLE DUCTWORK
	SUPPLY AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	RETURN AIR AND OUTSIDE AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	EXHAUST AIR DUCTWORK THROUGH HORIZONTAL PARTITION
<b>A</b>	FIRE DAMPER (VERTICAL)
	MANUAL BALANCING DAMPER (SEE DAMPER SCHEDULE)
	MOTORIZED DAMPER (SEE DAMPER SCHEDULE)
SENSORS	
①	THERMOSTAT AND TEMPERATURE SENSOR
$\oplus$	HUMIDISTAT
S	SMOKE DETECTOR
AIR DEVIC	ES
<del>-</del>	GRILLE SIZE TAG (REFER TO GRILLE SIZE LEGEND)
$\boxtimes$	SUPPLY AIR GRILLE WITH FOUR-WAY THROW
4	RETURN AIR GRILLE WITH SOUND BOOT
	EXHAUST AIR GRILLE
PIPING	
—D—	CONDENSATE DRAIN LINE

LOCATION OF THRU-WALL LOUVERS, VENTS, ETC. SHALL BE COORDINATED WITH EXISTING BUILDING EQUIPMENT AND SHALL BE PAINTED TO MATCH WALL FINISH.

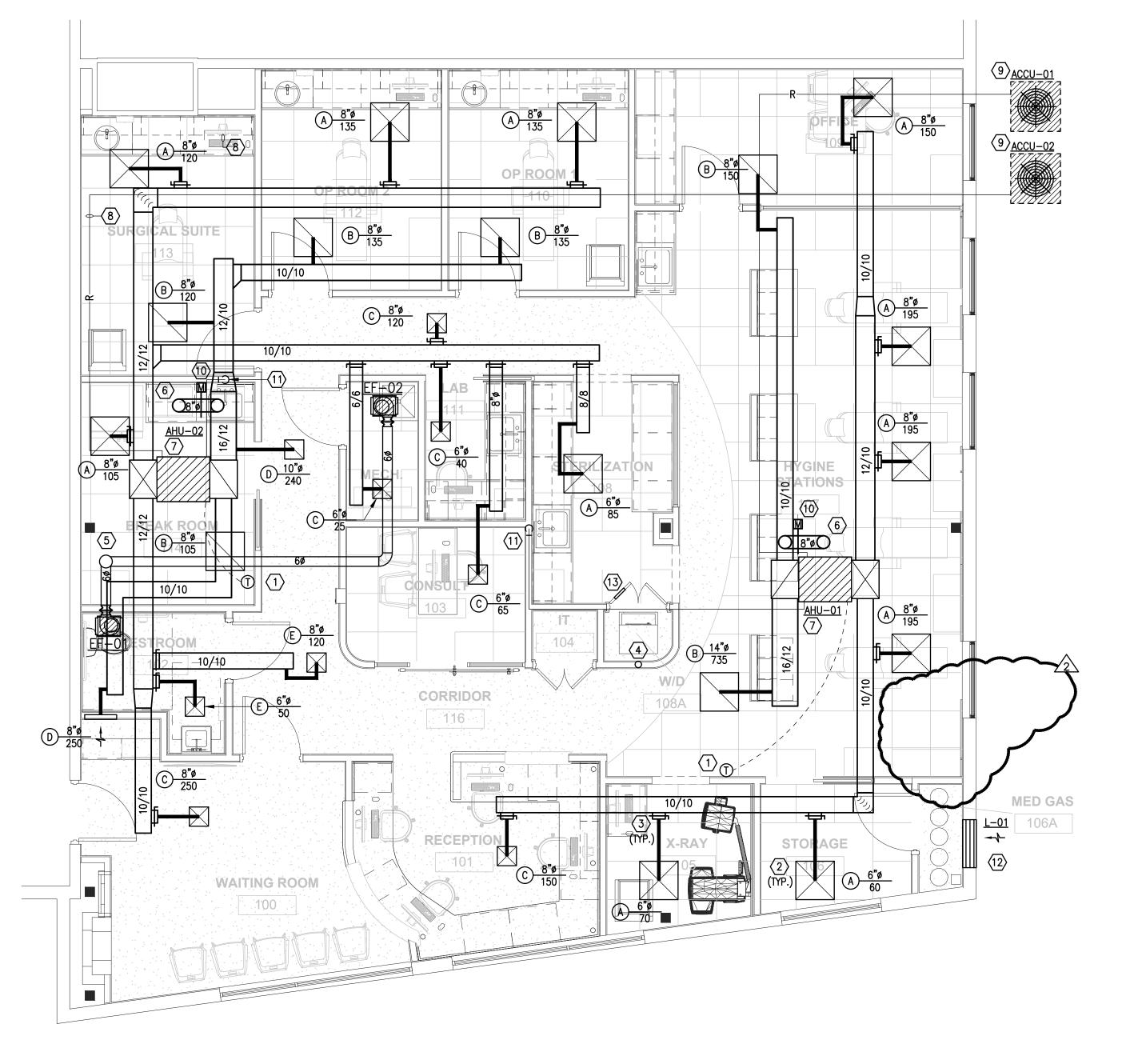
CONDENSATE DRAIN SIZING SCHEDULE					
PIPE DIA.	EQUIPMENT CAPACITY				
3/4"ø	UP TO 5 TONS				
1"ø	OVER 5 TONS TO 25 TONS				
1-1/4 <b>"</b> ø	OVER 25 TONS TO 60 TONS				
1-1/2 <b>"</b> ø	OVER 60 TONS TO 100 TONS				
2 <b>"</b> ø	OVER 100 TONS TO 200 TONS				

RETURN FLEX DUCT SIZING SCHEDULE					
SIZE	AIRFLOW (CFM)				
4"ø	0 - 50				
6 <b>"</b> ø	50 - 100				
8"ø	100 - 200				
10 <b>"</b> ø	200 - 300				
12 <b>"</b> ø	300 - 400				
14 <b>"</b> ø	400 - 500				
16 <b>"</b> ø	600 - 700				

# MECHANICAL CONTRACTOR NOTES

CONTRACTOR TO BE AWARE OF OBSTRUCTIONS AND BE PREPARED TO OFFSET DUCT AND PIPING BOTH VERTICALLY AND HORIZONTALLY TO ROUTE MECHANICAL SYSTEM. CONTRACTOR SHALL MAINTAIN FREE AREA OF DUCTWORK. CONTRACTOR SHALL SUBMIT RFI'S FOR ALL CHANGES PRIOR TO INSTALLATION. CONTRACTOR SHALL REFER TO DETAILS FOR DETAILED INSTALLATION INSTRUCTION.

SUPP	LY DIFFUSER NECK
SI	ZING SCHEDULE
SIZE	AIRFLOW (CFM)
4"ø	0 - 50
6 <b>"</b> ø	50 - 100
8"ø	100 - 210
10 <b>"</b> ø	210 - 380
12 <b>"</b> ø	380 - 500
14"ø	500 - 700
16 <b>"</b> ø	700 – 800



# 1 MECHANICAL FLOOR PLAN SCALE: 1/4" = 1'-0"

DIFFUSER/GRILLE TYPE

FLEX DUCT/NECK SIZE

AIR VOLUME – CFM

NOTE: PROVIDE R-6 FACTORY MANUFACTURED INSULATION ON BACK PAN FOR ALL CEILING MOUNTED AIR DEVICES

#### MECHANICAL GENERAL NOTES:

- CODES, RULES AND REGULATIONS DESIGN OF SYSTEM
   A) ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES AND CODES.
- B) WHEN THE DRAWINGS CALL FOR MATERIALS OR CONSTRUCTION OF A BETTER QUALITY OR LARGER SIZES THAN REQUIRED BY THE ABOVE MENTIONED CODES AND RULES, WORK SHALL BE AS SPECIFIED OR SHOWN RATHER THAN AS REQUIRED BY CODE. ALL ITEMS OR FEATURES OF THE MECHANICAL SYSTEMS REQUIRED BY CODE SHALL BE
- INCLUDED, EVEN THOUGH NOT SPECIFIED HEREIN.

  C) INSTALLATION OF THE SYSTEMS SHALL BE IN ACCORDANCE WITH THE ABOVE MENTIONED CODES AND REGULATIONS AND ALSO SHALL CONFORM TO GOOD, ACCEPTED MECHANICAL PRACTICES.
- 2. COORDINATE EXACT LOCATION OF ALL AIR OUTLETS AND INLETS
  (DIFFUSERS, REGISTERS AND GRILLES) WITH APPROPRIATE
  ARCHITECTURAL PLAN, AND VERIFY THEIR LOCATION WITH ARCHITECT ON
  THE JOB SITE BEFORE INSTALLATION. COLOR AS DIRECTED BY OWNER.
- 3. AUTOMATIC TEMPERATURE CONTROL DEVICE FOR REGULATION OF SPACE TEMPERATURE SHALL BE CAPABLE OF BEING SET FROM 55 TO 85°F, AND HAVE THE ABILITY TO OPERATE THE HEATING AND COOLING IN SEQUENCE. CONTROL SHALL BE ADJUSTABLE TO PROVIDE A RANGE OF UP TO 5°F BETWEEN FULL HEATING AND FULL COOLING AND HAVE CAPABILITY OF TERMINATING ALL HEATING AT A TEMPERATURE NO MORE THAN 70°F, AND COOLING AT A TEMPERATURE NOT LESS THAN 78°F.
- 4. APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE FASTENED IN PLACE.
- 5. A MAINTENANCE LABEL SHALL BE AFFIXED TO MECHANICAL EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED FOR THE OWNERS USE.
- PROVIDE MIN. 10'-0" SEPARATION BETWEEN POINT OF EXHAUST AND ANY FRESH AIR INTAKE, OR A/C UNIT OSA INTAKE.
- ALL DUCT SIZES SHOWN ON THE FLOOR PLANS ARE CLEAR INSIDE DIMENSIONS. CONTRACTOR SHALL ENLARGE DUCT SIZE IN ORDER TO ACCOMMODATE LINING INSIDE OF DUCT IF REQUIRED.
- 8. THE MECHANICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS AND FEES.
- THE PROJECT SHALL BE AIR BALANCED AND A COPY OF THE FINAL REPORT SHALL BE PRESENTED TO THE OWNER.
- 10. ALL EQUIPMENT AND APPLIANCES ARE LISTED PRODUCTS, AND WILL BE INSTALLED ACCORDING TO THEIR LISTING, AND ALL LISTING INFORMATION WILL
- BE AVAILABLE FOR INSPECTION.

  11. DUCTWORK CONSTRUCTION DETAILS:
- A) MATERIAL: INSULATED DUCTBOARD (R-8) OR FLEX DUCT.
   12. REFER TO DETAILS OR GUIDELINES FOR MECHANICAL CONSTRUCTION REQUIRMENTS. INSTALL IN FULL ACCORDANCE WITH PROPER CODES AND
- GUIDELINES.

  13. COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND
- (ARCHITECTUAL) REFLECTED CEILING PLAN.

  14. ALL EXTERIOR BRACKETS, CLAMPS, AND HANGERS SHALL BE HOT
- DIPPED GALVANIZED. COAT ALL CUT ENDS AND WELDS WITH "ZRC" COLD GALVANIZING COMPOUND.
- 15. SHOP PRIME ALL MISCELLANEOUS INTERIOR BRACKETS AND HANGERS UNLESS GALVANIZED OR STAINLESS STEEL.
- 16. 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 LOCATION AND PERFORMANCE DATA ON EACH PIECE OF EQUIPMENT, GENERAL CONFIGURATION OF DUCT AND PIP DISTRIBUTION SYSTEM INCLUDING SIZES, AND THE TERMINAL AIR OR WATER DESIGN FLOW RATES.
- 17. A OPERATING MANUAL AND A MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE. THESE MANUAL 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.
   b) OPERATING MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE, EXCEPT EQUIPMENT NOT FURNISHED AS
- PART OF THE PROJECT.

  c) EVERY 12 MONTHS THE EQUIPMENT SHALL BE SERVICED BY A LICENSED
- MECHANICAL CONTRACTOR.

  18. (PIPE INSULATION) PIPING SHALL BE THERMALLY INSULATED IN ACCORDANCE WITH TABLE 6.8.3. EXCEPTIONS:

  a) FACTORY—INSTALLED PIPING WITHIN HVAC EQUIPMENT TESTED AND RATED
- IN ACCORDANCE WITH 6.4.1.

  b) PIPING THAT CONVEYS FLUIDS HAVING A DESIGN OPERATING TEMPERATURE
- RANGE BETWEEN 60 F AND 105 F, INCLUSIVE.

  c) PIPING THAT CONVEYS FLUIDS THAT HAVE NOT BEEN HEATED OR COOLED THROUGH THE USE OF NONRENEWABLE ENERGY WHERE HEAT GAIN OR HEAT
- LOSS WILL NOT INCREASE ENERGY USAGE.

  d) HOT WATER PIPING BETWEEN THE SHUTOFF VALVE AND THE COIL, NOT EXCEEDING 4 FT IN LENGTH, WHEN LOCATED IN CONDITIONED SPACES.

  e) PIPE UNIONS IN HEATING SYSTEMS (STEAM, STEAM CONDENSATE, AND HOT
- 19. FACTORY-MADE FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH. (2021 UMC 603.4.1)
- 20. OPENINGS BETWEEN THE 1-HOUR FIRE RATED ROOMS OR ENCLOSURES AND INTERIOR SPACES SHALL BE SELF-CLOSING SMOKE AND DRAFT CONTROL ASSEMBLIES HAVING A FIRE PROTECTION RATING OF NOT LESS THAN 1 HOUR.

#### MECHANICAL KEYED NOTES:

- PROVIDE WALL MOUNTED WIFI AND BACNET CAPABLE SEVEN DAY PROGRAMMABLE THERMOSTAT WITH AUTO—CHANGEOVER; RE: TO SCHEDULE NOTES. CONFIRM FINAL LOCATION AND HEIGHT WITH OWNER AND ARCHITECT. THERMOSTAT SHALL BE PROVIDED IN CLEAR, LOCKABLE ENCLOSURE.
- RE: 5/M301 FOR FLEX DUCT CONNECTION AT A SUPPLY AIR DIFFUSER DETAIL. (TYPICAL)
- 3 RE: 1/M301 FOR FLEXIBLE DUCT TAP DETAIL. (TYPICAL)
- (4) 5"Ø RIGID DRYER VENT DUCT WITH SMOOTH INTERIOR SURFACE FOR FULL LENGTH. TERMINATE AT ROOF WITH RAIN CAP W/ BACKDRAFT DAMPER. DRYER VENT MUST COMPLY WITH 2021 UMC.
- \$\sqrt{5}\ 8" EXHAUST AIR DUCT UP THROUGH ROOF TO EXHAUST HOOD/CAP ON ROOF.
- 6 OUTSIDE AIR DUCT UP TO ROOF. TERMINATE WITH ROOF RAIN VENT CAP. CONTRACTOR TO
- COORDINATE WITH OWNER FOR FINAL LOCATION.

  7 PROVIDE AIR HANDLING UNIT WITH ALL PROPER CLEARANCES FOR MAINTENANCE AND OPERATION. REFER TO MANUFACTURER FOR RECOMMENDATIONS. PROVIDE AIR HANDLING UNIT WITH 3" DEEP GALVANIZED AUXILIARY DRAIN PAN. AUXILIARY DRAIN PAN SHALL BE 3" LARGER
- THAN AIR HANDLING UNIT ON ALL SIDES.

  8 SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE CONDENSING UNIT WITH ALL PROPER CLEARANCES FOR MAINTENANCE AND OPERATIOIN. REFER TO MANUFACTURER FOR RECOMMENDATIONS. PROVIDE CONDENSING UNIT WITH 4" THICK CONCRETE MAINTENANCE PAD. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ANY WORK BEING DONE.
- PROVIDE MOTORIZED VOLUME DAMPER (MVD) IN OUTSIDE AIR DUCT. MVD TO INTERLOCK WITH ASSOCIATED AIR HANDLER SUCH THAT MVD IS 100% OPEN WHEN FAN IS ENERGIZED AND MVD IS 100% CLOSED WHEN FAN IS DE—ENERGIZED. ROUTE DUCT TO ROOF INTAKE HOOD RUSKIN PR OR APPROVED EQUIVALENT.
- ROUTE CONDENSATE DRAIN PIPE TO SINK TAIL PIECE.
  PROVIDE AND INSTALL PIPE SUPPORT ON 4'-0" CENTERS AND IN
  EVERY CHANGE IN DIRECTION. SLOPE PIPE TO PROVIDE PROPER DRAINAGE.
  INSULATE CONDENSATE PIPE AS SPECIFIED. REFER TO SPECIFICATIONS.
  PROVIDE A CLEAN OUT IN EVERY CHANGE OF DIRECTION.
- INSTALL TWO 30"W x 12"H RUSKIN #ELF6375DXD WALL INTAKE LOUVER OR APPROVED EQUIVALENT MOUNTED 6" BELOW THE FINISHED CEILING TO THE TOP OF LOUVER AS WELL AS 6" ABOVE FINISHED FLOOR HEIGHT. CONTROL DAMPER SHALL BE INTERLOCKED WITH ASSOCIATED EXHAUST FAN.
- (13) INSTALL 10"W x 10"H DOOR INTAKE LOUVER FOR DRYER MAKE UP AIR. COORDINATE EXACT LOCATION WITH ARCHITECT/ONWER PRIOR TO ROUGH-IN.



#### PROJECT TEAM

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TEXAS BOARD OF PROFESSIONAL ENGINEERS

FIRM REGISTRATION #: F-9072

EXPIRES: 31 MARCH 2025

#	DESCRIPTION	DATE
1	CITY OF AUSTIN RESPONSE #1	06/20/24

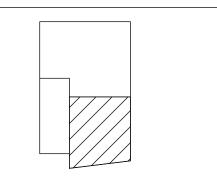
07/16/24

CITY OF AUSTIN RESPONSE #2

#### SEAL / SIGNATURE



#### KEY MAP



PROJECT STATUS

ISSUE FOR PERMIT

PROJECT NAME

SUPER KIDS DENTAL

PROJECT ADDRESS

6707 E RIVERSIDE DR., AUSTIN, TX 78741

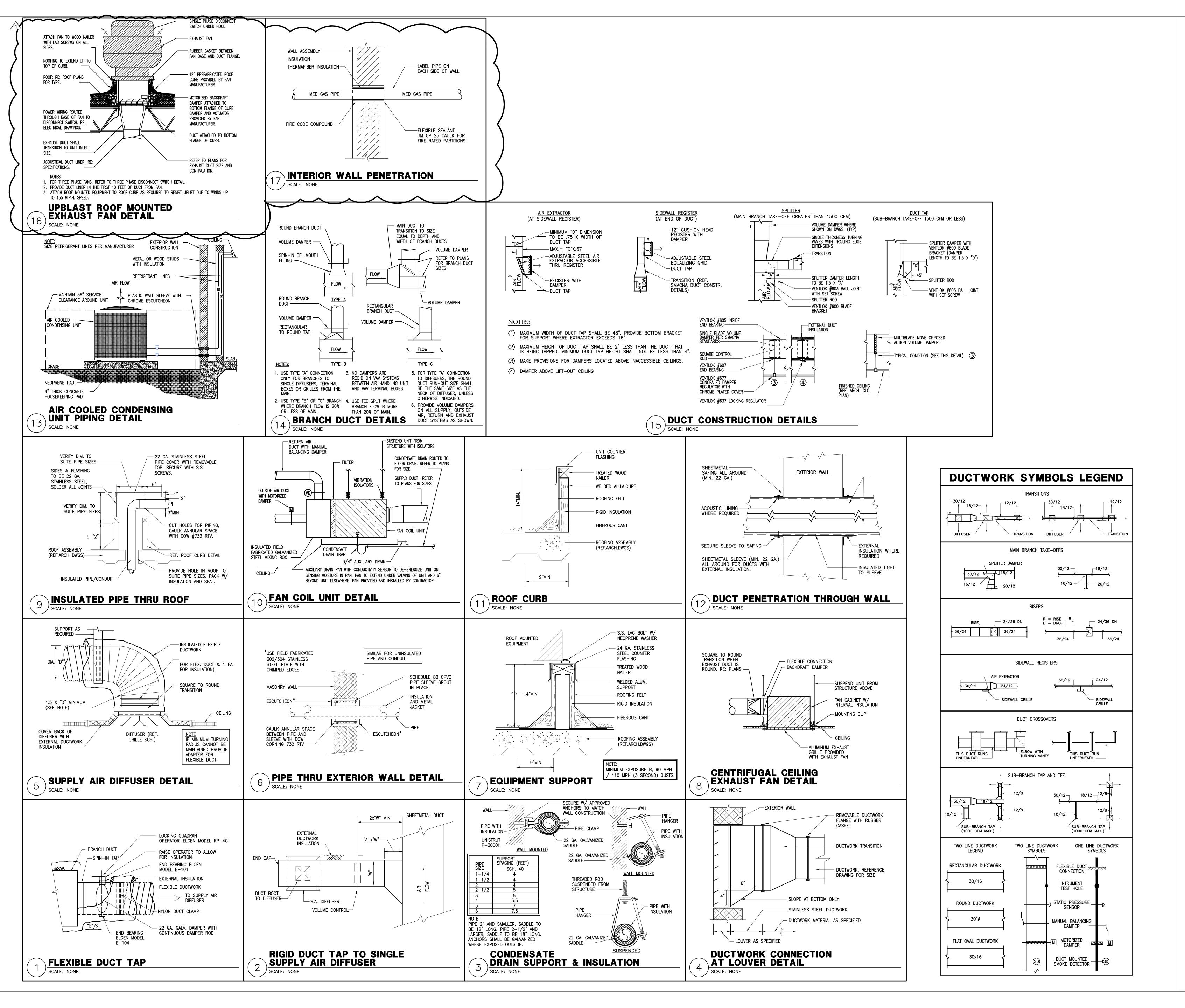
PROJECT NUMBER

4017 **DATE** 

23/24

MECHANICAL FLOOR PLAN

M101



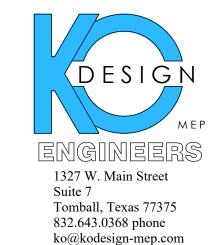


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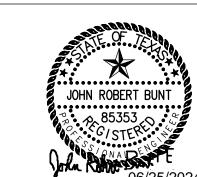
MEP K.O. DESIGN 1327 W MAIN STREET, SUITE 7 TOMBALL, TX 77375 (832) 643 0368



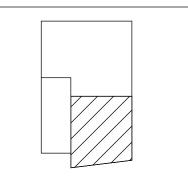
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION #: F-9072 EXPIRES: 31 MARCH 2025

#	DESCRIPTION	DATE
1	CITY OF AUSTIN RESPONSE #1	06/20/24

SEAL / SIGNATURE



KEY MAP



PROJECT STATUS

ISSUE FOR PERMIT

PROJECT NAME

SUPER KIDS DENTAL

PROJECT NAME
SUPER KIDS DENTAL
PROJECT ADDRESS
6707 E RIVERSIDE DR., AUSTIN, TX 78741

PROJECT NUMBER

24017 **DATE** 

MECHANICAL DETAILS

M201

#### **MECHANICAL SPECIFICATIONS**

#### GENERAL MECHANICAL REQUIREMENTS

- A. THE WORK OF THIS DIMSION CONSISTS OF PROMDING LABOR, MATERIALS, PRODUCTS, AND IN PERFORMING ALL OPERATIONS REQUIRED FOR THE COMPLETE OPERATING INSTALLATION OF ALL MECHANICAL AND PLUMBING SYSTEMS IN ACCORDANCE WITH THE SPECIFICATIONS AS WELL AS APPLICABLE DRAWINGS, TERMS, CONDITIONS OF THE CONTRACT AND ALL APPLICABLE CODES AND ORDINANCES GOVERNING THE INSTALLATION OF THE VARIOUS MECHANICAL AND PLUMBING SYSTEMS. ALL WORK SHALL BE FULLY CORRELATED WITH THE WORK OF OTHER CRAFTS.
- B. EACH CONTRACTOR SHALL STUDY THE CONTRACT DOCUMENTS TO DETERMINE THE EXTENT OF WORK PROMDED UNDER THIS CONTRACT AS WELL AS ASCERTAIN THE DIFFICULTY TO BE ENCOUNTERED IN PERFORMING THE WORK ON THE DRAWINGS AND OUTLINED HEREINAFTER AND IN MAKING CONNECTIONS TO EXISTING UTILITIES, INSTALLING NEW
- EQUIPMENT AND SYSTEMS AND COORDINATING THE WORK WITH THE OTHER TRADES. EXAMINATION OF THE SITE: THE CONTRACTOR SHALL THOROUGHLY EXAMINE SITE AND SATISFY HIMSELF AS THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL VERIFY. AT THE SITE, ALL MEASUREMENTS AFFECTING HIS WORK AND SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF THE SAME. NO EXTRA COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR EXPENSES DUE TO HIS NEGLECT TO EXAMINE OR FAILURE TO DISCOVER CONDITIONS WHICH AFFECT HIS WORK. NO EXTRA COMPENSATION WILL BE ALLOWED ON ACCOUNT OF DIFFERENCES BETWEEN ACTUAL DIMENSIONS AND THOSE INDICATED ON THE DRAWINGS.
- 1.2 REGULATORY REQUIREMENTS
- A. CODES AND ORDINANCES/PERMIT AND FEES: PERFORM ALL WORK IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND ORDINATES, THE CURRENT EDITION OF NFPA, THE INTERNATIONAL BUILDING CODE, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL PLUMBING CODE, AND ALL CURRENT SUPPLEMENTS THERETO, AND ANY OTHER AUTHORITIES
- HAVING JURISDICTION OVER THE WORK. PROCURE AND PAY FOR ALL PERMITS, LICENSES, FEES AND CHARGES, AND GIVE ALL NOTICES NECESSARY. B. IN CASE OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND REQUIREMENTS OF ANY CODE OR AUTHORITIES HAVING JURISDICTION, THE MOST STRINGENT REQUIREMENTS OF
- THE AFOREMENTIONED SHALL BE GOVERNED. C. SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE BUILDING CODES, STATE LAWS, AND LOCAL
- ORDINANCES AND INDUSTRY STANDARDS, HE SHALL BEAR ALL COSTS ARISING IN CORRECTING THE DEFICIENCIES, AS APPROVED BY THE ARCHITECT. D. INTENT: THE DRAWINGS SHOW GENERAL ARRANGEMENTS AND THE EXTENT OF THE WORK. THE DRAWINGS DO NOT SHOW, IN MINUTE DETAIL, ALL FEATURES OF THE INSTALLATION. FOLLOW THE DRAWINGS AS CLOSELY AS ACTUAL CONSTRUCTION WILL PERMIT. ALL MATERIAL AND LABOR NECESSARY TO COMPLETE THE WORK IN ACCORDANCE WITH THE INTENT OF THE SPECIFICATIONS AND DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR WITHOUT ADDITIONAL CHARGE. THE JOB SHALL BE BID AND INSTALLED COMPLETE AND CONSISTENT IN EVERY REQUEST.
- 1.3 COORDINATION OF WORK
- A. EACH CONTRACTOR SHALL COMPARE HIS DRAWINGS AND SPECIFICATIONS WITH THOSE OF OTHER TRADES. ALL WORK SHALL BE INSTALLED IN COOPERATION WITH ALL OTHER Trades installing interrelated work. Before installation, all trades shall make proper provisions to avoid interferences. B. EACH CONTRACTOR SHALL COORDINATE THE LOCATION OF HIS SYSTEMS TO THAT ALL OUTSIDE AIR INTAKES, PLUMBING VENTS, AND EXHAUST FANS ARE LOCATED IN SUCH A
- WAY AS TO PREVENT CROSS-CONTAMINATION. SUCH A DISTANCE SHALL BE NOT LESS THAN 10'-0"FT. C. LOCATIONS OF CONDUIT, DUCTS, PIPING, SPRINKLER HEADS AND EQUIPMENT SHALL BE ADJUSTED TO ACCOMMODATE THE WORK WITH INTERFERENCES ANTICIPATED AND
- ENCOUNTERED. EXACT ROUTING AND LOCATION OF SYSTEMS SHALL BE DETERMINED PRIOR TO FABRICATION OR INSTALLATION.
- D. OFFSETS AND CHANGES OF DIRECTION IN ALL CONDUIT, DUCTS AND PIPING SYSTEMS SHALL BE MADE AS REQUIRED TO MAINTAIN PROPER HEADROOM AND PITCH OF SLOPING
- 1.4 REGULATORY REQUIREMENTS
- A. COMPLY WITH ALL CURRENT LOCAL, STATE, AND NATIONAL CODES, INCLUDING THE AMERICANS WITH DISABILITIES ACT (MOST CURRENT EDITION) AND SECURE AND PAY FOR ALL APPLICABLE COSTS, FEES, PERMITS AND LICENSES. NO ADDITIONAL COSTS SHALL BE PAID BY THE OWNER FOR THESE ITEMS.
- B. Perform all work with highest regard to safety. Excavate by hand and with caution to locate all utilities in the bounds of the area to be excavated PRIOR TO MACHINE EXCAVATING. PROCEED WITH SAFETY AND CAUTION SO THAT NO UTILITY IS DAWAGED OR INTERRUPTED.
- C. PRIOR TO BID, VERIFY AND COORDINATE ALL REQUIRED CONNECTIONS AND/OR RELOCATIONS OF UTILITIES WITH UTILITY COMPANIES. PERFORM SUCH WORK IN ACCORDANCE WITH UTILITY COMPANY REGULATIONS. PAY ALL APPLICABLE FEES AND COSTS INCLUDING THOSE FOR ANY EXTENSIONS, RELOCATIONS AND/OR CONNECTIONS. D. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ABOVE GROUND AND MARKED UTILITIES.
- A. Submittals shall be complete for system(s) involved. Provide submittals for all hvac equipment.
- B. WHERE EQUIPMENT OF THE ACCEPTABLE MANUFACTURERS REQUIRE DIFFERENT ARRANGEMENT OR CONNECTIONS FROM THOSE SHOWN, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL THE EQUIPMENT TO OPERATE PROPERLY AND IN HARMONY WITH THE ORIGINAL INTENT OF THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL MAKE ALL NECESSARY CHANGES IN ALL AFFECTED RELATED WORK PROVIDED UNDER OTHER SECTIONS INCLUDING LOCATIONS OF ROUGH—IN CONNECTIONS BY OTHER TRADES, CONDUIT SUPPORTS, INSULATION, ETC. ALL CHANGES SHALL BE MADE AT NO INCREASE IN THE CONTRACT AMOUNT OR ADDITIONAL COSTS TO THE OTHER TRADES and/or owner.
- A. ALL EQUIPMENT AND WORK SHALL BE GUARANTEED FOR A PERIOD OF 12 MONTHS AFTER ACCEPTANCE. ANY DEFECTS IN EQUIPMENT OR WORKMANSHIP SHALL BE PROMPTLY REPAIRED OR REPLACED BY THE CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER. THE GUARANTEE PERIOD OF ANY PART OF THE REPAIRED ITEMS SHALL BE extended for a period of one year from the date of such repair or replacement.
- 1.7 COMPLETION
- A. UPON COMPLETION OF THE MECHANICAL INSTALLATION, DEMONSTRATE TO THE OWNER'S SATISFACTION THAT THE SYSTEMS HAVE BEEN INSTALLED IN A SATISFACTORY MANNER IN ACCORDANCE WITH THE PLANS AND APPLICABLE CODES. SHOW THAT ALL CONTROLS ARE OPERABLE AND ARE PROPERLY ADJUSTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FINAL SYSTEMS BALANCE, THAT ALL SYSTEMS ARE PROPERLY BALANCED, THAT ALL EQUIPMENT OPERATES PROPERLY, THAT FILTERS AND STRAINERS ARE CLEAN, AND THAT ALL COMPONENTS OF ALL SYSTEMS ARE INSTALLED AND ADJUSTED FOR PROPER OPERATION.

A. ALL MATERIALS SHALL BE NEW AND OF THE QUALITY SPECIFIED. MATERIALS SHALL BE FREE FROM DEFECTS. MANUFACTURERS SHALL BE AS SPECIFIED HEREIN, OR BY ADDENDA. ALL PIPING EQUIPMENT, ETC., WHICH NEEDS TO BE INSULATED TO CONSERVE HEAT OR COLD, OR TO PREVENT FREEZING OR CONDENSATION, SHALL BE INSULATED. ALL MATERIALS SHALL HAVE THE UNDERWRITERS LABORATORIES, INC. LABEL.

#### BASIC MECHANICAL METHODS

- 1.1 DIMENSION AND FIT A. CUT MATERIALS ACCURATELY FROM MEASUREMENTS TAKEN ON THE JOB SITE.
- B. DO NOT SPRING OR BEND PIPE TO FIT CONDITIONS OR MAKE UP JOINTS
- 1.2 SERMCEABILITY OF PRODUCTS
- A. FURNISH ALL PRODUCTS TO PROMDE THE PROPER ORIENTATION OF SERVICEABLE COMPONENTS TO ACCESS SPACE PROMDED. B. COORDINATE INSTALLATION OF PIPING, DUCTWORK, EQUIPMENT, SYSTEM COMPONENTS, AND OTHER PRODUCTS TO ALLOW PROPER SERVICE OF ALL ITEMS REQUIRING PERIODIC
- MAINTENANCE OR REPLACEMENT. C. REPLACE OR RELOCATE ALL PRODUCTS INCORRECTLY ORDERED OR INSTALLED TO PROVIDE PROPER SERVICEABILITY.
- D. PROVIDE ACCESS DOORS AND ACCESS PANELS IN CEILINGS, WALLS, FLOORS, ETC. FOR ACCESS TO TRAPS, VALVES, PRIMERS, DAMPERS, AUTOMATIC DEVICES, AND ALL SERVICEABLE OR OPERABLE EQUIPMENT IN CONCEALED SPACES.
- E. PROVIDE VIBRATION ISOLATORS ON ALL EQUIPMENT HAVING MOTORS AND SUPPORTED BY THE BUILDINGS STRUCTURE.
- 1.3 ROUTING A. ROUTE ALL PIPELINES AND DUCTWORK PARALLEL WITH BUILDINGS LINES AND AS HIGH AS POSSIBLE.
- B. ROUTE PIPING AND DUCTS TO CLEAR ALL DOORS, WINDOWS, AND OTHER OPENINGS AND TO AVOID ALL OTHER PIPES AND DUCTS. LIGHT FIXTURES AND SIMILAR PRODUCTS. C. PROVIDE UNIONS ADJACENT TO ALL EQUIPMENT AND WHERE REQUIRED FOR DISCONNECT AND MAINTENANCE OF EQUIPMENT.
- D. SECURELY FASTEN ALL MECHANICAL/PLUMBING WORK TO THE STRUCTURE TO PREVENT HAZARD HUMAN LIFE AND LIMB, AND TO PREVENT DAMAGE TO PRODUCTS OF CONSTRUCTION UNDER ALL CONDITIONS OF OPERATION.
- E. DO ALL SLEEVING, CUTTING, AND PATCHING OF ROUGH CONSTRUCTION FOR PIPING. ALL CUTTING, REPAIRING AND REQUIRED STRUCTURAL REINFORCING FOR INSTALLATION OF THIS WORK SHALL BE DONE IN CONFORMANCE WITH ARCHITECT'S DIRECTIONS AND ANY DAWAGE CAUSED BY CUTTING SHALL BE REPAIRED EQUAL TO ORIGINAL CONDITIONS. NO CUTTING WITHOUT ARCHITECT'S APPROVAL.
- F. PLACE ANY SLEEVES, CHASES, CONCRETE INSERTS, ANCHOR BOLTS, ETC., BEFORE CONCRETE IS POURED, AND BE RESPONSIBLE FOR CORRECT LOCATION AND INSTALLATION OF

#### <u>VIBRATION AND SEISMIC CONTROL FOR HVAC PIPING AND EQUIPMENT</u>

- 1.1 PERFORMANCE REQUIREMENTS A. SEISMIC-RESTRAINT LOADING:
- a. Site class as defined in the IBC: As required by local jurisdiction. b. Assigned seismic use group or building category as defined in the IBC: As required by local jurisdiction.
- c. Design spectral response acceleration at short periods (0.2 second). d. Design spectral response acceleration at 1—second period.
- 1.2 COMPONENTS:
- A. VIBRATION ISOLATORS: a. ISOLATOR PADS: NEOPRENE.
- b. Mounts: Double-Deflection type.
- c. Restrained mounts: All directional mountings with seismic restraint; cast-ductile-iron housing. d. Spring isolators: Freestanding, Laterally Stable, Open—Spring Type.
- e. Restrained Spring Isolators: Freestanding, Steel, Open—Spring Type with Seismic Restraint. f. Housed spring mounts: Ductile-Iron or Steel Housing, with integral, vertically adjustable seismic snubbers.
- q. Elastomeric hangers: Double-Deflection type.

RECEPTION

X-RAY

STORAGE

**HYGINE STATIONS** 

**TOTAL UNIT SQF1** 

- h. Spring hangers: combination coil—spring and elastomeric—insert hangers with spring and insert in compression.
- SPRING HANGERS WITH VERTICAL-LIMIT STOP: COMBINATION COIL-SPRING AND ELASTOMERIC-INSERT HANGERS WITH SPRING AND INSERT IN COMPRESSION AND WITH VERTICAL-LIMIT STOP.
- PIPE RISER RESILIENT SUPPORT: ALL-DIRECTIONAL, ACOUSTICAL PIPE ANCHOR. . Resilient pipe guides.
- B. AIR-MOUNTING SYSTEMS: a. AIR MOUNTS: FREESTANDING, SINGLE OR MULTIPLE, COMPRESSED—AIR BELLOWS.
- b. Restrained air mounts: Housed compressed—air bellows. RESTRAINED VIBRATION ISOLATION ROOF-CURB RAILS: FACTORY-ASSEMBLED, FULLY ENCLOSED, INSULATED, AIR- AND WATERTIGHT CURB RAIL; WITH SPRING ISOLATORS MOUNTED ON ELASTOMERIC ISOLATION PADS, AND SNUBBER BUSHINGS.
- D. VIBRATION ISOLATION EQUIPMENT BASES: a. Steel Base: Factory-Fabricated, Welded. Structural-Steel Bases and Rails.
- o. Inertia Base: Factory—Fabricated, Welded, structural—Steel Bases and Rails ready for Field—Applied, cast—in—Place concrete. Seismic-restraint devices:
- a. SNUBBERS: WELDED STRUCTURAL—STEEL SHAPES AND REPLACEABLE RESILIENT ISOLATION WASHERS AND BUSHINGS. b. Channel support system: MFWA-3 slotted steel channels. c. Restraint Cables: Stainless-Steel Cables.
- d. ANCHOR BOLTS: MECHANICAL TYPE, SEISMIC RATED. e. RESILIENT ISOLATION WASHERS AND BUSHINGS: MOLDED NEOPRENE.
- 1.3 FIELD QUALITY CONTROL A. TESTING: BY CONTRACTOR.

#### <u>air distribution</u> FILTERS

- A. MANUFACTURERS: AAFOR APPROVED EQUIVALENT. a. Pleated filters or approved equivalent, or as noted on the drawings.
- 1.2 DUCTWORK
- a. Steel ducts: Galvanized Steel Sheet, Lock—forming quality, minimum gauge per smacha standards. b. Insulated Flexible ducts: Flexible duct wrapped with Flexible glass fiber insulation, enclosed by metalized vapor barrier jacket. . SEALANT: NON-HARDENING, WATER RESISTANT, FIRE RESISTIVE, USED ALONE OR WITH TAPE.
- B. METAL DUCTWORK: a. FABRICATE AND SUPPORT IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS — METAL AND FLEXIBLE EXCEPT AS INDICATED.
- b. CONSTRUCT I'S, BENDS, AND ELBOWS WITH RADIUS OF 1-1/2 TIMES WIDTH OF DUCT ON CENTER LINE, WHERE NOT POSSIBLE PROVIDE TURNING VANES. c. Increase duct sizes gradually, not exceeding 30 degrees divergence and 45 degrees convergence. d. Connect flexible ducts to metal ducts with draw bands
- e. Use Crimp Joint's with or without bead for Joining Round Duct Sizes 8 inches and smaller with crimp in direction of air flow.
- f.a. SUPPLY DUCTS CONNECTED TO CONSTANT—VOLUME AIR—HANDLING UNITS AND SECONDARY DUCTWORK AFTER TERMINAL UNITS:
- Pressure class: Positive 2—Inch Wg. MINIMUM SWACNA SEAL CLASS: B
- SMACNA LEAKAGE CLASS FOR RECTANGULAR: 12 SMACNA LEAKAGE CLASS FOR ROUND: 12
- f.b. Supply ducts connected to variable—volume air—handling units:
- Pressure class: Positive 4-Inch Wg. MINIMUM SMACNA SEAL CLASS: B
- SMACNA LEAKAGE CLASS FOR RECTANGULAR: 6 SMACNA LEAKAGE CLASS FOR ROUND: 6
- f.c. RETURN DUCTS CONNECTED TO VARIABLE AND CONSTANT-VOLUME AIR-HANDLING UNITS: PRESSURE CLASS: POSITIVE OR NEGATIVE 2-INCH WG. MINIMUM SMACNA SEAL CLASS: B
- SMACNA LEAKAGE CLASS FOR RECTANGULAR: 12
- SMACNA LEAKAGE CLASS FOR ROUND: 12 f.d. EXHAUST DUCTS
- Pressure class: Positive or Negative 2—Inch Wg. MINIMUM SMACNA SEAL CLASS: B IF NEGATIVE, A IF POSITIVE SMACNA LEAKAGE CLASS FOR RECTANGULAR: 12
- SMACNA LEAKAGE CLASS FOR ROUND: 6 f.e. OUTSIDE AIR DUCTS:
- PRESSURE CLASS: POSITIVE OR NEGATIVE 2-INCH WG. MINIMUM SWACNA SEAL CLASS: B
- SMACNA LEAKAGE CLASS FOR RECTANGULAR: 12
- f.e.d. SMACNA LEAKAGE CLASS FOR ROUND: 12 g. Seismic-restraint devices
- CHANNEL SUPPORT SYSTEM. 2. GALVANIZED STEEL RESTRAINT CABLES. 3. Hanger rod stiffener: Steel tube or steel slotted—support—system sleeve with internally bolted
- PROVIDE ALL BRANCHES AND DUCT TAKE-OFFS, FABRICATE IN ACCORDANCE WITH SWACNCA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE, AND AS INDICATED.
- D. FABRICATE SPLITTER DAMPERS OF MATERIAL SAME GAGE AS DUCT TO 24 INCHES SIZE IN EITHER DIRECTION, OR TWO GAGES HEAMER FOR LARGER SIZES. SECURE WITH CONTINUOUS HINGE OR ROD. OPERATE WITH MINIMUM 1/4 INCH DIAMETER ROD.
- FABRICATE SINGLE BLADE DAMPERS FOR DUCT SIZES TO 12X30 INCH. EXCEPT IN ROUND DUCTWORK 12 INCHES AND SWALLER, PROVIDE END BEARINGS.
- PROVIDE LOCKING, INDICATING QUADRANT REGULATORS ON SINGLE AND MULTI-BLADE DAMPERS. WHERE WIDTH EXCEEDS 30 INCHES PROVIDE REGULATOR AT BOTH ENDS.
- 1.4 FLEXIBLE DUCT CONNECTIONS
- A. UL LISTED FIRE-RETARDANT NEOPRENE COATED WOVEN GLASS FIBER FABRIC TO NFPA 90, APPROXIMATELY 3 INCHES (75 MM) WIDE, CRIMPED INTO METAL EDGING STRIP.
- A. MANUFACTURERS: PRICE, TITUS, TUTTLE AND BAILEY, KRUEGER, OR APPROVED EQUIVALENT.
- B. DIFFUSERS/REGISTERS/GRILLES: PROMDE AIR DEVICE TYPE, OPERATION, COLOR, ETC. AS SCHEDULED.
- 2.1 INSTALLATION
- A. INSTALL PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. . Install flexible connections specified between fan inlet and discharge ductwork. Flexible connectors shall not be in tension while running.
- PROMDE BACK DRAFT DAMPERS ON DISCHARGE OF EXHAUST FANS AND AS INDICATED. PREVENT PASSAGE OF UNFILTERED AIR AROUND FILTERS WITH FELT. RUBBER. OR NEOPRENE CASKETS.
- LOCATE DUCTS WITH SUFFICIENT SPACE AROUND EQUIPMENT TO ALLOW NORWAL OPERATING AND MAINTENANCE ACTIVITIES. PROVIDE FLEXIBLE CONNECTIONS IMMEDIATELY ADJACENT TO EQUIPMENT IN DUCTS ASSOCIATED WITH FANS AND MOTORIZED EQUIPMENT.
- G. CHECK LOCATION OF AIR OUTLETS AND INLETS AND MAKE NECESSARY ADJUSTMENTS IN POSITION TO CONFORM TO ARCHITECTURAL FEATURES, SYMMETRY, AND LIGHTING H. PROMDE BALANCING DAMPERS ON DUCT TAKE-OFF TO DIFFUSERS, AND GRILLES AND REGISTERS, REGARDLESS OF WHETHER DAMPERS ARE SPECIFIED AS PART OF THE
- DIFFUSER, OR GRILLE AND REGISTER ASSEMBLY.

#### MECHANICAL INSULATION

- A. GENERAL: FURNISH ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETE INSTALLATION OF THERMAL INSULATION ON ALL HOT AND COLD PIPING SURFACE AND DUCTWORK INSTALLED UNDER THIS CONTRACT WHICH REQUIRE INSULATIONS FOR HEAT OR COLD CONSERVATION; FREEZE PROTECTION, PREVENTION OF CONDENSATION OR DRIPPINGS; COMFORT FOR OCCUPANTS; EFFICIENCY OR BASE OF OPERATION. MECHANICAL INSULATION SHALL BE COMPLETE AND EFFECTIVE THROUGHOUT THE PROJECT.
- B. SYSTEMS TO RECEIVE INSTALLATION INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO: a. Hydronic water lines (supply and return).
- b. CONDENSATE DRAINAGE. c. HORIZONTAL RAIN LEADERS AND ROOF DRAINS.
- d. REFRIGERANT LINES (BOTH HIGH AND LOW PRESSURES). e. PIPING ACCESSORIES AND SPECIALTIES.
- 1.2 PIPE INSULATION

OCCUPANTS | CFM/OCCUPANT | TOTAL OSA (CFM) | EXHAUST RATE | TOTAL EXHAUST (CFM)

130

A. ALL ABOVE GRADE INSULATION SHALL HAVE COMPOSITE (INSULATION, JACKET OR FACING, ALL ADHESVE OR CEMENT USED TO ADHERE THE JACKET TO THE INSULATION) FIRE

GENERAL NOTES:

1. NONE

LOSS. COORDINATE WITH ELECTRICIAN.

EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES,

DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE, DIRTY FILTER

AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL

AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO

OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND

INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC. FAN SHALL BE CENTRIFUGAL, BELT DRIVEN TYPE UNLESS OTHERWISE SCHEDULED.

PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE

MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 12 INCHES ON NON-SERVICE SIDES

and smoke hazard ratings as tested under procedure astm e-84 and NFPA 225. APPROVED MANUFACTURERS: CERTAINEED, OWENS/CORNING, JOHNS-MANVILLE, UPJOHN, ARMSTRONG, OR APPROVED EQUIVALENT.

TOTAL BLDG. EXH.

C. LOCATE INSULATION AND COVER SEAWS IN LEAST VISIBLE LOCATIONS.

- D. NEATLY FINISH INSULATION AT SUPPORTS, PROTRUSIONS, AND INTERRUPTIONS.
- E. PROMDE INSULATED DUAL TEMPERATURE PIPES OR COLD PIPES CONVEYING FLUIDS BELOW AMBIENT TEMPERATURE WITH VAPOR BARRIER JACKETS. FINISH WITH CLASS CLOTH AND VAPOR BARRIER ADHESIVE. INSULATE COMPLETE SYSTEM.
- F. FOR INSULATED PIPES CONVEYING FLUIDS ABOVE AMBIENT TEMPERATURE. PROVIDE STANDARD JACKETS. BEVEL AND SEAL ENDS OF INSULATION AT EQUIPMENT. FLANGES, AND
- G. PROVIDE INSERT BETWEEN SUPPORT SHIELD AND PIPING ON PIPING 2 INCHES (50 MM) DIAMETER OR LARGER. FABRICATE OF CORK OR OTHER HEAVY DENSITY INSULATING
- MATERIAL SUITABLE FOR TEMPERATURE, NOT LESS THAN 6INCHES (150 MM) LONG.
- a. CONDENSATE DRAINS: 1" FLEXIBLE ELASTOMERIC. ON PIPING EXPOSED TO WEATHER, PROVIDE ALLUMINUM JACKETING.
- b. REFRIGERANT LINES: 1" FLEXIBLE ELASTOMERIC. ON PIPING EXPOSED TO WEATHER. PROVIDE ALUMINUM JACKETING.
- 1.3 DUCTWORK INSULATION
- A. MANUFACTURERS: KNAUF, OR APPROVED EQUIVALENT. B. MINERAL—FIBER BLANKET INSULATION: MINERAL OR GLASS FIBERS BONDED WITH A THERMOSETTING RESIN. COMPLY WITH ASTM C 553, TYPE II AND ASTM C 1290, TYPE III WITH FACTORY-APPLIED FSK JACKET. FACTORY-APPLIED JACKET REQUIREMENTS ARE SPECIFIED IN "FACTORY-APPLIED JACKETS" ARTICLE.
- a. 'K' (KSI) VALUE: 0.29 AT 75 DEGREES F (0.042 AT 24 DEGREES C). b. Density: 0.75 lb/cu ft (24 kg/cu m). c. Vapor Barrier Jacket: Aluminúm-foil, fiberglass-reinforced scrim with Kraft-Paper Backing; complying with Astm C 1136, type II.
- a. METAL. ADHESIVELY ATTACHED. PERFORATED—BASE INSULATION HANGERS: BASEPLATE WELDED TO PROJECTING SPINDLE THAT IS CAPABLE OF HOLDING INSULATION. OF THICKNESS INDICATED, SECURELY IN POSITION INDICATED WHEN SELF—LOCKING WASHER IS IN PLACE. COMPLY WITH THE FOLLOWING REQUIREMENTS:
- D. MINERAL—FIBER OR GLASS FIBER BLANKET INSULATION SCHEDULE (UNLESS SPECIFIED ON PLANS): i. EXHAUST DUCTS EXPOSED TO OUTDOOR AIR: 1-1/2" ii. Ventilation ducts: 2"
- iii. SUPPLY DUCTS: 2" iv. Return ducts in unconditioned spaces: 1-1/2"
- 1.4 INSTALLATION
- A. INSTALL MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. B. CONTINUE INSULATION VAPOR BARRIER THROUGH PENETRATIONS.
- a. Materials shall be compatible with insulation materials, jackets, and substrates; comply with Mil-PRF-19565C, type II. i. For indoor applications, use mastics that have a voc content of 50 g/l or less when calculated according to 40 cfr 59, subpart D (epa

#### SYSTEM TESTING, ADJUSTING, AND BALANCING

- A. TESTING, ADJUSTING AND BALANCING OF ALL WORK SHALL BE MADE BY AN INDEPENDENT NBC, OR AABC CONTRACTOR WHO IS CURRENTLY LICENSED. THE HVAC CONTRACTOR SHALL INSTALL NEW FILTERS IN ALL UNITS PRIOR TO THE AIR BALANCE. THE COMPLETE AIR BALANCE SHALL TAKE PLACE WITH OUTSIDE AIR DAMPERS IN MINIMUM POSITION.
- B. BALANCE AIR AND WATER QUANTITIES TO WITHIN  $\pm 10\%$  OF THAT INDICATED ON THE DRAWINGS. ANY REQUIRED CHANGES IN SHEAVES, BELTS, PULLEYS, OR THE ADDITION OF DAMPERS REQUIRED TO ACHIEVE SPECIFIED FLOW RATES SHALL BE PERFORMED BY THE HVAC CONTRACTOR WITH NO
- ADDITIONAL COST. C. THE BALANCE REPORT SHALL INCLUDE AS A MINIMUM THE FOLLOWING INFORMATION:
- A. CERTIFICATION NUMBER AND SIGNATURE OF BALANCING CONTRACTOR. B. INSTRUMENTATION LIST WITH LAST CALIBRATION DATES.

K. INDEXED PLAN WITH DIFFUSER AND RETURN LOCATIONS.

- C. MAKE AND MODEL NUMBERS OF ALL HVAC EQUIPMENT. D. AIR CFM AND STATIC PRESSURE READINGS (DISCHARGE AND SUCTION) AS MEASURED BY PITOT TUBE DUCT TRAVERSE AT THE UNIT.
- E. MOTOR NAMEPLATE DATA WITH ACTUAL FIELD VOLTAGE AND AMPERAGE READINGS FOR EACH LEG. F. MOTOR AND FAN RPMS, SHEAVE SIZES AND BELT SIZES. G. OUTSIDE, RETURN, MIXED AND SUPPLY AIR TEMPERATURES AT FULL COOLING AND HEATING.
- H. WATER BALANCE DATA INCLUDING GPM WITH INLET AND OUTLET TEMPERATURE AND PRESSURE READINGS (WHERE APPLICABLE) I. MAKE AND MODEL NUMBERS OF ALL AIR DISTRIBUTION EQUIPMENT. J. FINAL BALANCED AIR VOLUMES AT ALL OUTLETS (INCLUDING RETURNS WHERE DUCTED).
- E. ALL CONTROL SEQUENCES SHALL BE TESTED (INTERLOCKED EQUIPMENT, SMOKE DETECTORS, SMOKE EVACUATION, ECONOMIZER, ETC.) AND OPERATING
- STATUS RECORDED IN THE REPORT. F. THREE COPIES OF THE BALANCE REPORT SHALL BE SUBMITTED THROUGH THE GENERAL CONTRACTOR TO THE TENANT'S CONSTRUCTION MANAGER FOR
- G. THE BALANCING CONTRACTOR SHALL PERFORM ALL APPLICABLE TESTING AND BALANCING FUNCTIONS AS REQUIRED FOR THE SYSTEM DESIGNED IN THESE DRAWINGS. THE BALANCING CONTRACTOR SHALL RECHECK ANY ITEMS THAT THE TENANT DEEMS NECESSARY AT NO ADDITIONAL COST TO THE TENANT.
- H. CONTROLS CONTRACTOR SHALL PROVIDE, AT NO COST, ALL NECESSARY SOFTWARE AND HARDWARE REQUIRED FOR SYSTEM BALANCE AND VERIFICATION OF CONTROLS. CONTROLS CONTRACTOR SHALL BE PRESENT AND ASSIST TEST & BALANCE CONTRACTOR DURING CONTROLS VERIFICATION. PRIOR TO START OF TEST & BALANCE, THE CONTROLS CONTRACTOR SHALL VERIFY ALL CONTROLS ARE OPERATIONAL AND ALL INPUT VALUES HAVE BEEN ENTERED PER DESIGN DOCUMENTATION. CONTROLS CONTRACTOR SHALL PROVIDE CONTROL SYSTEM START-UP SHEETS VERIFYING CONTROLS OPERATION PRIOR TO THE
- START OF TEST & BALANCE. FINAL BALANCE REPORT SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUALS.

DY SELLI 2	YSTEMS SCHEDULI	<u> </u>
EVAPORATOR SECTION		
INDOOR EVAPORATOR DESIGNATION	AUL 04	ALIII 02
SERVICE	<u>AHU-01</u>	<u>AHU-02</u>
MANUFACTURER	- Guardian	- Guardian
MODEL NUMBER	RFCC36	RFCC36
TYPE:	Mulit Position AHU	Mulit Position AHU
	12.25	12.25
EER (AT ARI): NOTES	12.25 ALL	12.25 ALL
	150	150
WEIGHT (LBS):	150	150
FAN DATA		
SUPPLY CFM (HIGH) SPEED	1,015	1,250
OUTSIDE AIR CFM	130	111
EXTERNAL STATIC PRESSURE, "WG	0.50	0.50
DX COOLING COIL		
NOMINAL TONNAGE	3 Tons	3 Tons
ENTERING AIR EVAP (DB / WB) °F	78°F / 65°F	78°F / 65°F
LEAVING AIR (DB/WB) °F	56.4°F / 54.3°F	58.5°F / 56 °F
SENSIBLE BTUH	23,700	25,900
GRAND TOTAL BTUH COOLING	32,900	34,200
VOLTS / PH / HZ	208/1/60	208/1/60
ELECTRIC HEATING DATA		
ENTERING AIR EVAP (DB) °F	60°F	60°F
Input (kW)	10	10
AIR-COOLED CONDENSER		
DESIGNATION	ACU-01	ACU-02
SERVES	AHU-01	AHU-02
LOCATION (INDOORS OR OUTDOORS)	Outdoors	Outdoors
WEIGHT (LBS):	200	200
SELF-CONTAINED OR SPLIT SYSTEM	SPLIT-SYSTEM	SPLIT-SYSTEM
MANUFACTURER	Guardian	Guardian
MODEL NUMBER	TCD2B36	TCD2B36
VOLTS / PH / HZ	208/3/60	208/3/60
MCA (Indoor Unit / Outdoor Unit)	48 / 11.9	48 / 11.9
MOCP (Indoor Unit / Outdoor Unit)	50 / 20	50 / 20
REFRIGERANT	R-410a	R-410a
AMBIENT TEMPERATURE °F	98∘F	98∘F

REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL DATA. ESTIMATED EXTERNAL STATIC PRESSURE INCLUDES LOSSES THROUGH PLENUM, AIR DEVICES, ETC.

#### **FANS** EXT. STATIC POWER CURRENT (WATTS) CHARAC. INTERLOCKED MAXIMUM MODEL NUMBER LOCATION SWITCHED MANUFACTURER REMARKS (IN. W.C.) EF-01 RESTROOM 102 2,3,7 0.375 | 87 W | 120/1/60 | SWITCH CEILING MOUNTED L100E 2,3,7 0.375 | 87 W | 120/1/60 | SWITCH CEILING MOUNTED

MANUFACTURER SHALL PROVIDE 7 DAY PROGRAMMABLE THERMOSTAT

5. CONTACT TYLER SIEGRIST (832-342-7000) WITH TEXAS AIR SYSTEMS FOR PRICING AND TECHNICAL INFORMATION.

4. PROVIDE TXV FOR FIELD INSTALLATION BY INSTALLING CONTRACTOR

. PROVIDE WITH BIRDSCREEN

CENTRIFUGAL-DIRECT DRIVE

PROVIDE WITH BACKDRAFT DAMPER.

I. PROVIDE WITH SPEED CONTROLLER.

. REFER TO ARCH. FOR COLOR FINISH.

PROVIDE WITH ROOF CURB. REFER TO DETAIL.

CENTRIFUGAL CEILING MOUNTED EXHAUST FAN.

OFFICE 0.06

1) TRANSFER AIR PERMITTED IN ACCORDANCE WITH SECTION 403.2.2 MECHANICAL EXHAUST REQUIRED.

1) TRANSFER AIR PERMITTED IN ACCORDANCE WITH SECTION 403.2.2 MECHANICAL EXHAUST REQUIRED.

CFM/SQFT

0.06

0.06

MINIMUM VENTILATION RATES AHU-01

SPACE	SQFT	CFM/SQFT	OCCUPANTS	CFM/OCCUPANT	TOTAL OSA (CFM)	EXHAUST RATE	TOTAL EXHAUST (CFN
WAITING ROOM	180	0.06	5	5	38	_	<del>-</del>
BREAKROOM	105	0.06	2	5	17	_	_
SURGICAL SUITE	120	0.06	1	5	13	_	_
OP ROOM 1	105	0.06	1	5	12	_	_
OP ROOM 2	105	0.06	1	5	12	_	_
STERILIZATION	85	0.06	1	5	9	_	_
CONSULT	65	0.06	1	5	7	_	_
MECH.	25	_	_	_	_	_	_
LAB	35	0.06	0	5	4	_	_
CORRIDOR	240	_	_	_	_	_	_
RESTROOM	45	<u> </u>	_	_	_	50/70f	50

TOTAL BLDG. OSA

**GRILLE** FINISH COLOR MANUFACTURER CONSTRUCTION STEEL 45° DEFLECTION ARCH. SPEC. B RETURN GRILLE 45° DEFLECTION ARCH. SPEC. C | SUPPLY | GRILLE | STEEL ARCH. SPEC. N/A SURFACE 12X12 45° DEFLECTION D RETURN GRILLE N/A STEEL ARCH. SPEC. TITUS 23RL N/A SURFACE 18X6 45° DEFLECTION GENERAL NOTES: REMARKS:

1. NONE



#### PROJECT TEAM

SUPER KIDS DENTAL 2410 E RIVERSIDE DRIVE, SUITE 12-H AUSTIN, TX 78741 www.superkidsaustin.com

**ELEMENT ARCHITECTS, LLC** 1250 WOOD BRANCH PARK DR, SUITE 480 HOUSTON, TX 77079 (713) 874 0775 www.ElementArchitects.com

K.O. DESIGN 1327 W MAIN STREET, SUITE 7 TOMBALL, TX 77375 (832) 643 0368

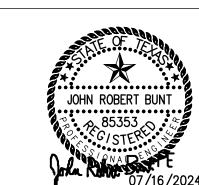


TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION #: F-9072

EXPIRES: 31 MARCH 2025

#	DESCRIPTION	DATE
1	CITY OF AUSTIN RESPONSE #1	06/20/24
2	CITY OF AUSTIN RESPONSE #2	07/16/24

**SEAL / SIGNATURE** 



**KEY MAP** 

**PROJECT STATUS** ISSUE FOR PERMIT PROJECT NAME

> SUPER KIDS DENTAL **PROJECT ADDRESS**

6707 E RIVERSIDE DR., AUSTIN, TX 78741

PROJECT NUMBER DATE

**MECHANICAL** SCHEDULES

M301

	LIGHTING FIXTURE SCHEDULE										
MARK	MANUFACTURER AND	MOUNTING		LAMPS	VOLTS	REMARKS					
MARK	CATALOG NUMBER	MOUNTING	NO.	TYPE	VULIS	REMARKS					
A1	LITHONIA #EPANL-2x4-4000LMHE-40K-EZT- A268	RECESSED	_	31W - LED 4000K 4,000 LUMENS	120	2'x4', LENSED LED LAY-IN PANEL LIGHT.					
A1E	LITHONIA #EPANL-2x4-4000LMHE-40K-EZT-E10WCP- A268	RECESSED	_	31W - LED 4000K 4,000 LUMENS	120	SAME AS TYPE A1 EXCEPT WITH EMERGENCY BATTERY PACK W/ 90 MIN. OF BACK-UP.					
A2	LITHONIA #EPANL-2x2-4000LMHE-40K-EZT- A268	RECESSED	_	31W - LED 4000K 4,000 LUMENS	120	2'x2', LENSED LED LAY-IN PANEL LIGHT.					
A2E	LITHONIA #EPANL-2x2-4000LMHE-40K-EZT-E10WCP- A268	RECESSED	_	31W - LED 4000K 4,000 LUMENS	120	SAME AS TYPE A2 EXCEPT WITH EMERGENCY BATTERY PACK W/ 90 MIN. OF BACK-UP.					
В	LITHONIA #LDN6-40/15-L06-AR-LSS-MVOLT-EZ1- A268	RECESSED	_	18W - LED 4000K 1,500 LUMENS	120	6" OPEN REFLECTOR LED DOWNLIGHT WITH SEMI-SPECULAR REFLECTOR.					
BE	LITHONIA #LDN6-40/15-L06-AR-LSS-MVOLT-EZ1- E10WCP-A268	RECESSED	-	18W - LED 4000K 1,500 LUMENS	120	SAME AS TYPE B EXCEPT WITH EMERGENCY BATTERY PACK W/ 90 MIN. OF BACK-UP.					
C1	LUMENWERX #RIMHP3ULOSW90T-240120D11CRDB-VERIFY	SUSPENDED	_	104W - LED 4000K	120	DECORATIVE CHANDELIER.					
C2	LUMENWERX #RIMHP4ULOSW90T-240120D11CRDB-VERIFY	SUSPENDED	-	104W - LED 4000K	120	DECORATIVE CHANDELIER.					
D	INTENSE LIGHTING #MXG2PRDEM-1-L1-41-12-VERIFY	SUSPENDED	_	16W — LED 4000K	120	DECORATIVE PENDANT.					
X1	LITHONIA #LHQM-LED-R-HO-SD-A268	UNIVERSAL	_	LED	120/277	WHITE THERMOPLASTIC COMBO EMERG. LTG. WITH RED LETTERS. UNIT WITH 90 MIN. OF BATTERY					
X2	LITHONIA #LHQM-LED-R-HO-SD-A268	UNIVERSAL	_	LED	120/277	WHITE THERMOPLASTIC EXIT SIGN W/ DIRECTIONAL ARROWS.					
NOTEC											

1. ALL COLORS SPECIFIED FOR FIXTURES ABOVE IN LIGHTING FIXTURE SCHEDULE SHALL BE COORDINATED WITH OWNER/ARCHITECT PRIOR TO PURCHASING. LIGHTING FIXTURE SCHEDULE NOTES:

ANY LIGHTING MANUFACTURER(S) SUBSTITUTED NOT AS SPECIFIED IN THE LIGHT FIXTURE SCHEDULE DOES NOT GUARNTEE APPROVAL. APPROVAL WILL BE DETERMINED BY WRITTEN REQUESTS SUBMITTED TO THE ENGINEER OF RECORD AND PRIOR TO REVIEW OF SHOP DRAWINGS TO DETERMINE IF THE SUBSTITUTED FIXTURE OR POLE SUBMITTED MEETS OR EXCEEDS THE DESIGN STANDARDS AND PERFORMANCE REQUIRED OF THE ACTUAL FIXTURE SPECIFIED IN THE LIGHT FIXTURE SCHEDULE. SHOP DRAWING SHOP DRAWING DELAYS AS A RESULT OF INAPPROPRIATE SUBSTITUTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND AT NO ADDITIONAL COST TO THE OWNER.

#### **DENTAL SUPPLIER NOTES**

- DENTAL EQUIPMENT SUPPLIER/INSTALLER IS RESPONSIBLE FOR FURNISHING PER-INSTALL ITEMS TO CONTRACTOR WHEN REQUIRED, AS WELL AS EQUIPMENT TEMPLATES.
- DENTAL EQUIPMENT SUPPLIER/INSTALLER IS RESPONSIBLE FOR VERIFYING ALL ELECTRICAL SPECIFICATIONS PROVIDED WITHIN THIS PROJECT THAT RELATE TO EQUIPMENT BEING INSTALLED.

WIRING AND GROUNDING OF ALL RECEPTACLES WITHIN PATIENT AREAS SHALL COMPLY WITH NEC 517.13 (A)(B).

PER N.E.C. 406.12: ALL NONLOCKING 120V RECEPTACLES LOCATED IN PATIENT AREAS SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.

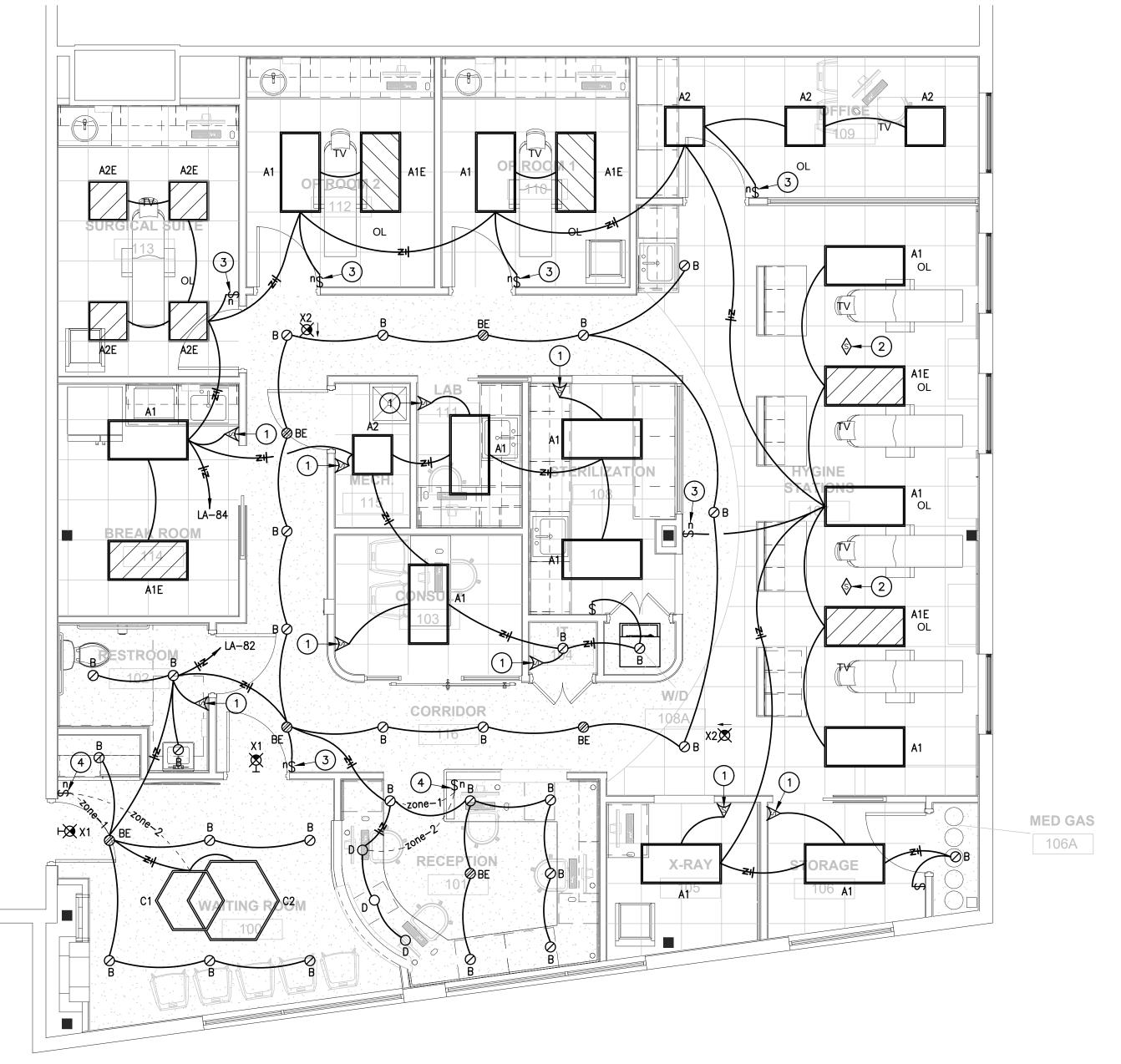
#### **ELECTRICAL GENERAL NOTES:**

- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES AND ELECTRICAL
- NO MORE THAN THREE SINGLE PHASE CIRCUITS AND NO MORE THAN SIX CURRENT CARRYING CONDUCTORS SHALL BE INSTALLED IN A SINGLE RACEWAY. WHEN FOUR, FIVE, OR SIX CURRENT CARRYING CONDUCTORS ARE INSTALLED IN A SINGLE RACEWAY, THEIR CURRENT CARRYING AMPACITIES SHALL BE DERATED AS REQUIRED BY THE NEC FOR NON-DIVERSIFIED LOADS. THE INSTALLED WIRE SIZE SHALL HAVE A NOMINAL AMPACITY RATING OF 125% OF THAT REQUIRED OR SPECIFIED WHEN FOUR OR MORE CURRENT CARRYING CONDUCTORS ARE INSTALLED IN A SINGLE RACEWAY. NEUTRAL CONDUCTORS SHALL BE CONSIDERED A CURRENT CARRYING CONDUCTOR IN ALL NON-LINEAR LOADED CIRCUITS AS
- ALL LIGHTING, RECEPTACLE, AND EQUIPMENT BRANCH CIRCUITS CONDUITS SHALL CONTAIN A GROUND WIRE. USING THE CONDUIT SYSTEM AS THE ONLY GROUND PATH IS NOT ACCEPTABLE.
- 4. ELECTRICIAN OF RECORD, & BONDED PER DIVISION 0-"CONTRACT" SPECIFICATIONS, AND BE FAMILIAR & EXPERIENCED WITH SUCH WORK INDICATED HEREIN, & QUALIFIED BY MOST RECENT OSHA CERTIFICATION TO WORK ON ENERGIZED EQUIPMENT. REFER TO & COMPLY WITH OSHA 29CFR.1910 & 1926 ELECTRICAL SAFETY PORTIONS. CONSTRUCTION METHOD AND MEANS AND THEIR REQUIREMENTS. CONTRACTOR SHALL PROVIDE WORK WITHIN STANDARD OF CARE FOR PROFESSION.
- 5. MOUNT ALL LIGHT SWITCHES AT +48" A.F.F. UNLESS OTHERWISE NOTED.
- 6. MOUNT ALL RECEPTACLES AT +17 1/2" A.F.F. UNLESS OTHERWISE NOTED.
- EMERGENCY LIGHTING UNITS & OR EXIT SIGNS SHALL BE CONNECTED TO UNSWITCHED LEG OF CIRCUIT WITH A CONSTANT HOT.
- 8. ALL ELECTRICAL WORK INCLUDED IN THIS PROJECT SHALL MEET THE REQUIREMENTS OF THE 2023 NATIONAL ELECTRICAL CODE (N.E.C.).
- 9. TENANT(S) OR HIS/HER TELEPHONE VENDOR IS RESPONSIBLE FOR ALL WIRING ASSOCIATED WITH TELEPHONE/DATA SYSTEMS.

- **ELECTRICAL KEYED NOTES:**
- 1 PROVIDE "SENSOR SWITCH" (ACUITY BRANDS) #WSX-PDT-WH, DUAL TECHNOLOGY WALL MOUNTED MOTION SENSOR FOR AUTOMATIC CONTROL OF LIGHTS IN THIS ROOM. COORDINATE WITH OWNER/ARCHITECT FOR TIME-OUT ON SENSOR.
- PROVIDE "SENSOR SWITCH" (ACUITY BRANDS) #CM-PDT-9, DUAL TECHNOLOGY CEILING MOUNTED MOTION SENSOR CONNECTED TO POWER PACK FOR AUTOMATIC CONTROL OF LIGHTS IN THIS ROOM. COORDINATE WITH OWNER/ARCHITECT FOR TIME-OUT ON SENSOR.
- PROVIDE "ACUITY CONTROLS" # nPODA-DX-WH (nLIGHT ENABLED) WALL POD WITH ON/OFF + RAISE/LOWER CONTROL OF LIGHTS IN THIS ROOM. ROUTE CAT5e CABLE FROM WALL POD TO "ACUITY CONTROLS" #nPP16DS (nLIGHT ENABLED) POWER PACK LOCATED ABOVE THE CEILING. IN ADDITION FROM THE POWER PACK DAISY CHAIN 0-10V(LOW-VOLTAGE) WIRING TO EACH FIXTURE.
- PROVIDE "ACUITY CONTROLS" #nPODA-2P-DX-WH (nLIGHT ENABLED) WALL POD WITH 2-CHANNEL ON/OFF + RAISE/LOWER CONTROL OF LIGHTS IN THIS ROOM. ROUTE CATSe CABLE FROM WALL POD TO "ACUITY CONTROLS" #nPP16DS (nLIGHT ENABLED) POWER PACK LOCATED ABOVE THE CEILING. IN ADDITION FROM THE POWER PACK DAISY CHAIN 0-10V(LOW-VOLTAGE) WIRING TO EACH FIXTURE.
- 5) NEW 120/208V, 3ø, 4W PANELBOARD <u>LA</u>(2-SECTION). REFER TO SHEET E201 FOR PANEL SCHEDULE INFORMATION.
- (6) MOUNT DUPLEX RECEPTACLE AT +36" A.F.F. FOR REFRIGERATOR.
- 7 J-BOX MOUNTED FLUSH WITH FINISHED FLOOR FOR DENTAL CHAIR POWER. REFER TO DENTAL SUPPLIER FOR EXACT REQUIREMENTS AND MOUNTING.

- 8 CONTRACTOR TO COORDINATE EXACT LOCATION OF 3" (76MM), CORE HOLE IN FLOOR FOR POWER, TELEPHONE AND DATA. CONTRACTOR TO DETERMINE MOST PRACTICAL ROUTING
- IN FIELD. COORDINATE PATCHING OF FLOOR WITH ARCHITECT. 9 PROVIDE EMPTY 2" CONDUIT WITH PULL-WIRE FOR ADDITIONAL DENTAL CHAIR
- PROVIDE QUAD RECEPTACLE ABOVE COUNTER FOR TREATMENT CABINET. REFER TO DENTAL EQUIPMENT SUPPLIER FOR EXACT LOCATION AND REQUIREMENTS.
- (11) mount duplex receptacle below counter for refrigerator.
- VERIFY EXACT MOUNTING HEIGHT FOR TELEVISION POWER/DATA WITH ARCHITECT PRIOR TO ROUGH-IN.
- POWER/DATA MOUNTED TO STRUCTURE FOR TELEVISION. VERIFY EXACT MOUNTING WITH ARCHITECT PRIOR TO ROUGH—IN.
- MAKE FINAL CONNECTION TO AIR COMPRESSOR. REFER TO DENTAL EQUIPMENT SUPPLIER FOR EXACT REQUIREMENTS AND MOUINTING HEIGHT.
- MAKE FINAL CONNECTION TO VACUUM. REFER TO DENTAL EQUIPMENT SUPPLIER FOR EXACT REQUIREMENTS AND MOUINTING HEIGHT.
- 4'x8'x3/4" FIRE RETARDANT PLYWOOD FOR TELEPHONE TERMINAL BOARD. EXTEND (2) 4"C. FROM TELEPHONE COMPANY CABINET. OWNER OR HIS/HER TELEPHONE VENDOR IS RESPONSIBLE FOR ALL WIRING ASSOCIATED WITH TELEPHONE/DATA SYSTEMS.
- CEILING MOUNTED J-BOX FOR OPERATING LIGHT. VERIFY EXACT REQUIREMENTS WITH DENTAL SUPPLIER PRIOR TO ROUGH-IN.
- (18) MOUNT OUTLET AT +36" A.F.F. FOR WASHER.
- 19) MOUNT OUTLET AT +72" A.F.F. FOR DRYER. VERIFY EXACT MOUNTING HEIGHT, AMPERAGE AND NEMA CONFIGURATION WITH OWNER PRIOR TO ROUGH-IN.
- POWER AND DATA FOR PAN-X SYSTEM SHALL BE LOCATED WITHIN 20'-0" OF PAN-X EQUIPMENT. COORDINATE EXACT LOCATION WITH DENTAL EQUIPMENT SUPPLIER.
- (21) DATA AND POWER MOUNTED IN CABINET ABOVE.
- 22) DATA AND POWER MOUNTED BELOW COUNTER.
- 23) REMOTE GFCI RESET SWITCH FOR REFRIGERATOR RECEPTACLE.

THIS AREA FUTURE, CAP AS REQUIRED-NÉMA-3R ╠╫╶<del>╶</del>┼╶┼╴<del>╒</del>╢╌╌┼ **CORRIDOR** MED GAS 106A



ELECTRICAL LIGHTING PLAN

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





#### PROJECT TEAM

SUPER KIDS DENTAL 2410 E RIVERSIDE DRIVE, SUITE 12-H AUSTIN. TX 78741 www.superkidsaustin.com

**ELEMENT ARCHITECTS, LLC.** 1250 WOOD BRANCH PARK DR, SUITE 480 HOUSTON, TX 77079 (713) 874 0775 www.ElementArchitects.com

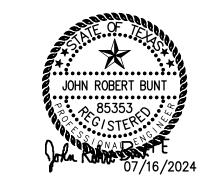
K.O. DESIGN 1327 W MAIN STREET, SUITE 7 TOMBALL, TX 77375 (832) 643 0368



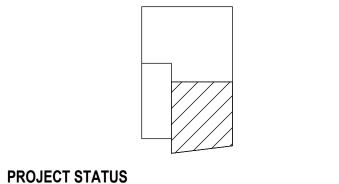
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION #: F-9072 EXPIRES: 31 MARCH 2025

#	DESCRIPTION	DATE
1	CITY OF AUSTIN RESPONSE #1	06/20/24
2	CITY OF AUSTIN RESPONSE #2	07/16/24

#### SEAL / SIGNATURE



#### **KEY MAP**



**ISSUE FOR PERMIT** 

PROJECT NAME SUPER KIDS DENTAL

PROJECT ADDRESS

6707 E RIVERSIDE DR., AUSTIN, TX 78741

**PROJECT NUMBER** 

24017 DATE

ELECTRICAL FLOOR **PLANS** 

E101

PROJECT: SUPER KIDS DENTAL LOCATION: AUSTIN, TX DESCRIPTION: TENANT IMPROVEMENT VOLTAGE: 120/208V, 3ø, 4W	
LOAD DESCRIPTION	LOAD KVA
LIGHTING CONNECTED LOAD= 1.7 KVA AT 1.25% = <2.1> LIGHTING 1.7W X 2,065 SQFT. =	- 3.5
RECEPTACLES - FIRST 10 KW + 50% OF REMAINDER AT 100% =	6.2
DENTAL EQUIPMENT AT 100% =	16.6
H.V.A.C. AT 100% =	28.2
25% LARGEST MOTOR =	0.2
EXHAUST FANS =	0.4
PLUMBING AT 100% =	4.7
MISCELLANEOUS NON-CONTINUOUS AT 100% =	15.1
MISCELLANEOUS CONTINUOUS AT 1.25% =	1.6
TOTAL ESTIMATED CONNECTED LOAD =	76.5

76.5 KVA / 208 /  $\sqrt{3}$  = AMPS

NEW TENANT SERVICE SIZE = 250.0 AMPS AT 208V., 3ø, - 4W

TENANT SERVICE SPARE CAPACITY = 37.7 AMPS

**ELECTRICAL LOAD ANALYSIS** 

F	ANEL 'L/	<u>\</u> '			120	/208V, 3ø,	4W		ı	NEN	JNTING: SURFACE 1A-1	
LC	DCATION: BREAKROOM 1	14			2	50 AMP MC	В		2	22k	SISCA	
CKT	LOAD	*	KVA	WIRE	BKR		BKR	WIRE	KVA	*	LOAD	
1	DENTAL CHAIR		0.5	#12	20/1	\\	20/1	#12	0.5		T.T.B.	
3	DENTAL CHAIR		0.5	#12	20/1	$\cap$	20/1	#12	0.4		LAB RECEPTACLES	
5	DENTAL CHAIR		0.5	#12	20/1		20/1	#12	0.6		LAB EQUIPMENT	
7	DENTAL CHAIR		0.5	#12	20/1	$\sim$	20/1	#12	0.6		LAB EQUIPMENT	
9	DENTAL CHAIR		0.5	#12	20/1	$\overline{}$	30/2	#10	4.1		DRY VACUUM SYSTEM	
11	DENTAL CHAIR		0.5	#12	20/1		-	-	-			
13	DENTAL CHAIR		0.5	#12	20/1	$\sim$	20/1	#12	0.2		DRY VACUUM REC	
15	DENTAL CHAIR		0.5	#12	20/1	$\overline{}$	20/2	#12	2.2		AIR COMPRESSOR	
17	TREATMENT CABINETS		0.6	#12	20/1		-	-	-			
19	TREATMENT CABINETS		0.6	#12	20/1		20/1	#12	0.8	1	REFRIGERATOR	
21	TREATMENT CABINETS		0.6	#12	20/1		20/1	#12	0.5	1	U.C. REFRIGERATOR	
23	TREATMENT CABINETS		0.3	#12	20/1		20/1	#12	0.5		COFFEE	
25	OP ROOM RECEPTACLES		1.1	#12	20/1		20/1	#12	1.0		MICROWAVE	
27	HYGIENE RECEPTACLES		0.8	#12	20/1		20/1	#12	1.0		PAN-X RECEPTACLE	
29	OPERATING LIGHTS		1.0	#12	20/1		20/1	#12	0.4		PAN-X COMPUTER	
31	OPERATING LIGHTS		1.0	#12	20/1		20/1	#12	1.0	1	WASHER	
33	OPERATING LIGHTS		1.0	#12	20/1	$\overline{}$	20/1	#12	4.5	1	DRYER	
35	OPERATING LIGHTS		1.0	#12	20/1		_	_	- 2	2	\	
37	OP ROOM TV'S		0.8	#12	20/1		20/1	#12	0.6		RECEPTION RECEPTACLES	
39	HYGIENE TV'S		0.8	#12	20/1		20/1	#12	0.4		RECEPTION RECEPTACLES	
41	MISC. RECEPTACLES		0.4	#12	20/1		20/1	#12	0.9		WAITING RECEPTACLES	

PANEL 'LA' LOCATION: BREAKROOM 114				250 AMP MLO					NEMA-1 22K ISCA			
CKT	LOAD	*	KVA	WIRE	BKR		BKR	WIRE	KVA	*	LOAD	CK
43	<u>EWH-1</u>		4.5	#10	30/2	1	20/1	#12	0.5		DEDICATED STERLIZER	4
45			-	_	-	<b>A</b>	20/1	#12	0.5		DEDICATED STERLIZER	4
47	HWCP-1		0.2	#12	20/1		20/1	#12	0.5		DED. ULTRASONIC CLEAN.	4
49	<u>AHU-01</u>		9.9	#10	50/2	1	20/1	#12	0.5		STERILE EQUIPMENT	5
51			-	_	-	<b>A</b>	20/1	#12	0.6		CONSULT RECEPTACLES	5:
53	ACCU-01		4.2	#12	20/2	1	20/1	#12	0.8		OFFICE RECEPTACLES	5
55			-	_	-		20/1	#12	0.2		STERILE RM RECEPTACLE	5
57			-	_	-	1	20/1	#12	0.5		STERILE EQUIPMENT	5
59	<u>AHU-02</u>		9.9	#10	50/2	1	20/1	#12	0.5		MASTER WATER SHUT-OFF	6
61			-	_	-		-				SPACE	6
63	ACCU-02		4.2	#12	20/2	1	-				SPACE	6
65			-	_	-		-				SPACE	6
67			-	_	-		-				SPACE	6
69	EXHAUST FANS		0.4	#12	20/1		-				SPACE	7
71	SPACE			_	-		-				SPACE	7:
73	SPACE			_	-		-				SPACE	7
75	SPACE			_	-		-				SPACE	7
77	SPACE			_	-		-				SPACE	78
79	SPACE			_	-		-				SPACE	80
81	SPACE			_	-		20/1	#12	0.9		LIGHTING	8:
83	SPACE			_	-		20/1	#12	0.8		LIGHTING	84
					TOT	AL KVA = 7	72.2					

NEC TABLE (250-66) -	PANELBOARD 1#2G.	ALL METAL PIPE  WATER PIPE  GAS PIPE  TENANT SERVICE DISC:  SERVICE GUTTER  GROUND  NEUTRAL  METAL WATER PIPE	— (MAIN BONDING JUMPER) BOND NEUTRAL AND GROUI BUS ONLY AT MAIN SWITCH AND SEPERATELY DERIVED SYSTEMS.  — UL APPROVED GROUND LUC OR EXOTHERMIC WELD.
PROVIDE CONCRETE GROUNDING ELECTR N.E.C. 250.52(A)(3)	ODE PER I		3/4"x10' COPPER GROUND ROD

PANEL LA

120/208 VOLT

FED FROM METERING GUTTER

NOTE:
WHITE PLASTIC NAMEPLATE WITH ENGRAVED
BLACK LETTERING FOR ELECTRICAL
EQUIPMENT. SECURELY ATTACH NAMEPLATE
TO EQUIPMENT USING SCREWS. THE USE
OF "STICK—ON" NAMEPLATES SHALL NOT
BE PERMITTED.

(TYPICAL PANEL LABEL)

2 EQUIPMENT LABELING DETAIL
SCALE: NOT TO SCALE

| LOCATION DESCRIPTION | STARTING ISC | MINIMUM CONDUCTOR LENGTH | PHASE MULTIPLIER | VOLTAGE | CONDUCTOR SETS | C VALUE | ISC END SETS | 1 18,594 | 16,175 |

1. INSTALL GFCI CIRCUIT BREAKER.

\* <u>NOTES</u>

\* Equipment protection shall be a coordinated combination which has been tested in accordance with UL requirements for this equipment. Alternatively, the interrupting rating may be achieved through current—limiting fuses (Series—rated in a listed combination).

212.3 AMPS

SHORT CIRCUIT CALCULATIONS

USING BUSSMAN POINT TO POINT METHOD:

ULTIMATE FAULT CURRENT FROM BUILDING GUTTER = 25,246 AMPS AT 208 VOLTS, 3 PHASE.

1. SERVICE FROM BUILDING SERVICE GUTTER WITH 4#250 KCMIL, APPROXIMATELY 50' FROM ELECTRICAL GUTTER TO TENANT PANEL

A.  $F = 50 \times 25,246 \times 1.73$ 18,594 × 208

B. M = 1 ———— = 0.64

C. 25,246 X 0.64 = 16,157 AMPS RMS SHORT CIRCUIT CURRENT AT

D. TENANT PANEL RATED AT 22,000 A.I.C. RMS SYM.

FAULT CURRENT CALCULATIONS

16,175 A.I.C.

CALCULATED

May 22, 2024

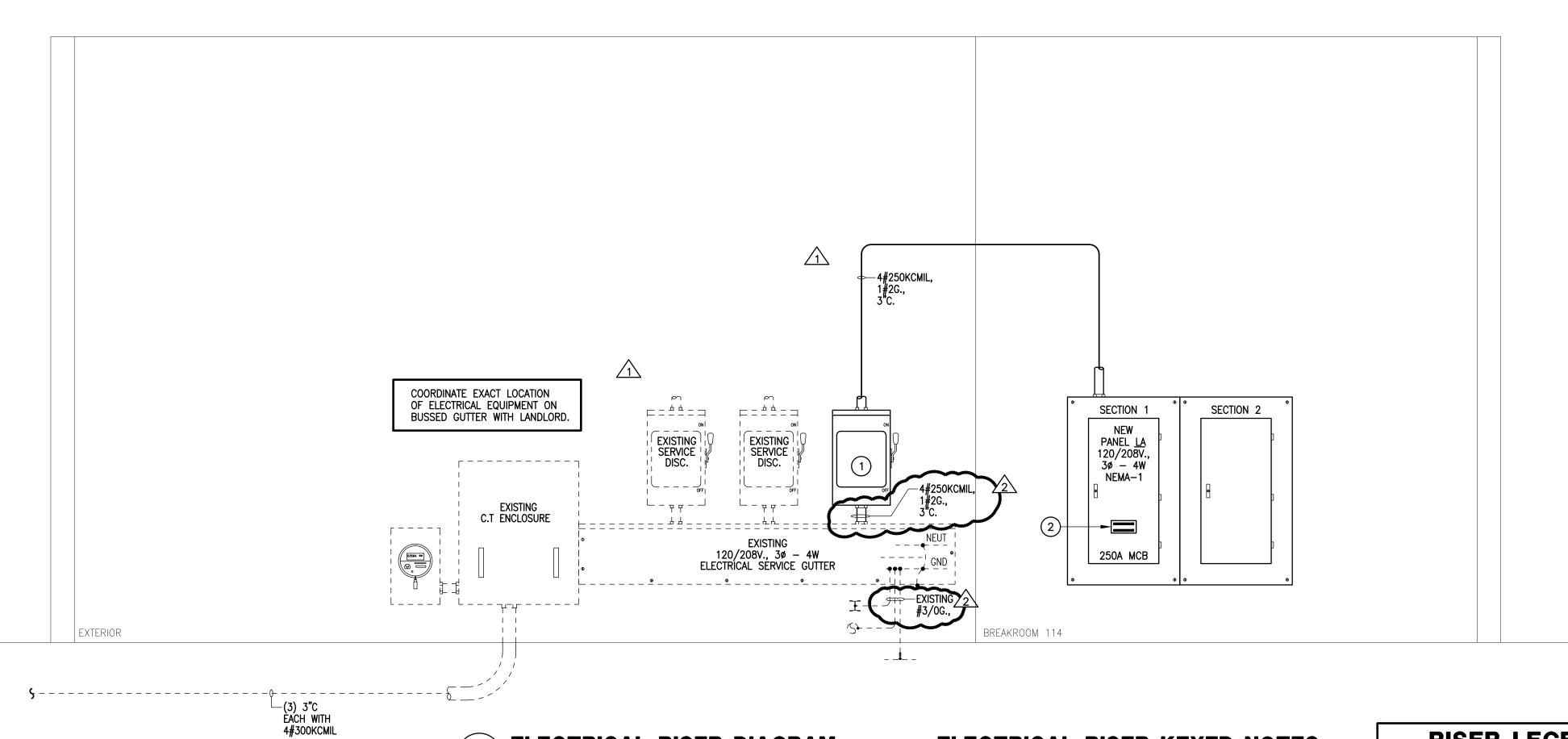
NOTE:
WHITE PLASTIC NAMEPLATE WITH ENGRAVED
BLUE LETTERING FOR AVAILABLE FAULT
CURRENT. SECURELY ATTACH NAMEPLATE
TO EQUIPMENT USING SCREWS. THE USE
OF "STICK—ON" NAMEPLATES SHALL NOT
BE PERMITTED. THE LABEL SHALL BE 2"X3".



NOTE TO CONTRACTOR FOR COORDINATION WITH LOCAL ELECTRIC UTILITY COMPANY DESIGN STANDARDS:

LALTHOUGH THE ENGINEER HAS MADE EVERY EFFORT TO VERIFY & COORDINATE THE PROJECT SITE UTILITIES, THE SITE UTILITY SERVICE LOCATIONS ARE NOT NECESSARILY FINAL AND ARE SUBJECT TO REVISIONS PER REVIEW BY THE RESPECTIVE UTILITY COMPANIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN APPROVALS FROM, AND COORDINATE WITH THE LOCAL UTILITY COMPANY TERMS & CONDITIONS PACKAGE, TO PROVIDE UTILITY SERVICE TO THE PROJECT. CONTRACTOR SHALL BASE HIS BID ON CONFORMANCE TO ALL UTILITY REQUIREMENTS AND SPECIFICATIONS DRAWINGS & NOTES.

2. CONTRACTOR SHALL CONTACT LOCAL ELECTRIC UTILITY COMPANY IMMEDIATELY UPON AWARD OF CONTRACT. CONTRACTOR SHALL COORDINATE ALL UTILITIES AND THEIR REQUIREMENTS, ROUTING, METERING, AND DISCONNECTING MEANS PRIOR TO INSTALLATION OF ANY CONDUITS OR PIPING AS ESTABLISHED ELECTRICAL SERVICE DESIGN STANDARDS MAY HAVE CHANGED DURING THE DESIGN PHASE OF THIS PROJECT TO WHEN THE ACTUAL CONSTRUCTION PHASE STARTS.



ELECTRICAL RISER DIAGRAM

ELECTRICAL RISER KEYED NOTES:

1 400A/3P/250AF NEMA-1 SERVICE RATED DISCONNECT SWITCH WITH CURRENT LIMITING FUSES IN LOCKABLE ENCLOSURE.

2) PROVIDE A PERMANENTLY AFFIXED 2"X3" LABEL WITH BLUE LETTERING ON CONTRASTING BACKGROUND LISTING THE FAULT CURRENT AT THE TIME OF INSTALLATION. REFER TO DETAIL #4 ON THIS SHEET.

RISER LEGEND

----- EXISTING TO REMAIN

----- EXISTING TO BE REMOVED

NEW CONSTRUCTION



**PROJECT TEAM** 

OWNER
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Tomball, Texas 77375 832.643.0368 phone ko@kodesign-mep.com

TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION #: F-9072

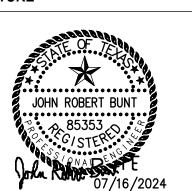
EXPIRES: 31 MARCH 2025

# DESCRIPTION DATE

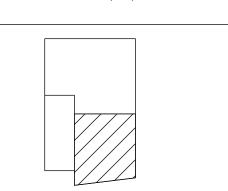
1 CITY OF AUSTIN RESPONSE #1 06/20/24

CITY OF AUSTIN RESPONSE #2

SEAL / SIGNATURE



**KEY MAP** 



ISSUE FOR PERMIT

PROJECT NAME

SUPER KIDS DENTAL

**PROJECT STATUS** 

PROJECT ADDRESS

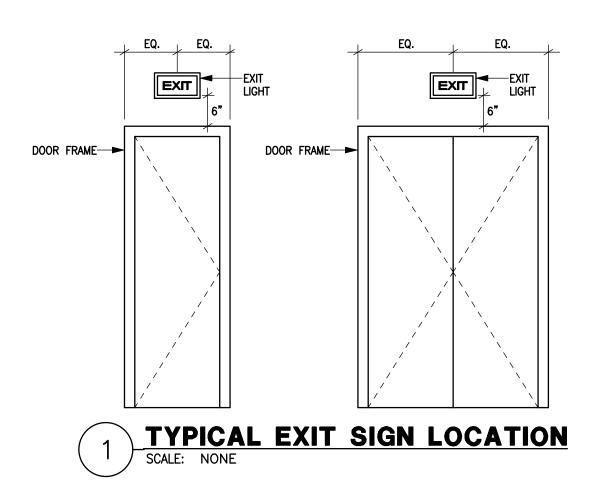
6707 E RIVERSIDE DR., AUSTIN, TX 78741

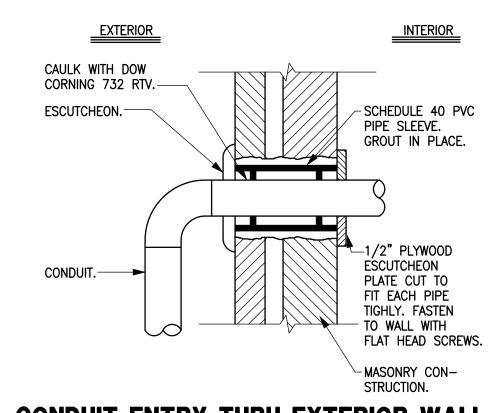
PROJECT NUMBER

24017 **DATE**05/23/24

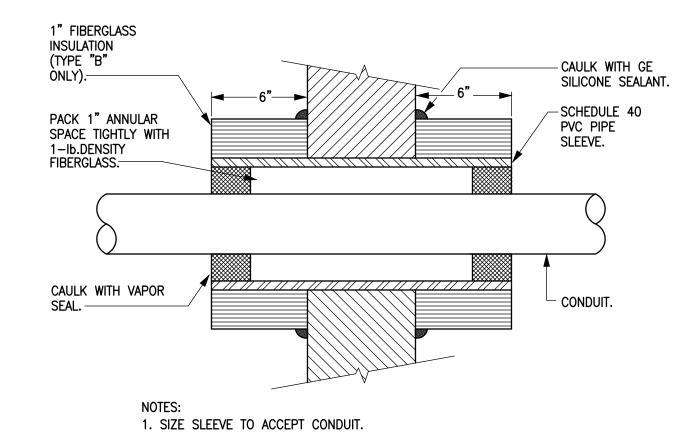
ELECTRICAL RISER DIAGRAM

E201

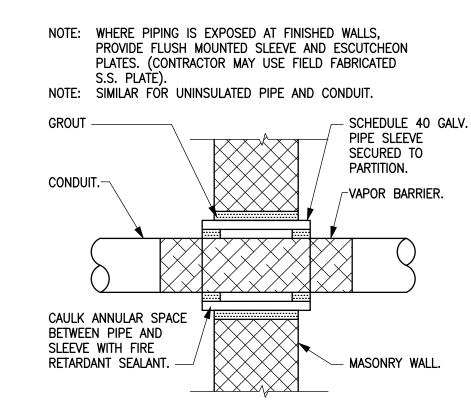




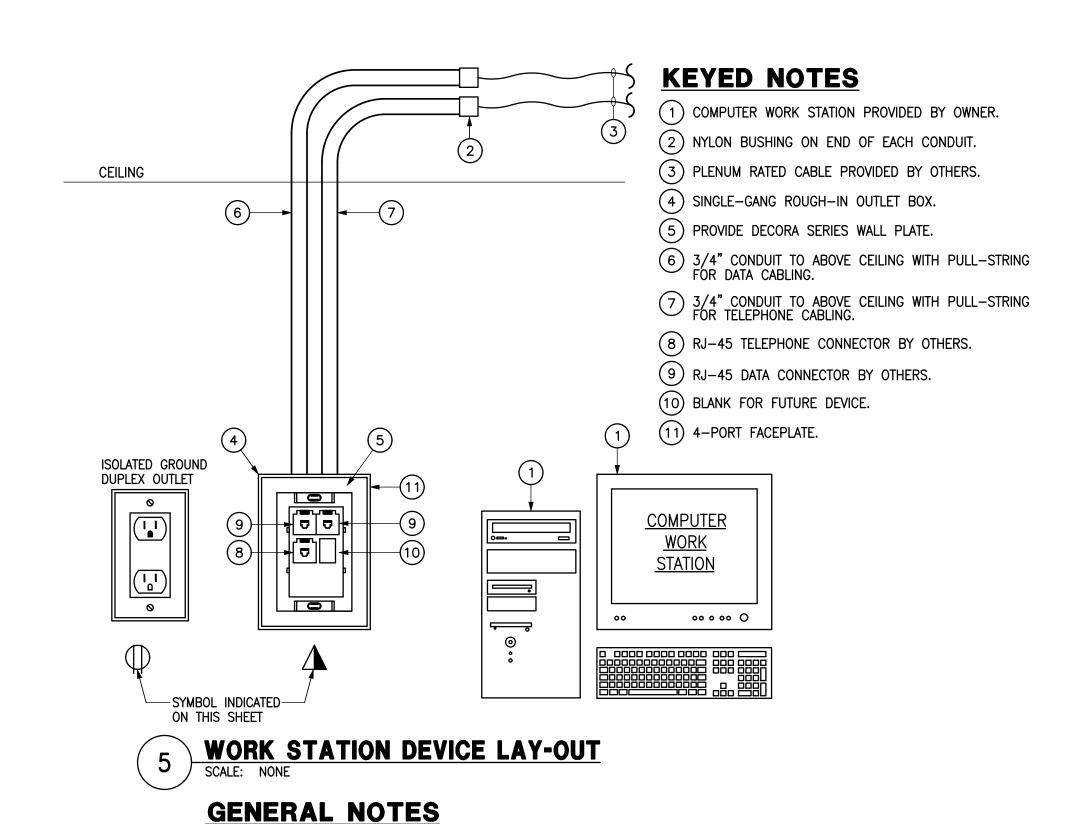
**CONDUIT ENTRY THRU EXTERIOR WALL DETAIL** 



CONDUIT SEALANT THRU EXTERIOR WALLS DETAIL



**CONDUIT THRU FIRE RATED WALL DETAIL** 



1. ALL PATCH CABLES REQUIRED FOR DATA AND TELEPHONE

TO BE PROVIDED BY OWNER.

#### SYMBOL SCHEDULE DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS) LIGHTING (LETTER DENOTES TYPE - SEE LIGHT FIXTURE SCHEDULE) L.E.D. FIXTURE L.E.D. FIXTURE ON EMERGENCY CIRCUIT DOWNLIGHT FIXTURE ⊢O | LIGHT FIXTURE – WALL MOUNTED DOWNLIGHT FIXTURE ON EMERGENCY CIRCUIT LIGHT FIXTURE - WALL MOUNTED ON EMERGENCY CIRCUIT EXIT LIGHT-CEILING MTD WITH DIRECTIONAL ARROWS AS REQUIRED EXIT LIGHT-WALL MTD WITH DIRECTIONAL ARROWS AS REQUIRED EMERGENCY LIGHTING UNIT EQUIPMENT SWITCHES SINGLE POLE SWITCH 3-WAY SWITCH TSI TIME SWITCH RECEPTACLES AND OUTLETS ⇒ U | DUPLEX RECEPTACLE WITH USB PORT ➡ M MEDICAL GRADE DUPLEX RECEPTACLE DOUBLE DUPLEX IN 2-GANG BOX WITH SINGLE COVER PLATE ISOLATED GROUND DUPLEX RECEPTACLE DOUBLE DUPLEX ISOLATED GROUND IN 2-GANG BOX WITH SINGLE COVER PLATE 125/250 VOLT, 1 PHASE, 3-WIRE, 20 AMPS UNLESS NOTED OTHERWISE 480 VOLT, 3 PHASE, 4-WIRE, 20 AMPS UNLESS NOTED OTHERWISE **O** JUNCTION BOX PULL-BOX DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE DOUBLE DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE IN 2-GANG BOX WITH SINGLE COVER PLATE FLUSH FLOOR DOUBLE DUPLEX RECEPTACLE OUTLET FLUSH FLOOR COMBO DOUBLE DUPLEX RECEPTACLE OUTLET WITH TELEPHONE/DATA SURFACE MOUNTED PLUGMOLD FLUSH FLOOR JUNCTION BOX FLUSH FLOOR PULL BOX CEILING MOUNTED DATA OUTLET FOR SECURITY CAMERA (POE) POWER OVER EHTERNET. (CABLING IS BY OTHERS) DATA OUTLET, 1—GANG BOX WITH 3/4" CONDUIT TO ABOVE CEILING ■ TELEPHONE OUTLET, 1—GANG BOX WITH 3/4" CONDUIT TO ABOVE CEILING TELEPHONE/DATA OUTLET, 1-GANG BOX WITH (2)3/4" CONDUIT TO ABOVE CEILING MOTOR CONTROLLERS AND EQUIPMENT MOTOR, MAKE FINAL MOTOR CONNECTION DISCONNECT SWITCH AS REQUIRED MANUAL MOTOR SWITCH AS REQUIRED SD DUCT MOUNTED SMOKE DETECTOR ELECTRICAL EQUIPMENT 277/480 VOLT DISTRIBUTION OR PANELBOARD 120/208 VOLT OR 120/240 VOLT PANELBOARD TELEPHONE CABINET PLYWOOD TELEPHONE BACKBOARD DRY TYPE TRANSFORMER CIRCUITING ---- CONDUIT IN/OR BELOW FLOOR, SLAB, OR GRADE 3/4"C. UNLESS OTHERWISE NOTED; LONG HATCH, NEUTRAL; SHORT HATCH, PHASE; "Z" HATCH, INSULATED GROUND. NO HATCHES INDICATES 2 CONDUCTORS. ARROW INDICATES HOMERUN. SUBSCRIPTS AND ABBREVIATIONS NEXT TO ANY SYMBOL INDICATES EXISTING TO REMAIN NEXT TO ANY SYMBOL INDICATES NIGHT LIGHT NEXT TO ANY SYMBOL INDICATES WEATHERPROOF NEXT TO ANY SYMBOL INDICATES TAMPERPROOF INDICATES TRANSFORMER INDICATES UNDERGROUND ELECTRICAL CONDUIT(S) INDICATES UNDERGROUND TELEPHONE CONDUIT(S) NEXT TO ANY SYMBOL INDICATES FINAL ROUGH—IN FIELD COORDINATION BY

CONTRACTOR WITH ARCHITECTURAL MILLWORK DRAWINGS AND OTHER TRADES ALL EXTERIOR BUILDING ELECTRICAL EQUIPMENT TO BE WEATHERPROOF NEMA-3R MINIMUM UNLESS NOTED OTHERWISE.

#### FURNISH AND INSTALL A COMPLETE ELECTRICAL SYSTEM AS INDICATED ON PLANS. ELECTRICAL CONTRACTOR TO MAKE ALL FINAL CONNECTIONS TO ALL EQUIPMENT. \* ALL ELECTRICAL CONDUCTORS SHALL BE INSTALLED IN CONDUIT COMPLYING WITH THE NATIONAL ELECTRICAL CODE. WHERE INSTALLED SUBJECT TO STRESS FROM COLLISION OR IMPACT, CONDUIT SHALL BE GALVANIZED RIGID STEEL. OUT SIDE AND ENAMEL INSIDE. TUBING SHALL BE BY "TRIANGLE" OR AN APPROVED SUBSTITUTION. LIQUID—TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED AT ALL MOTOR CONNECTIONS, OR WHERE MOVEMENT/VIBRATION IS A USED ONLY FOR CONNECTION TO LIGHTING FIXTURES, IN LENGTHS NOT TO MINIMUM SIŽE FOR FLEXIBLE METAL CONDUIT SHALL BE 1/2 INCH. CONDUIT/ CONDUCTOR FILL SHALL CONFIRM TO NATIONAL ELECTRICAL CODE, LATEST \* CARLON PVC TYPE SCH. 40 HEAVY WALL CONDUIT WITH GROUND WIRE MAY THREADED, GALVANIZED CONDUIT. PVC SCH. 40 CONDUIT SHALL NOT BE RUN IN OR ABOVE FLOOR SLAB, OR IN TILT WALL PANELS. PVC CONDUIT SHALL \* A GROUND CONDUCTOR SHALL BE SUPPLIED IN NONMETALLIC CONDUIT OR E.M.T. UTILIZING SET SCREW TYPE CONNECTORS. THE GROUND CONDUCTOR \* CONDUIT TO BE SUPPORTED FROM JOIST. PROVIDED HANGERS, SUPPORTS AND FASTENINGS AS REQUIRED BY NATIONAL ELECTRICAL CODE DO NOT \* ALL CONDUIT FITTINGS SHALL BE STEEL, SET SCREW OR COMPRESSION TYPE, INSULATED THROAT, UL LISTED. FITTINGS SHALL BE AS MANUFACTURED BY APPLETON ELECTRIC, OZ GEDNEY CO., ARROW CONDUIT AND FITTINGS CORP., CONTINUOUS, WITHOUT WELD, SPLICE, OR JOINT THROUGHOUT ITS LENGTH, AND UNIFORM IN CROSS-SECTION. WIRE #6 AWG AND LARGER SHALL HAVE TYPE "THWN" INSULATION. WIRE #8 AWG AND SMALLER SHALL HAVE DUAL-RATED TYPE "THHN/THWN" INSULATION. MINIMUM WIRE SIZE, EXCEPT FOR CONTROL WIRING, SHALL BE #12 AWG. ALL WIRING INSIDE LIGHTING FIXTURES SHALL BE TEMPERATURE RATËD PER THE N.E.C. — 90 DEGREES C MINIMUM. BRANCH CIRCUIT WIRING WITHIN 3 INCHES OF FLUORESCENT BALLASTS SHALL \* ALL WIRING ABOVE CEILING SHALL BE PLENUM RATED OR INSTALLED IN CONDUIT. CONTRACTOR TO PROVIDE WIRING FROM EACH DEVICE TO PLYWOOD BACKBOARD \* 1. ALL WIRING DEVICES TO BE 'LEVITON' DECORA SERIES. THIS INCLUDES 3. ALL COVERPLATES TO BE 'LEVITON' DECORA SERIES WITH STAINLESS-STEEL FINISH. (VERIFY EVERY DEVICE AND COVERPLATE FINSIH ON THIS PROJECT WITH OWNER. \* 1. 120/208V, 3-PHASE' 4-WIRE, 120/240V, 1-PHASE, 3-WIRE OR 277/480V, 3-PHASE, 4-WIRE: FURNISH AND INSTALL AS SHOWN ON PLANS, LIGHTING PANELBOARDS BY SQUARE 'D' TYPE 'NQOD', STYLE "Q", OR EQUAL WITH BOLT ON CIRCUIT BREAKERS OR AN APPROVED SUBSTITUTION. ADDITIONAL BREAKERS FOR EXISTING PANELBOARDS SHALL BE OF TYPE MATCHING THE EXISTING BREAKERS. 2. PROVIDE TYPED DIRECTORY CARDS UNDER PLASTIC ON ALL DOORS OF PANELS. \* SAFETY SWITCHES SHALL BE FURNISHED AND INSTALLED AT ALL LOCATIONS INDICATED ON PLANS OR REQUIRED BY THE NATIONAL ELECTRICAL CODE. ALL SWITCHES SHALL BE HEAVY DUTY TYPE AND SHALL HAVE CLIPS FOR

**SPECIFICATIONS** 

\* VERIFY ALL DIMENSIONS AT THE JOB SITE AND FROM THE ARCHITECTURAL

\* UNLESS OTHERWISE NOTED, CONTRACTOR AND SUBCONTRACTOR SHALL PAY

\* VISITING THE SITE: EACH BIDDER SHALL VISIT THE SITE OF THE PROPOSED

ADDITIONAL COMPENSATION WILL BE ALLOWED FOR WORK OR MATERIAL

\* ALL CHANNELING AND PATCHING OF ROOF, FLOOR, CEILING AND WALLS

OMITTED FROM THE BIDDER'S CONTRACT PROPOSAL DUE TO HIS FAILURE

WHERE RIGID STEEL CONDUIT IS NOT REQUIRED, CONDUCTORS SHALL BE

CONCERN. UNLESS NOTED OTHERWISE FLEXIBLE METAL CONDUIT MAY BE

EXCEED 6 (SIX) FEET. MINIMUM CONDUIT SIZE SHALL BE 1/2 INCH.

BE USED BELOW FLOOR SLAB OR UNDERGROUND IN LIEU OF RIGID,

TERMINATE BELOW FLOOR SLAB WITH RIGID, THREADED METAL CONDUIT

\* ALL CONDUCTORS SHALL BE COPPER. EACH CONDUCTOR SHALL BE

SWITCHES, DIMMERS, RECEPTACLES, AND TELEPHONE/DATA OUTLETS.

2. ALL ISOLATED GROUND RECEPTACLES SHALL BE ORANGE 'IG 5-20R',

REJECTION TYPE FUSES AND SHALL BE BY SQUARE 'D', G.E., OR

(BUSSMAN "HI-CAP" KŔP-C) FOR CIRCUITS ABOVE 600 AMPS.

SYSTEM RATED TO WITHSTAND 220 DEG. C.

EQUAL, FOR THE VOLTAGE AND LOAD INVOLVED. PROVIDE A COMPLETE

SET OF FUSES IN ALL FUSED SWITCHES. FUSES SHALL BE CLASS AK-1

(BUSSMAN "LOW PEAK") FOR CIRCUITS UP TO 600 AMPS AND CLASS L

\* FURNISH AND INSTALL G.E. TYPE "QL" OR EQUAL DRY TRANSFORMER WITH 2-1/2% CAPACITY TAPS ON THE PRIMARY WINDING (TWO ABOVE AND FOUR

BELÓW NORMAL VOLTAGE). TRANSFORMER SHALL BE RATED FOR 150 DEG. C

RISE ABOVE 40 DEG. C. AMBIENT DURING USE AND HAVE AN INSULATION SYSTEM

ON/OFF

WSX PDT D

ADAPTER. CONDUIT ABOVE SLAB SHALL BE METAL.

SHALL BE BARE, STRANDED, ANNEALED COPPER.

BE TEMPERATURE RATED FOR 90 DEGREES C.

TELEHONE CABLE SHALL BE CAT3 OR BETTER.

ALL OTHERS TO BE GREY '5-20R'.

DATA/TELEPHONE/CATV CABLING:

DATA CABLE SHALL BE CAT5.

CATV CABLE SHALL BE CO-AX.

SUPPORT FROM ROOF DECK.

CONDUIT FITTINGS:

CONDUCTORS:

**WIRING DEVICES:** 

<u>LIGHTING PANELBOARDS:</u>

SAFETY SWITCHES:

WSX PDT

INSTALLED IN ELECTRICAL METALLIC TUBING WITH ELECTRO-GALVANIZING

GOVERNING CODES AND ORDINANCES.

SHALL BE GENERAL CONTRACTOR.

MATERIAL SHALL BE AS FOLLOWS:

TO SO INFORM HIMSELF BY SUCH INVESTIGATION.

\* CONTRACTOR TO PROVIDE RECORD DRAWINGS TO OWNER.

FOR ALL PERMITS AND CHARGES REQUIRED AND SHALL COMPLY WITH ALL

WORK AND SHALL FULLY INFORM HIMSELF REGARDING THE FACILITIES. NO

ON/OFF ON/OFF 

nPODM 2P DX

nPODM 4P DX

nlight switch face plate details

SCALE: NONE

ON/OFF

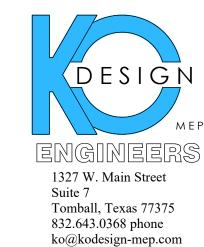


PROJECT TEAM

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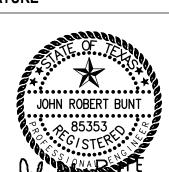


TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION #: F-9072 EXPIRES: 31 MARCH 2025

DATE

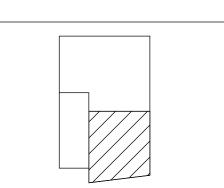
DESCRIPTION

SEAL / SIGNATURE



**KEY MAP** 

**PROJECT STATUS** 



ISSUE FOR PERMIT PROJECT NAME SUPER KIDS DENTAL

PROJECT ADDRESS 6707 E RIVERSIDE DR., AUSTIN, TX 78741

PROJECT NUMBER

ELECTRICAL **SPECIFICATIONS** 

E301

#### PLUMBING GENERAL NOTES:

(FOR SHEET P101)

- 1. SAWCUT AND REMOVE EXISTING FLOOR SLAB/PAVING AS REQUIRED TO PROVIDE NEW FIXTURES, GREASE TRAP, SAMPLE WELL, CLEANOUTS, AND UNDERSLAB WASTE AND VENT PIPING. PATCH AND REFINISH FLOOR/PAVING TO MATCH EXISTING. ALL SUCH WORK IS TO BE DONE IN ACCORDANCE
- WITH THE LANDLORD'S REQUIREMENTS. 2. FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING SANITARY WASTE PIPING PRIOR TO BEGINNING CONSTRUCTION TO ENSURE THAT PROPER
- 3. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.

CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.

- 4. BEFORE MAKING ANY CONNECTIONS AND AGAIN UPON COMPLETION OF WORK, THOROUGHLY ROD OUT AND FLUSH SANITARY PIPING TO ENSURE THEY ARE FREE FROM BLOCKAGES.
- 5. AT CONNECTION TO EXISTING COLD WATER MAIN, PROVIDE WATER METER IF REQUIRED PER LANDLORD'S REQUIREMENTS AND/OR TENANT'S LEASE
- 6. PRIOR TO BEGINNING CONSTRUCTION, COORDINATE PLUMBING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL CODE AUTHORITY AND
- 7. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT.

ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.

MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES.

SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/

- 9. COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS AND SPECIFICATIONS PRIOR TO ANY ROUGH-INS.
- 10. DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
- 11. CONTRACTOR TO COORDINATE ALL REMODEL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICE.
- 12. CONTRACTOR TO FIELD VERIFY AS NECESSARY THE EXACT ROUTING AND SIZES OF ALL PIPING.
- 13. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE AND INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING
- 14. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE LANDLORD'S MOST RECENT RULES AND REGULATIONS FOR TENANT FINISHOUT. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH SUCH RULES AND REGULATIONS.

**BACKFLOW PREVENTION PROTECTION NOTE** 

ALL NEW ROOFING WORK SHALL BE PERFORMED BY LANDLORD'S ROOFING CONTRACTOR

BUILDING IS PROTECTED BY AN EXISTING BACKFLOW PREVENTER ON SITE.

PLUMBING SPECIAL ROOFING NOTE

#### **PLUMBING KEYED NOTES**

ON THIS SHEET.

- (FOR SHEET P101) 1 CONNECT NEW SANITARY TO EXISTING SANITARY WASTE LINE BELOW SLAB. FIELD VERIFY EXACT TIE-IN LOCATION. REFER TO PLUMBING GENERAL NOTE 1
- 2 PROVIDE 3/4" WATTS LF-009 REDUCED PRESSURE BACKFLOW DEVICE RPZ-1 TO SERVE FILTER STATION. COORDINATE EXACT LOCATION WITH DENTAL EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. REFER TO DETAIL #3 ON THIS SHEET FOR MORE INFORMATION.
- 3 PROVIDE BRANCH WYE TAILPIECE AT SINK FOR HVAC CONDENSATE LINE. LOWER ROUGH-IN HEIGHT ACCORDINGLY. COORDINATE WITH MECHANICAL CONTRACTOR.
- 4 | FLOOR SINK TO SERVE ADJACENT DENTAL EQUIPMENT. COORDINATE LOCATION WITH EQUIPMENT BEING FURNISHED BY DENTAL SUPPLIER.
- 5 CONNECT NEW 1-1/4" COLD WATER TO EXISTING COLD WATER LINE ABOVE CEILING. FIELD VERIFY SIZE AND LOCATION PRIOR TO START OF WORK. IF NO SHUT OFF VALVE EXISTS AT THIS LOCATION, PROVIDE NEW SHUT-OFF VALVE AS SHOWN.
- 6 DENTAL COMPRESSOR SYSTEM FURNISHED BY DENTAL SUPPLIER PER CATEGORY 3, NFPA 99. PROVIDE 2" SCHEDULE 80 CPVC VENT COOLING AIR INTAKE PIPE FROM GARAGE WITH SHROUD AND SCREENED INLET. (LOCATE MINIMUM 10'-0" FROM WASTE VENT OR EXHAUST). ATTACH A PVC DRAIN TUBE TO THE DRIP LEG VALVE TO ALLOW DRAINAGE INTO FLOOR SINK. COORDINATE EXACT REQUIREMENTS AND MAKE ALL CONNECTIONS AS DIRECTED BY DENTAL EQUIPMENT SUPPLIER. (AIR TECHNIQUES MOJAVE MONITOR V5)
- 7 DENTAL VACUUM SYSTEM FURNISHED BY DENTAL SUPPLIER PER CATEGORY 3, NFPA 99. PROVIDE 2" SCHEDULE 40 PVC VACUUM LINE UP TO ABOVE CEILING AND ROUTE AS SHOWN. PROVIDE 2" EXHAUST VENT LINE TO GARAGE WITH SHROUD AND SCREENED INLET. (SCH. 40 PVC IF HEAT EXCHANGER IS PROVIDED, RECOMMENDED PIPE USED WITH MODELS WITHOUT A HEAT EXCHANGER INCLUDES WROUGHT IRON PIPE (BLACK & GALVANIZED) OR COPPER PIPE TYPE M. INSULATE METAL PIPE IN UTILITY ROOM TO AVOID ADDING HEAT TO THE ROOM. INSULATION MUST BE RATED FOR A MINIMUM OF 300°F CONTINUOUSLY.) ROUTE 1-1/2" SCH. 40 PVC DRAIN LINE TO FLOOR SINK. COORDINATE EXACT REQUIREMENTS, LOCATION AND MAKE ALL CONNECTIONS AS DIRECTED BY DENTAL EQUIPMENT SUPPLIER. (AIR TECHNIQUES AIRSTAR 50)
- PROVIDE NEW WATER HEATER <u>EWH-1</u> SUSPENDED AS HIGH AS POSSIBLE IN ACCESSIBLE LOCATION. PROVIDE 3/4" COLD AND HOT WATER CONNECTIONS COORDINATE FINAL LOCATION WITH OWNER. ROUTE WATER HEATER T&P RELIEF AND DRAIN LINES TO FLOOR SINK IN ROOM BELOW WITH APPROVED AIR GAP.
- 9 PROVIDE PLUMBING FIXTURE WITH THERMOSTATIC MIXING VALVE TMV-1 TO TEMPER HOT WATER TO 110°F.
- 10 ROUTE 3/4" FILTERED WATER LINE, 1/2" AIR LINE & 3/4" VACUUM LINE DOWN TO DENTAL JUNCTION BOX. PROVIDE SHUT-OFF VALVES AS NECESSARY. COORDINATE EXACT REQUIREMENTS WITH DENTAL EQUIPMENT SUPPLIER PRIOR TO ANY WORK BEING DONE. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING WHAT WAS INSTALLED AND INSTALLING NEW PIPING/EQUIPMENT AT HIS/HER COST.
- 11 ROUTE 1/2" 02 LINE, 3/8" NO2 & 3/4" VAC DOWN TO SURGICAL JUNCTION BOX. PROVIDE FLOW METER & SHUT-OFF VALVES AS NECESSARY. COORDINATE EXACT REQUIREMENTS WITH DENTAL EQUIPMENT SUPPLIER PRIOR TO ANY WORK BEING DONE. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING WHAT WAS INSTALLED AND INSTALLING NEW PIPING/EQUIPMENT AT HIS/HER COST. REFER TO DETAIL #10 ON SHEET P301 FOR MORE INFORMATION.

PLUMBING LEGEND

----(E)----- EXISTING TO REMAIN

\_\_\_\_\_ NEW CONSTRUCTION

#### PROVIDE 3/4" PIPING WITH UNIONS AND VALVES TO ACCOMMODATE DENTAL WATER SOLENOID CONTROL VALVE AND FILTER STATION. ROUTE 3/4" FILTERED COLD WATER TO SERVE ANY DENTAL EQUIPMENT AS DIRECTED BY DENTAL SUPPLIER. PROVIDE MASTER SHUT-OFF/BYPASS VALVE. COORDINATE EXACT REQUIREMENTS, LOCATION AND MAKE ALL CONNECTIONS AS DIRECTED BY DENTAL EQUIPMENT SUPPLIER.

- 13 NITROUS OXIDE & OXYGEN SUPPLY TANKS AND CONTROLLER. REFER TO DETAIL #1 ON SHEET P302 FOR MORE INFORMATION. COORDINATE ALL MED GAS EQUIPMENT & REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ANY WORK BEING DONE
- 14 COORDINATE EXACT LOCATION AND ORIENTATION OF EQUIPMENT IN MED GAS ROOM WITH OWNER/EQUIPMENT SUPPLIER PRIOR TO ANY WORK BEING DONE.
- 15 PROVIDE 1/2" FILTERED LINE WITH SHUT OFF VALVE FOR TANK WASHOUT PORT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DENTAL EQUIPMENT SUPPLIER.
- PROVIDE AND INSTALL HOT WATER RETURN CIRCULATING PUMP <u>HWCP-1</u> IN AN ACCESSIBLE LOCATION. REFER TO PROVIDE AND INSTALL CHECK VALVE AT BEGINNING OF HOT WATER RETURN LINE. COORDINATE FINAL LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN. REFER TO DETAIL #12 ON SHEET P301 FOR MORE INFORMATION.
- 17 3/4" FILTERED WATER LINE, 3/4" AIR LINE & 2" VACUUM. ENSURE THE VACUUM, FILTERED WATER & AIR PIPING ARE TIGHT TO STRUCTURE. COORDINATE EXACT SIZING AND ROUTING WITH DENTAL EQUIPMENT SUPPLIER PRIOR TO ANY WORK BEING DONE.
- 18 SAME AS NOTE 17 EXCEPT WITH 1/2" AIR & 1" VACUUM LINE.
- 19 1/2" 02 LINE DOWN TO DENTAL EQUIPMENT. REFER TO DETAIL DRAWINGS FOR MORE INFORMATION.
- 20 1/2" 02 LINE, 3/8" NO2 LINE & 1-1/2" VACUUM. ENSURE THE VACUUM, NO2 & 02 PIPING ARE TIGHT TO STRUCTURE. COORDINATE EXACT SIZING AND ROUTING WITH DENTAL EQUIPMENT SUPPLIER PRIOR TO ANY WORK BEING DONE.

SAME AS NOTE 20 EXCEPT WITH 1" VACUUM LINE. 1/2" 02 LINE, 3/8" NO2 & 3/4" VAC CAP ABOVE CEILING AT 10'-0" FROM EXTERIOR WALL. 23 SAME AS NOTE 17 EXCEPT WITH 1/2" AIR & 1-1/4" VACUUM LINE.

#### NOTE TO CONTRACTOR:

ALTHOUGH THE ENGINEER HAS MADE EVERY EFFORT TO VERIFY ALL DENTAL & MED GAS EQUIPMENT & DROPS, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE EQUIPMENT SUPPLIER /OWNER FOR FINAL LOCATIONS, SIZING AND ANY ADDITIONAL EQUIPMENT & PIPING TO ENSURE THERE IS A COMPLETE WORKING SYSTEM.

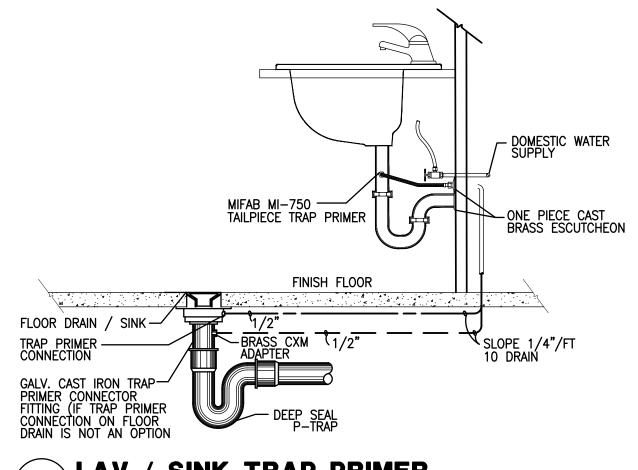
#### **NOTE TO CONTRACTOR:**

ALTHOUGH THE ENGINEER HAS MADE EVERY EFFORT TO VERIFY THE EXISTING PROJECT SITE UTILITIES, THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE OWNER FOR ANY NEW, REUSED OR DEMOLISHED EQUIPMENT/PIPING BASED ON THE EXISTING SITE UTILITIES.

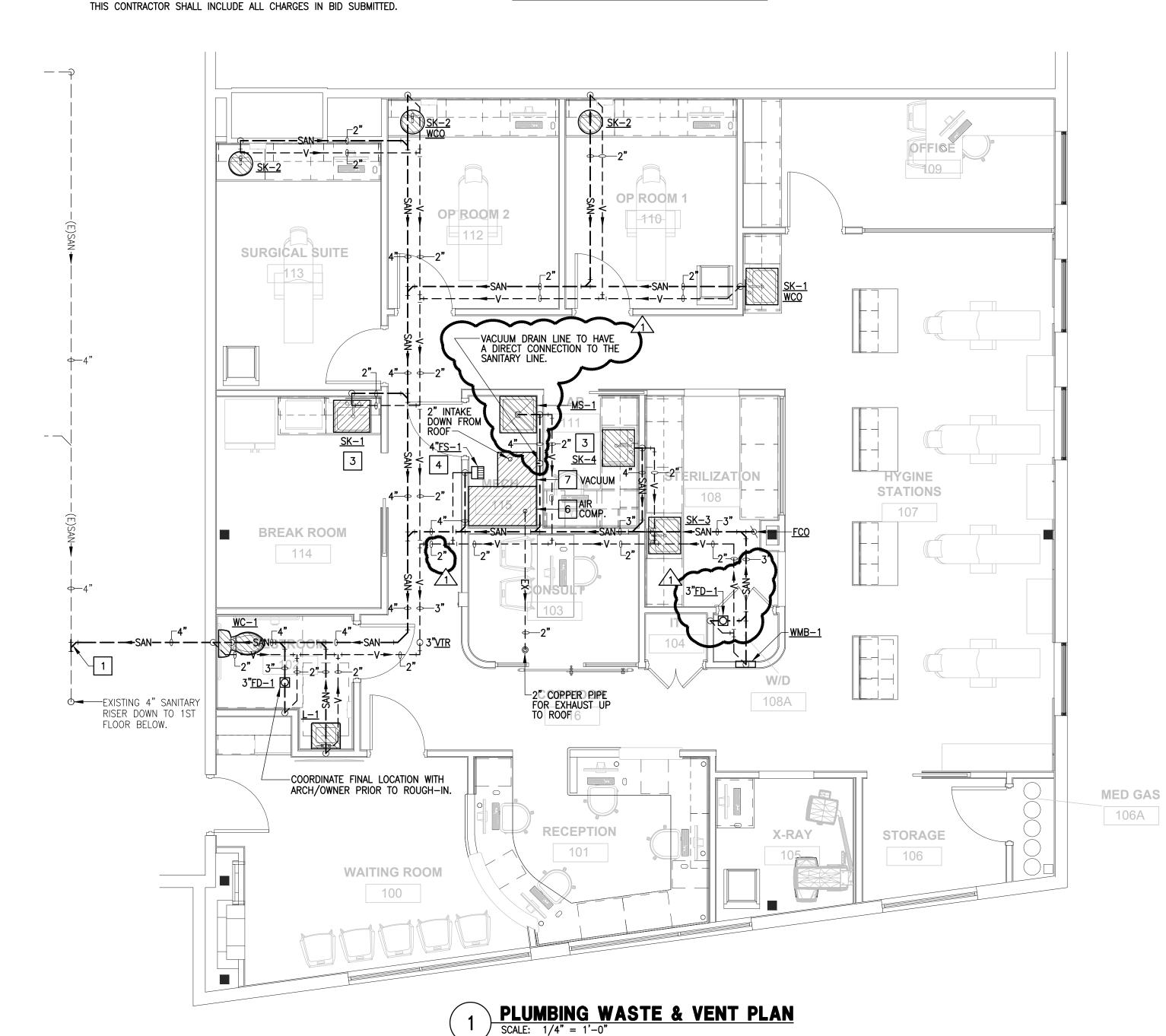
Plumbing Calculations										
Finding	Oversita	Water Fixture units	Drainage/Vent Fixture units	Total Water Fixture Units	Total Drainage Fixture					
Fixture	Quanity	(WFU's per type of fixture)	(DFU's per type of fixture)	Per Fixture	units Per Fixture					
Water Closet	1	5	4	5	4					
Lavatory	1	5	4	5	4					
Electric Drinking Fountain	0	0.25	0.5	0.00	0					
Mop Sink	1	3	5	3	5					
Washing Machine box	1	3	2	3	2					
Sink	7	3	2	21	14					
Floor Drain	1	-	5	-	5					
Floor Sink	1	-	5	-	5					
Dental Equipment	1	10	-	10.0	-					
Total Fixture Units				47.00	39.00					

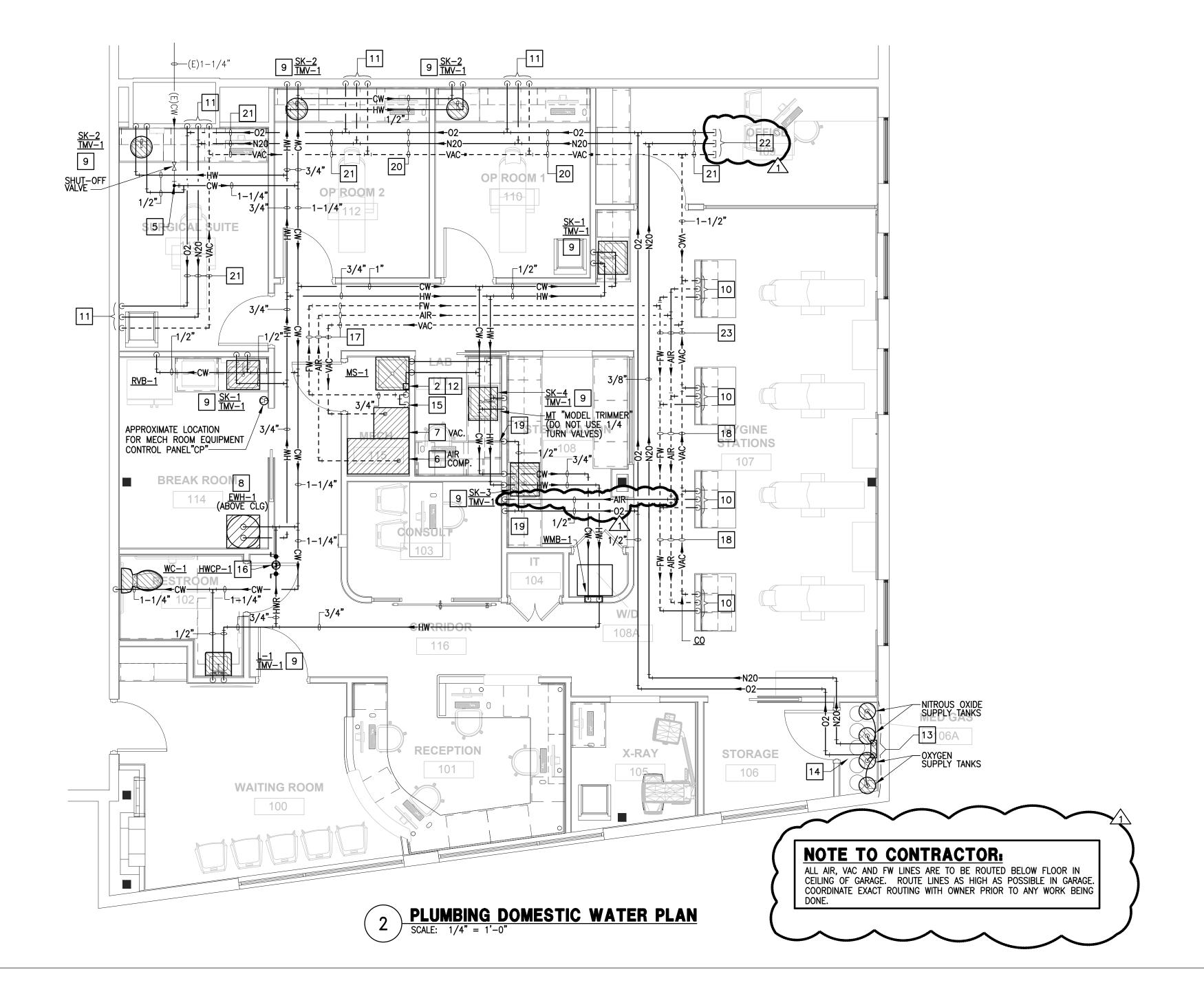
Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative
, , , , , , , , , , , , , , , , , , , ,	
LEAD FREE*	
Series LF009	a a
Reduced Pressure Zone Assemblies	
Sizes: 1/4" – 3"	
Series LF009 Reduced Pressure Zone Assemblies are designed to	
protect potable water supplies in accordance with national plumbing codes and water authority requirements. This series can be used in a variety of installations, including the prevention of health hazard cross-connections in piping systems or for containment at the service line entrance. The coating on this backflow assembly uses ArmorTek™ technology to resist corrosion due to microbial induced corrosion (MIC) or exposed metal substrate.* The LF009 features Lead Free* construction to comply with Lead Free* installation requirements.	LF009
This series features two in-line, independent check valves, captured springs and replaceable check seats with an intermediate relief valve. Its compact modular design facilitates easy maintenance and assembly access. Sizes 1/4" – 1" shutoffs have tee handles.	Test Cock No. 3  Ball Type Test Cock No. 4
Features	Test Cock
Single access cover and modular check construction for ease of maintenance	No. 2
<ul> <li>Top entry – all internals immediately accessible</li> </ul>	First Check Check
Captured springs for safe maintenance	Module Assembly Module Assembly
Internal relief valve for reduced installation clearances	
Replaceable seats for economical repair	
<ul> <li>Utilizes advanced ArmorTek<sup>™</sup> coating technology to resist corrosion of internals*</li> </ul>	
Lead Free* cast copper silicon alloy body construction for durability     1/4" - 2"	R.P. ZoneWater Outlet
<ul> <li>Fused epoxy coated cast iron body 2½" and 3"</li> </ul>	Tollor valvo resorristy
<ul> <li>Ball valve test cocks — screwdriver slotted ¼" – 2"</li> </ul>	AL. A. M.L.
Large body passages provides low pressure drop	Now Available
Compact, space saving design	WattsBox Insulated Enclosures.
No special tools required for servicing	For more information, send for literature ES-WB.
Specifications	
A Reduced Pressure Zone Assembly shall be installed at each potential health hazard location to prevent backflow due to backsiphonage and/or backpressure. The assembly shall consist of an internal pressure differential relief valve located in a zone between two positive seating check modules with captured springs and silicone seat discs. Seats and seat	NOTICE Inquire with governing authorities for local installation requirements  NOTICE
discs shall be replaceable in both check modules and the relief valve. There shall be no threads or screws in the waterway exposed to line fluids. Service of all internal components shall be through a single access cover secured with stainless steel bolts. Body and shutoffs shall be constructed using Lead Free* cast copper silicon alloy materials. Lead Free* reduced pressure zone assembly shall comply with state codes and standards, where applicable, requiring reduced lead content.	The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.
The assembly shall also include two resilient seated isolation valves, four resilient seated test cocks and an air gap drain fitting. The valve body shall utilize a coating system with built in electrochemical corrosion inhibitor and microbial inhibitor.* The assembly shall meet the requirements of: USC; ASSE Std.	*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.
1013; AWWA Std. C511; CSA B64.4. Shall be a Watts Series LF009.	* Armortek coating applies to the $21/2$ " and 3" models only.
Watts product specifications in U.S. customary units and metric are approximate and are provided for referen	ice only. For precise measurements, ction, specifications, or materials with- icts previously or subsequently sold.

REDUCED BACKFLOW PREVENTER 'RPZ'



LAV / SINK TRAP PRIMER





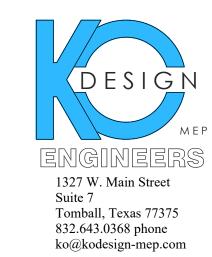


PROJECT TEAM

SUPER KIDS DENTAL 2410 E RIVERSIDE DRIVE, SUITE 12-H AUSTIN. TX 78741 www.superkidsaustin.com

ELEMENT ARCHITECTS, LLC. 1250 WOOD BRANCH PARK DR. SUITE 480 HOUSTON, TX 77079 (713) 874 0775 www.ElementArchitects.com

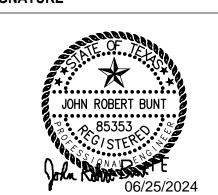
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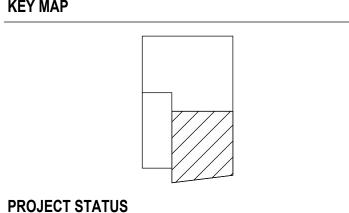
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION #: F-9072 EXPIRES: 31 MARCH 2025

#	DESCRIPTION	DATE
1	CITY OF AUSTIN RESPONSE #1	06/20/24

**SEAL / SIGNATURE** 



**KEY MAP** 



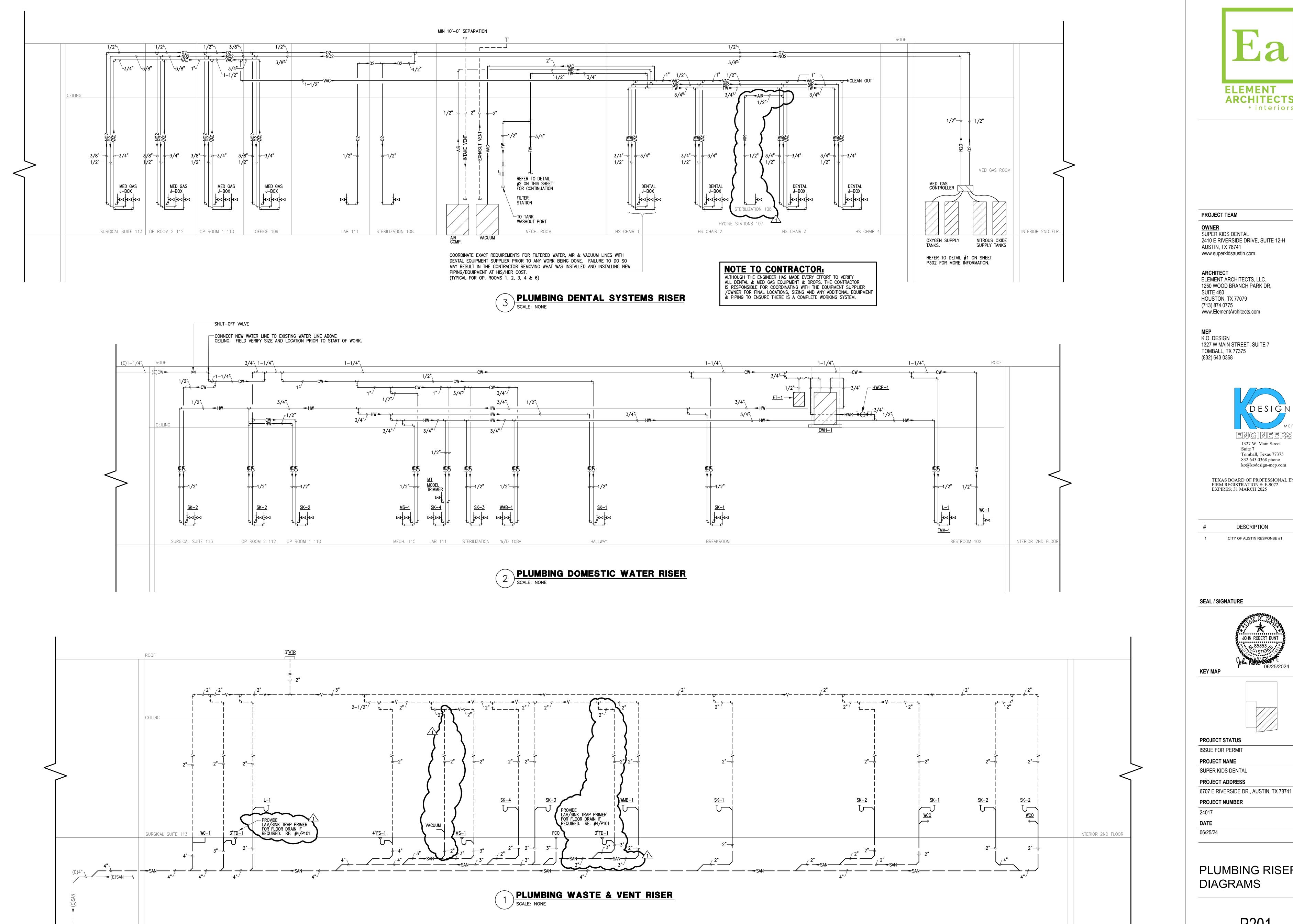
**ISSUE FOR PERMIT** PROJECT NAME SUPER KIDS DENTAL

PROJECT ADDRESS 6707 E RIVERSIDE DR., AUSTIN, TX 78741

**PROJECT NUMBER** 

24017 DATE

PLUMBING FLOOR **PLANS** 



SANITARY LINE DOWN TO FIRST FLOOR



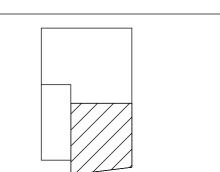
2410 E RIVERSIDE DRIVE, SUITE 12-H



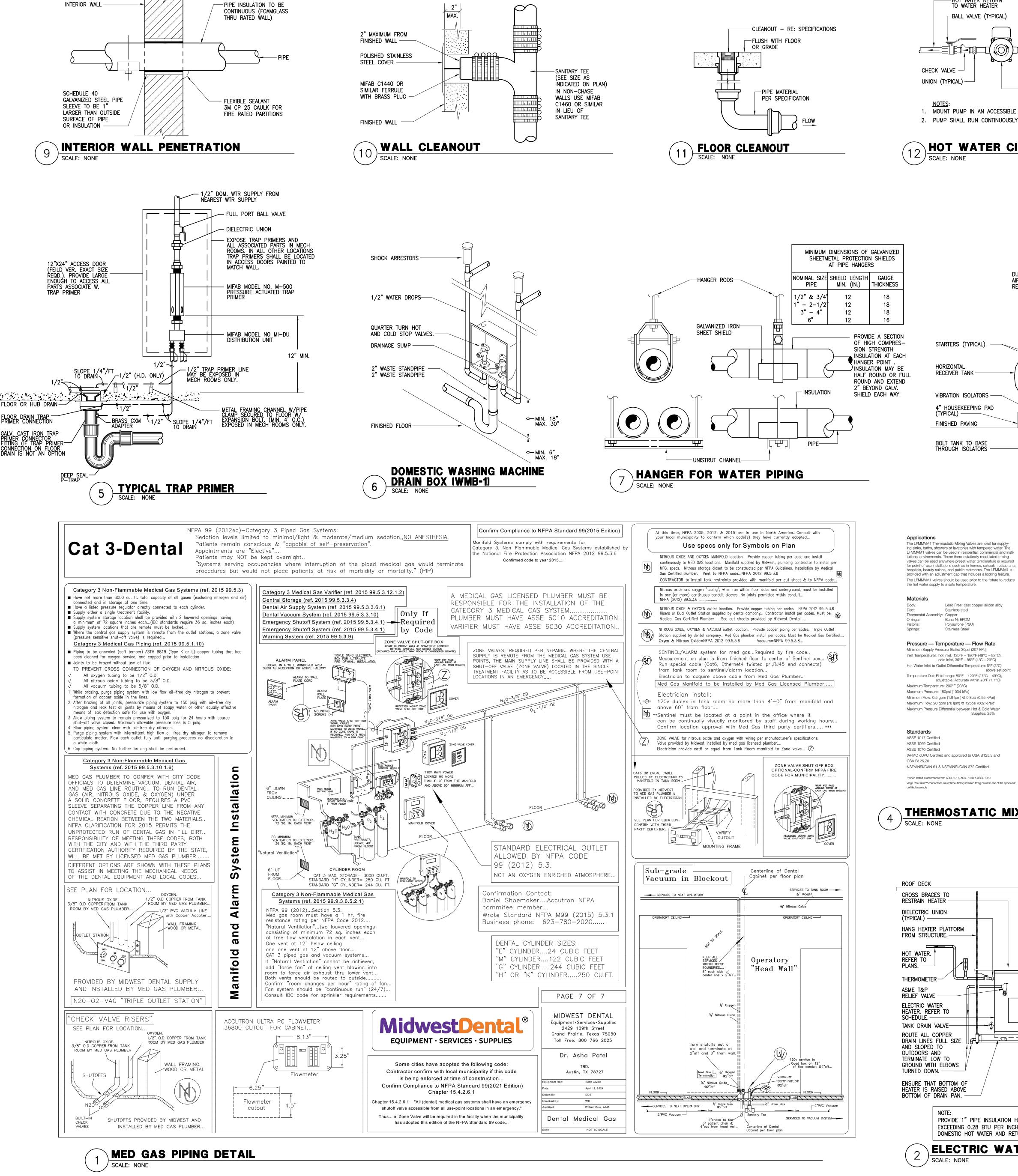
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION #: F-9072

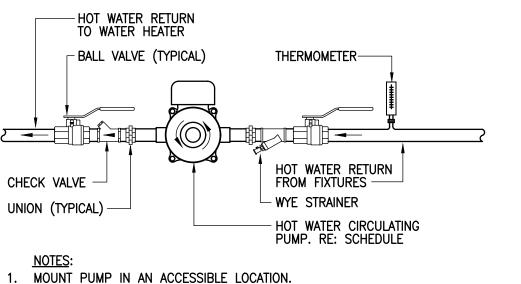
	#	DESCRIPTION	DATE
_	1	CITY OF AUSTIN RESPONSE #1	06/20/24





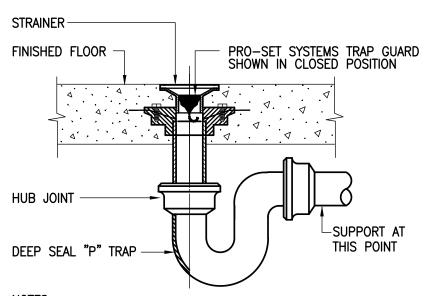
PLUMBING RISER





2. PUMP SHALL RUN CONTINUOUSLY

HOT WATER CIRCULATING PUMP



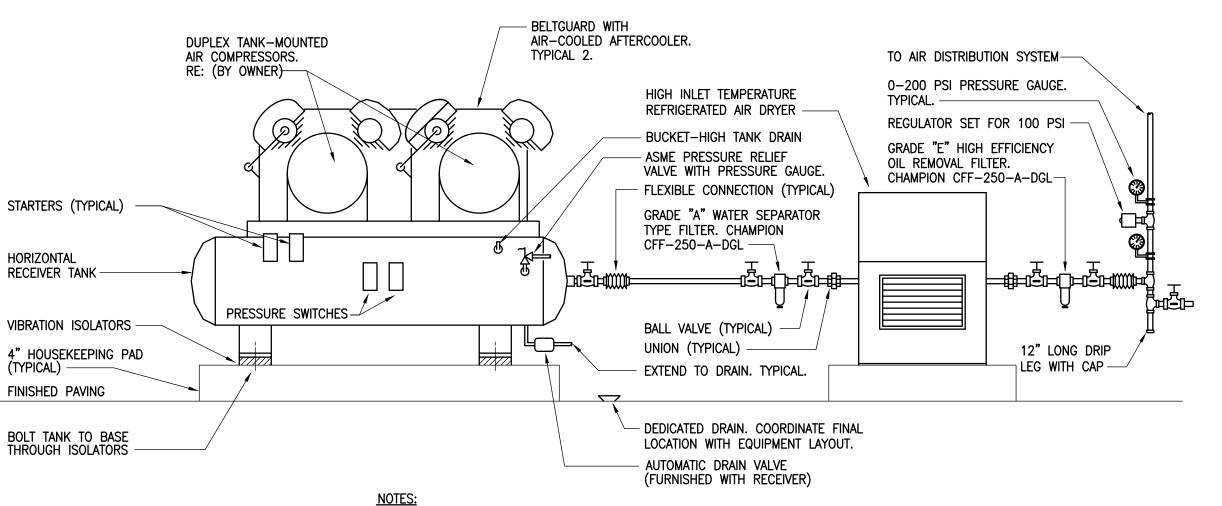
I. TRAP GUARD SHALL BE FACTORY FITTED TO MATCH EACH FLOOR DRAIN (AND FLOOR SINK) BY SIZE, MODEL, AND MANUFACTURER. 2. FLOOR SINK/HUB DRAIN TRAP GUARD INSTALLATION IS SIMILAR.

3. INSTALLATION OF TRAP GUARD TO BE IN ACCORDANCE WITH MANUFACTURER'S

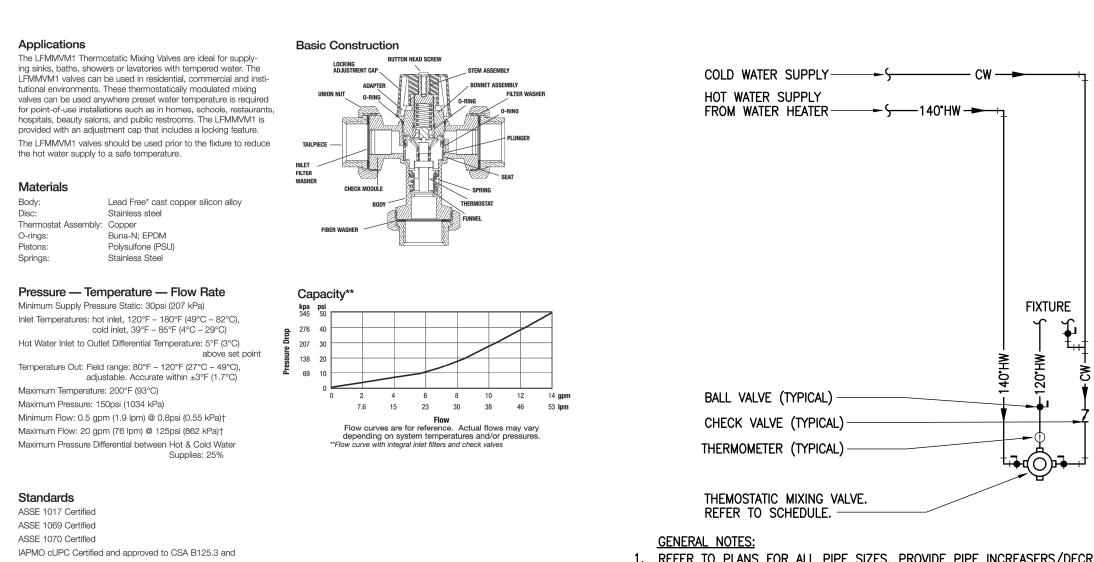
4. INSERT TRAP GUARD ONLY AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS TITE SEAL. FOR DRAIN RODDING AFTER INSTALLATION, INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.

#### **FLOOR DRAIN WITH** TRAP SEAL PROTECTION SCALE: NONE

RECOMMENDATIONS.

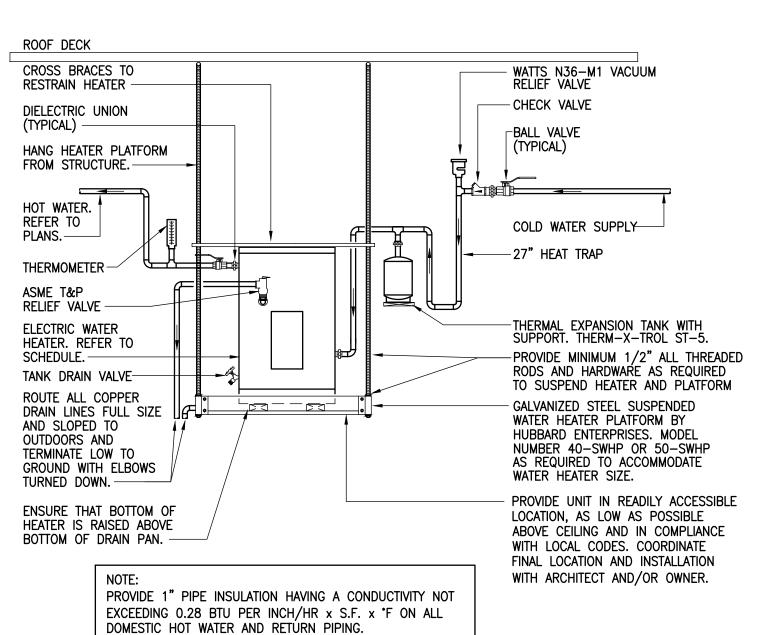






REFER TO PLANS FOR ALL PIPE SIZES. PROVIDE PIPE INCREASERS/DECREASERS AS REQUIRED. . REFER TO PLANS FOR ALL EQUIPMENT LOCATIONS. 3. TERMINATE HOT AND COLD WATER INSULATION 3'-0" FROM MIXING VALVE. 4. MAKE ALL WATER CONNECTIONS TO THERMOSTATIC MIXING VALVE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. FOLLOW ALL MANUFACTURER PIPING RECOMMENDATIONS. REFER TO LEONARD PIPING METHOD #2 FOR DETAILED PIPING REQUIREMENTS.

## THERMOSTATIC MIXING VALVE PIPING



ELECTRIC WATER HEATER PIPING

SCALE: NONE

PIPE HOUSE CONNECTION — COLLECTION SEWER PIPE HOUSE CONNECTION SELECT MATERIAL Sewer connection-

SANITARY SEWER CONNECTION SCALE: NONE



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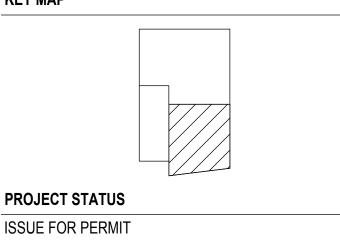
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DESCRIPTION

DATE

**SEAL / SIGNATURE** 





PROJECT NAME SUPER KIDS DENTAL PROJECT ADDRESS

6707 E RIVERSIDE DR., AUSTIN, TX 78741 PROJECT NUMBER

24017 DATE

05/30/24

**PLUMBING DETAILS** 

SYMBOL SAN SANTARY OR WASTE PIPING ABONE GRADE (SAW) SANTARY OR WASTE PIPING BELOW GRADE (SAW) VENT IPPINC ABOVE OR BELOW GRADE (SAW) VENT IPPINC (WC) ARR OZ OLOMBESSO AIR PIPING (WC) COLOMBESSO AIR PIPING (WW) HWW HOW WATER PIPING (WW) FIRE PROTECTION WATER PIPING (FIRE) FIRE PIPING DOWN	PL	UMBING LEGEND
SANTIARY OR WISTE PIPING BELOW GRADE (SMY)  VENT PIPING ABOVE OR BELOW GRADE (V)  FW FILTERED WATER PIPING (FW)  VAC  VACUUM PIPING (WAC)  OZ OXYGEN PIPING (OZ)  CW COLD WATER PIPING (CW)  HW HOT WATER PIPING (CW)  HW HOT WATER PIPING (WW)  HWRE FIRE PROTECTION WATER PIPING (FIRE)  FLOW DIRECTIONAL ARROW  SHITTOFY VALVE  BALANCING VALVE (BV)  SOLENOID VALVE (BV)  BUTTERFLY VALVE  GAS PLUE VALVE (GPV)  HORIZONTAL SWING CHECK  UNION  Y-STANKER  REDUCER OR INGREASER  ECCENTIOR REDUCER PARKED (CO)  FLOOR CLEANOUT (FCD)  EXTERNOL CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF BOTTOM  PRESSURE BROWNER CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF SIDE  WYE & 1/STH BEID BRANCH CONNECTION  PORTS BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF SIDE  WYE BRANCH CONNECTION OUT OF SIDE  WYE BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF SIDE  WYE BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF SIDE  WYE BRANCH CONNECTION OUT OF BOTTOM  WYE BRANCH CONNECTION OUT OF BOTTOM  BRANCH C	SYMBOL	DESCRIPTION
VENT PIPING ABOVE OR BELOW GRADE (V)  FIV  FIV  FIV  FIV  FIVE  FIV  FIVE  ARR  COMPRESSED AR PIPING (ARR)  OZ  NO2  NITROUS OXIDE PIPING (ARR)  OZ  NO2  NITROUS OXIDE PIPING (ARR)  OZ  NITROUS OXIDE PIPING (ARR)  HIN  HIN  HIN  HIN  HIN  HIN  FIRE  FREPROTECTION WATER PIPING (FIVE)  FIRE  FREDUCHON DIRECTIONAL ARROW  SHUT-OFF VALVE  BALANCING VALVE (BV)  BUITERFLY VALVE  CAS PLUE VALVE (GV)  HOND  V-STRAINER  REDUCER OR INCREASER  ECCENTRIC REDUCER  REDUCER OR INCREASER  ECCENTRIC REDUCER  REDUCED PRESSURE BACKFLOW PREVENTER (RPZ)  PIPING DOWN  RISE OR DROP PIPING  PIPING UP -OR- PIPING (CO)  EXTERNOL CONNECTION OUT OF DOTTOM  BRANCH CONNECTION OUT OF TOP  BRANCH CONNECTION OUT OF SIDE  VIVE & 1/6TH BEND BRANCH CONNECTION  WE BRANCH CONNECTION  HOSE BIBB  PRESSURE REDUCING  CAS PRESSURE REGULATOR  TEST COCK  GAS METER  WALL HYDRANT  AND CASES PAREL FOR TRAP PRIMER  ACCESS PANEL FOR TRAP PRIME	SAN	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
FW WAC COMPRESSED AIR PIPING (FW)  WAC COMPRESSED AIR PIPING (AIR)  O2 OXYGEN PIPING (02)  ND2 NITROUS OXDE PIPING (W2)  CW COLD WATER PIPING (WW)  HWW HOT WATER PIPING (WW)  HWW HOT WATER PIPING (WW)  HWW HOT WATER PIPING (FW)  FIRE PROTECTION WATER PIPING (FIRE)  FLOW DIRECTIONAL ARROW  SHUT-OFF VALVE  BALANCING VALVE (BV)  SOLENDID WALVE (SV)  BALL VALVE (BV)  BUILTERFLY VALVE  GAS PLUG WALVE (GPV)  HORZONTAL SYNNO CHECK  UNION  Y -STRAINER  REDUCED PRESSURE BACKFLOW PREVENTER (RP2)  PIPING DOWN  RISE OR DROP PIPING  PIPING UP -OR - PIPING UP & DOWN  CAP ON END OF PIPE  CLEMOUT (WALL OR CELLING) (CO)  FLOOR CLEANOUT (WALL OR CELLING)  EXTEROR CLEANOUT WITH  IS 18 SY CONCRETE PAD OUTSIDE)  PRESSURE REDUCENCE VALVE (PRV)  BRANCH CONNECTION OUT OF TOP  BRANCH CONNECTION OUT OF SIDE  WYE & 1/8TH BEAD BRANCH CONNECTION  WYE BRANCH CONNECTION OUT OF SIDE  WYE & 1/8TH BEAD BRANCH CONNECTION  WYE BRANCH CONNECTION OUT OF SIDE  THERMOMETER  GAS PRESSURE REQULATIOR  TEST COCK  GAS METER  WALL HYDRANT  VALVE IN RISSE  ASNE TEMPERATURE & PRESSURE RELIEF VALVE  ANGLE VALVE  THERMOMETER  ASNE TEMPERATURE & PRESSURE RELIEF VALVE  ANGLE VALVE  THERMOMETER  ASNE TEMPERATURE & PRESSURE RELIEF VALVE  ANGLE VALVE  THERMOMETER  CONNECT NEW TO FRAP PRIMER  ACCESS PANEL LOCATION SYMBOL  ARCHADBER  EXSTING  CONNECT NEW TO EXISTING  NORTH LEWYTON  LYMBOD  OUNCET TEWY TOO INCH SLOPE  1/45TH OF AN INCH SLOPE  1/45TH	— — SAN— —	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
VAC   ARR   OQ2   OXYGEN PIPING (VAC)  ARR   OQ2   OXYGEN PIPING (VAC)  COW   COLD WATER PIPING (CNV)  HW   HOT WATER PIPING (WW)  HWR   HOT WATER PIPING (WW)  FIRE   FI		VENT PIPING ABOVE OR BELOW GRADE (V)
AIR  O2  NO2  NO2  NO2CONFRESSED AIR PIPING (AIR)  O2  NO2CONTREN PIPING (N2)  COM  COLD WATER PIPING (WW)  HOT WATER PIPING (WW)  HOT WATER PIPING (WW)  HOT WATER PIPING (HW)  HOT WATER PIPING (HW)  FIRE  FIRE  FIRE  FIRE  FIRE  FIRE  FIRE  FIRE  FIRE  BAJANCING WALVE (BV)  SOLIDIO VALVE (BV)  SOLIDIO VALVE (BV)  BALL VALVE (BV)  BUTTERFLY VALVE  GAS PILUS WALVE (GV)  HORIZONTIAL SINNO CHECK  UNION  Y-STRAINER  REDUCER OR INCREASER  ECCENTRIC REDUCER  REDUCER OR INCREASER  ECCENTRIC	——— FW ———	FILTERED WATER PIPING (FW)
O2 OXYGEN PIPING (02)  ND2 NITROUS OXIDE PIPING (NO2)  CCW HW HOT WATER PIPING (WW)  HWR HOT WATER PIPING (WW)  HOT WATER PIPING (WW)  HOT WATER PIPING (WW)  HOT WATER PIPING (WW)  HOT WATER PIPING (FIRE)  FLOW DIRECTIONAL ARROW  SHUT-OFF WALVE  BALANCING VALVE (BV)  SOLENDID WALVE (BV)  SOLENDID WALVE (SV)  BALL VALVE (BV)  BUILTERFLY VALVE  OAS PLUG VALVE (GPV)  HORIZONTAL SWING CHECK  UNION  Y—STRAINER  REDUCER OR INCREASER  ECCENTRIC REDUCER  REDUCED PRESSURE BACKFLOW PREVENTER (RPZ)  PIPING DOWN  RISE OR DROP PIPING  OAP ON END OF PIPE  CLEANOUT (WALL OR CELLING) (CO)  FLOOR CLEANOUT (FCD)  PRESSURE REDUCING VALVE (PRV)  BRANCH CONNECTION OUT OF TOP  BRANCH CONNECTION OUT OF SIDE  WY & 1/8TH BEND BRANCH CONNECTION  WYE BRANCH CONNECTION OUT OF SIDE  WY & 1/8TH BEND BRANCH CONNECTION  WYE BRANCH CONNECTION  HOSE BIBB  PRESSURE GAUGE WITH COCK  THERMOMETER  GAS PRESSURE REGULATIOR  TEST COCK  GAS METER  WALL HYDRAIT  VALVE IN RISE  ASME TEMPERATURE & PRESSURE RELIEF VALVE  VICLUM RELIEF VALVE  ANGLE VALVE  THERMOMETER  ACCESS PANEL FOR TRAP PRIMER  ACCESS PANEL FOR TRAP PRIMER  ACCESS PANEL FOR TRAP PRIMER  ACCESS PANEL LOCATION SYMBOL  HUB DRAIN (HD)  ACCESS PANEL LOCATION SYMBOL  ARCHANGER PIPING  INVERT ELEVATION  UNITED FOR INCH SLOPE  1/8TH OF AN INCH SLOPE  1/9TH OF AN IN		, ·
NITROUS OXIDE PIPING (NO2)  CW  HW  HW  HOT WATER PIPING (FW)  HWR  HOT WATER PIPING (FW)  HWR  HOT WATER PIPING (FW)  FIRE  F		
CW HW HWR HWR HWR HWR HWR HWR HWR HWR HWR		, ,
HIV HOT WATER PIPPING (HW) HOT WATER RETURN PIPPING (FIRE) FIRE PROTECTION WATER PIPPING (FIRE) FLOW DIRECTIONAL ARROW SHUT-OFF VALVE BALANCING VALVE (BV) SOLENIDI VALVE (SV) BALL VALVE (BV) BUTTERFLY VALVE GAS PLUG VALVE (GPV) HORIZONTAL SWING CHECK UNION Y-STRAINER REDUCER OR INCREASER ECCENTRIC REDUCER REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) PIPPING UP -OR - PIPPING UP & DOWN CAP ON END OF PIPP CLEANOUT (WALL OR CELLING) (GO) FLOOR CLEANOUT (FCO) EXTERIOR, CLEANOUT WITH TO -WAY CLEANOUT (FCO) EXTERIOR, CLEANOUT WITH TO -WAY CLEANOUT (FCO) BRANCH CONNECTION OUT OF FOOT BRANCH CONNECTION OUT OF FOOT BRANCH CONNECTION OUT OF TOP BRANCH CONNECTION OUT OF TOP BRANCH CONNECTION OUT OF SIDE WYE & 1/8TH BEND BRANCH CONNECTION WYE BRANCH CONN		, ,
HOT WATER RETURN PIPING (HWR)  FIRE  FIRE  FIRE  FIRE  FIRE PROTECTION WATER PIPING (FIRE)  FLOW DIRECTIONAL ARROW  SHUT-OFF VALVE  BALLANUE (BV)  SOLENOID VALVE (BV)  BALL VALVE (BV)  BUTTERFLY VALVE  GAS PLUS VALVE (GPV)  HORIZONTAL SWING CHECK  UNION  Y-STRAINER  REDUCER OR INCREASER ECCENTRIC REDUCER  REDUCED PRESSURE BACKFLOW PREVENTER (RPZ)  PIPINS DOWN  RISE OR DROP PIPING  PIPINS UP -OR- PIPING UP & DOWN  CAP ON END OF PIPE  CLEANOUT (WALL OR CEILING) (CO)  FLOOR CLEANOUT (WALL OR CEILING) (CO)  FLOOR CLEANOUT (WALL OR CEILING) (CO)  FLOOR CLEANOUT (FCO)  EXTERIOR CLEANOUT WITH 18''X18'**A'' CONCRETE PAD OUTSIDE)  PRESSURE REDUCING VALVE (PRV)  BRANCH CONNECTION OUT OF TOP  BRANCH CONNECTION OUT OF SIDE  WYE & 17'81H BEND BRANCH CONNECTION  WYE BRANCH CONNECTION  HOSE BIBB  PRESSURE GAUGE WITH COCK  THERMOMETER  GAS PRESSURE REGULATOR  TEST COCK  GAS METER  WALL HYDRANT  ANDLE VALVE  ANGLE VALV		
FLOW DIRECTIONAL ARROW  SHUT-OFF VALVE BALANCING VALVE (BV)  SOLENDID VALVE (BV)  BALL VALVE (BV)  HORIZONTAL SWING CHECK  UNION  Y-STRAINER  REDUCER OR INCREASER  ECCENTRIC REDUCER  REDUCED PRESSURE BACKFLOW PREVENTER (RPZ)  PIPING DOWN  RISE OR DROP PIPING  PIPING UP -OR- PIPING UP & DOWN  CAP ON END OF PIPE  CLEANOUT (WALL OR CEILING) (CO)  FLOOR CLEANOUT (FCO)  EXTERIOR CLEANOUT WITH  18' 18' 34' CONCRETE PAD OUTSIDE)  PRESSURE REDUCING VALVE (PRV)  BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF SIDE  WYE & 1/8TH BEND BRANCH CONNECTION  WYE BRANCH CONNECTION  HOSE BIBB  PRESSURE REGULATOR  TEST COCK  GAS METER  GAS PRESSURE REGULATOR  TEST COCK  GAS METER  WALL HYDRANT  VALVE IN RISE  ASME TEMPERATURE & PRESSURE RELIEF VALVE  VACUUM RELIEF VALVE  ANGLE VALVE  1 REFER TO KEYED NOTE  FLOOR SINK (FS)  FLOOR DRAIN WITH P-TRAP (FD)  FLOOR DRAIN WITH P-TRAP AT 45' ANGLE (FD)  HUB DRAIN (HD)  ACCESS PANEL LOCATION SYMBOL  SHOCK ABSORBER WITH ACCESS PANEL  AR CHAMBER  EXISTING  CONNECT NEW TO EXISTING  INVERT ELEVATION  VALVE BENT BOLLOFE  1/5TH OF AN INCH SLOPE  1/5TH	HWR	
SHUT-OFF VALVE BALANCING VALVE (BV) SOLENDID VALVE (SV) BALL VALVE (BV) HORIZONTAL SWING CHECK UNION VY-STRAINER REDUCER OR INCREASER ECCENTRIC REDUCER REDUCER PREVENTE REDUCING (CO) PIPING DOWN RISE OR DROP PIPING PIPING UP -OR- PIPING UP & DOWN CAP ON END OF PIPIP CLEANOUT (FCO) EXTERIOR CLEANOUT WITH 18''x18''x4'' CONCRETE PAD OUTSIDE) PRESSURE REDUCING VALVE (PRV) BRANCH CONNECTION OUT OF BOTTOM BRANCH CONNECTION OUT OF SIDE WYE & 1/8TH BEND BRANCH CONNECTION WYE BRANCH CONNECTION HOSE BIBB PRESSURE REQULATOR TEST COCK GAS METER WALL HYDRANT WALVE IN RISE ASME TEMPERATURE & PRESSURE RELIEF VALVE THERMOMETER  WALL HYDRANT WALVE IN MISE ASME TEMPERATURE & PRESSURE RELIEF VALVE WACUUM RELIEF VALVE ANGLE VALVE  THERMOMETER BE FLOOR DRAIN (FS) FLOOR DRAIN (FS) FLOOR DRAIN WITH P-TRAP AT 45' ANGLE (FD) CO- HUB DRAIN (HD) ACCESS PANEL FOR TRAP PRIMER ACCESS PANEL FOR TRAP PRI	FIRE	FIRE PROTECTION WATER PIPING (FIRE)
BALL VALVE (BV)  BUTTERFLY VALVE  CAS PLUS VALVE (GPV)  HORIZONTAL SWING CHECK  UNION  Y-STRAINER  REDUCER OR INCREASER  ECCENTRIC REDUCER  REDUCER OR RESSURE BACKFLOW PREVENTER (RPZ)  PIPING DOWN  RISE OR DROP PIPING  PIPING UP -OR- PIPING UP & DOWN  CAP ON END OF PIPE  CLEANOUT (WALL OR CEILING) (CO)  FLOOR CLEANOUT (FCO)  FLOOR CLEANOUT (FCO)  FRESSURE REDUCING VALVE (PRV)  BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF FORD  WYE BRANCH CONNECTION  HOSE BIBB  PRESSURE REGULATOR  TEST COCK  CAS METER  WALL HYDRANT  VALVE IN RISE  ASM TEMPERATURE & PRESSURE RELIEF VALVE  VACUUM RELIEF VALVE  ANGLE VALVE  ANGLE VALVE  1 REFER TO KEYED NOTE  FLOOR DRAIN (FD)  ED-  FLOOR DRAIN WITH P-TRAP AT 45" ANGLE (FD)  ACCESS PANEL FOR TRAP PRIMER  ACCESS PANEL FOR TRAP PRIMER  ACCESS PANEL FOR TRAP PRIMER  ACCESS PANEL LOCATION SYMBOL  SHOCK ABSORBER WITH ACCESS PANEL  AIR CHAMBER  ENISTING  CONNECT NEW TO EXISTING  INVERT ELEVATION  VY TRE DUT  1/16TH OF AN INCH SLOPE  1/1		FLOW DIRECTIONAL ARROW
SOLENDO VALVE (SV)  BALL VALVE (BV)  BUTTERFLY VALVE  GAS PLUG VALVE (GPV)  HORIZONTAL SWING CHECK  UNION  Y-STRAINER  REDUCER OR INCREASER  ECCENTRIC REDUCER  REDUCED PRESSURE BACKFLOW PREVENTER (RPZ)  PIPING DOWN  RISE OR DROP PIPING  PIPING UP -OR- PIPING UP & DOWN  CAP ON END OF PIPE  CLEANOUT (WALL OR CEILING) (CO)  FLOOR CLEANOUT WILL OR CEILING)  PRESSURE REDUCING VALVE (PRV)  BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION OUT OF SDIE  WYE & 1/STH BEND BRANCH CONNECTION  WYE BRANCH CONNECTION  WYE BRANCH CONNECTION  HOSE BIBB  PRESSURE GAUGE WITH COCK  THERMOMETER  GAS PRESSURE REGULATOR  TEST COCK  GAS METER  WALL HYDRANT  VALVE IN RISE  ASME TEMPERATURE & PRESSURE RELIEF VALVE  ANGLE VALVE  THERMOMETER  CAS PRESSURE REGULATOR  TEST COCK  GAS METER  WALL HYDRANT  VALVE IN RISE  ASME TEMPERATURE & PRESSURE RELIEF VALVE  VACUUM RELIEF VALVE  ANGLE VALVE  THERMOMETER  CHOOR DRAIN WITH P-TRAP AT 45' ANGLE (FD)  HUB DRAIN (HD)  ACCESS PANEL LOCATION SYMBOL  SHOCK ABSORBER WITH ACCESS PANEL  AIR CHAMBER  EXISTING  CONNECT NEW TO EXISTING  INVERT ELEVATION  VY PROOT  UNATED OF AN INCH SLOPE  1/5TH OF AN INCH SLO	<del></del>	SHUT-OFF VALVE
BALL VALVE (BV) BUTTERFLY VALVE GAS PLUE VALVE (GPV) HORIZONTAL SWING CHECK UNION Y-STRAINER REDUCER OR INCREASER ECCENTRIC REDUCER REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) PIPING DOWN RISE OR DROP PIPING PIPING UP -OR- PIPING UP & DOWN CAP ON END OF PIPE CLEANOUT (WALL OR CEILING) (CO) FLOOR CLEANOUT WITH FLOOR CLEANOUT WITH PRESSURE REDUCING VALVE (PRV) BRANCH CONNECTION OUT OF SDDE WYE & 1/6TH BEND BRANCH CONNECTION PRESSURE REDUCING VALVE (PRV) BRANCH CONNECTION OUT OF SDDE WYE & 1/6TH BEND BRANCH CONNECTION HOSE BIBB PRESSURE GAUGE WITH COCK THERMOMETER  GAS PRESSURE REGULATOR TEST COCK GAS METER WALL HYDRANT VALVE IN RISE ASME TEMPERATURE & PRESSURE RELIEF VALVE ANGLE VALVE 1 REFER TO KEYED NOTE FLOOR DRAIN WITH P-TRAP AT 45' ANGLE (FD) HUB DRAIN (HD) ACCESS PANEL LOCATION SYMBOL  SHOCK ABSORBER WITH ACCESS PANEL AIR CHAMBER EXISTING CONNECT INEW TO EXISTING INVERT ELEVATION VYE DE ON INCH SLOPE 1/16TH OF AN INCH SLOPE 1/	——————————————————————————————————————	BALANCING VALVE (BV)
BUTTERFLY VALVE  GAS PLUG VALVE (GPV)  HORIZONTAL SWING CHECK UNION  Y-STRAINER  REDUCED OR INCREASER  ECCENTRIC REDUCER  REDUCED PRESSURE BACKFLOW PREVENTER (RPZ)  PIPING DOWN  RISE OR DROP PIPING  PIPING UP -OP - PIPING UP & DOWN  CAP ON END OF PIPE  CLEANOUT (WALL OR CELLING) (CO)  FLOOR CLEANOUT (WALL OR CELLING) (CO)  FROME 18 'X4' 'X4' CONCRETE PAD OUTSIDE)  PRESSURE REDUCING VALVE (PRV)  BRANCH CONNECTION OUT OF FOOT  BRANCH CONNECTION OUT OF BOTTOM  BRANCH CONNECTION  BRANCH CONNEC	<del></del>	
GAS PLUC VALVE (GPV) HORIZONTAL SWING CHECK UNION Y-STRAINER REDUCER OR INCREASER ECCENTRIC REDUCER REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) PIPING DOWN RISE OR DROP PIPING PIPING UP -OR - PIPING UP & DOWN CAP ON END OF PIPE CLEANOUT (WALL OR CELLING) (CO) FLOOR CLEANOUT (WALL OR CELLING) (CO) FLOOR CLEANOUT (FCO) EXTERIOR, CLEANOUT WITH 18"x6"x4" CONCRETE PAD OUTSIDE) PRESSURE REDUCING VALVE (PRV) BRANCH CONNECTION OUT OF BOTTOM BRANCH CONNECTION OUT OF SIDE WYE & 1/8TH BEND BRANCH CONNECTION WYE BRANCH CONNECTION WALL HYDRANT WHATTON WALL HYDRANT WHAT HYDRANT WALL HYDRANT WHAT HYDRANT WHAT HY	—————————————————————————————————————	
HORIZONTAL SWING CHECK UNION Y-STRAINER REDUCER OR INCREASER ECCENTRIC REDUCER REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) PIPING DOWN RISE OR DROP PIPING PIPING UP -OR- PIPING UP & DOWN CAP ON END OF PIPING ELANOUT (WALL OR CELLING) (CO) FLOOR CLEANOUT (WHITH RESURE REDUCING VALVE (PRV) BRANCH CONNECTION OUT OF TOP BRANCH CONNECTION OUT OF SIDE WYE & 1/8TH BEND BRANCH CONNECTION WYE BRANCH CONNECTION OUT OF SIDE WYE & 1/8TH BEND BRANCH CONNECTION WYE BRANCH CONNECTION HOSE BIBB PRESSURE REGULATOR TEST COCK GAS METER WALL HYDRANT ANGLE VALVE ANGLE VALVE 1 REFER TO KEYED NOTE PLOOR DRAIN (FD) FLOOR DRAIN (FD) FLOOR DRAIN (FD) FLOOR DRAIN (FD) FLOOR DRAIN WITH P-TRAP AT 45' ANGLE (FD) HUB DRAIN (HD) ACCESS PANEL LOCATION SYMBOL SHOCK ABSORBER WITH ACCESS PANEL AIR CHAMBER EXISTING CONNECT NEW TO EXISTING INVERT ELEVATION UVARIED FOR AN INCH SLOPE 1/8TH OF AN INCH S		
UNION Y-STRAINER REDUCER OR INCREASER ECCENTRIC REDUCER REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) PIPING DOWN RISE OR DROP PIPING PIPING UP - OR - PIPING UP & DOWN CAP ON END OF PIPE CLEANOUT (WALL OR CELLING) (CO) FLOOR CLEANOUT (FCO) EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (CCO) PRESSURE REDUCING VALVE (PRV) BRANCH CONNECTION OUT OF BOTTOM BRANCH CONNECTION OUT OF SIDE WYE & 1/8TH BEND BRANCH CONNECTION PRESSURE GAUGE WITH COCK THERMOMETER GAS PRESSURE REGULATOR TEST COCK GAS METER WALL HYDRANT VALVE IN RISE ASME TEMPERATURE & PRESSURE RELIEF VALVE VACUUM RELIEF VALVE ANGLE VALVE 1 REFER TO KEYED NOTE FLOOR SINK (FS) FLOOR DRAIN WITH P-TRAP AT 45" ANGLE (FD) HUB DRAIN (HD) ACCESS PANEL LOCATION SYMBOL FLOOR DRAIN WITH ACCESS PANEL AIR CHAMBER EXISTING CONNECT NEW TO EXISTING INVERT ELEVATION OUTHER OF AN INCH SLOPE 1/8TH OF AN IN	<u> </u>	, , ,
Y-STRAINER REDUCER OR INCREASER ECCENTRIC REDUCER REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) PPING DOWN RISE OR DROP PIPING PIPING UP - OR- PIPING UP & DOWN CAP ON END OF PIPE CLEANOUT (WALL OR CEILING) (CO) FLOOR CLEANOUT (WALL OR CEILING) (CO) FLOOR CLEANOUT (WALL OR CEILING) (CO) FLOOR CLEANOUT (WALL OR CEILING) (CO) FROMOW 18 A 24 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A	<del></del>	
ECCENTRIC REDUCER REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) PIPING DOWN RISE OR DROP PIPING PIPING UP -OR- PIPING UP & DOWN CAP ON END OF PIPIP CLEANOUT (WALL OR CEILING) (CO) FLOOR CLEANOUT (FCO) EXTERIOR CLEANOUT WITH 18 'x18 'x4' CONCRETE PAD (ECC) PRESSURE REDUCING VALVE (PRV) BRANCH CONNECTION OUT OF TOP BRANCH CONNECTION OUT OF SIDE WYE & 1/8TH BEND BRANCH CONNECTION WYE BRANCH CONNECTION HOSE BIBB PRESSURE GAUGE WITH COCK THERMOMETER GAS PRESSURE REGULATOR TEST COCK GAS METER WALL HYDRANT VALVE IN RISE ASME TEMPERATURE & PRESSURE RELIEF VALVE VACUUM RELIEF VALVE ANGLE VALVE  1 REFER TO KEYED NOTE FLOOR DRAIN WITH P-TRAP AT 45' ANGLE (FD) HUB DRAIN (HD) COCHECT NEW TO EXISTING SHOCK ABSORBER WITH ACCESS PANEL AIR CHAMBER EXISTING SCONNECT NEW TO EXISTING INVERT ELEVATION UVARTER OF AN INCH SLOPE 1/8TH OF AN IN		
REDUCED PRESSURE BACKFLOW PREVENTER (RP2) PIPING DOWN  RISE OR DROP PIPING PIPING UP -OR- PIPING UP & DOWN CAP ON END OF PIPING CLEANOUT (WALL OP CEILING) (CO) FLOOR CLEANOUT (FCO) EXTERIOR CLEANOUT WITH 18 'x 18 'x 4' CONCRETE PAD (ECO)  WO-WAY CLEANOUT (PROVIDE 18 'x 24' x 4' CONCRETE PAD OUTSIDE) PRESSURE REDUCING VALVE (PRV) BRANCH CONNECTION OUT OF BOTTOM BRANCH CONNECTION OUT OF SIDE WY & 2 1/81'H BEND BRANCH CONNECTION WYE BRANCH CONNECTION WYE BRANCH CONNECTION HOSE BIBB PRESSURE GAUGE WITH COCK THERMOMETER  GAS PRESSURE REGULATOR TEST COCK GAS METER WALL HYDRANT VALVE IN RISE ASME TEMPERATURE & PRESSURE RELIEF VALVE VACUUM RELIEF VALVE ANGLE VALVE  1 REFER TO KEYED NOTE FLOOR DRAIN (FD) FLOOR DRAIN WITH P-TRAP AT 45' ANGLE (FD) HUB DRAIN (HD) ACCESS PANEL FOR TRAP PRIMER ACCESS PANEL LOCATION SYMBOL  SHOCK ABSORBER WITH ACCESS PANEL  AIR CHAMBER EXISTING CONNECT NEW TO EXISTING INVERT ELEVATION UNARTER OF AN INCH SLOPE 1/8TH OF AN INCH SLOPE	—— <del>□</del>	REDUCER OR INCREASER
PIPING DOWN RISE OR DROP PIPING PIPING UP -OR- PIPING UP & DOWN CAP ON END OF PIPE CLEANOUT (WALL OR CEILING) (CO) FLOOR CLEANOUT (WALL OR CEILING) FLOOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO) TWO-WAY CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO) TWO-WAY CLEANOUT OF TOP BRANCH CONNECTION OUT OF TOP BRANCH CONNECTION OUT OF BOTTOM BRANCH CONNECTION OUT OF SIDE WYE & 1/8TH BEND BRANCH CONNECTION HOSE BIBB PRESSURE GAUGE WITH COCK THERMOMETER  GAS PRESSURE REGULATOR TEST COCK GAS METER WALL HYDRANT VALVE IN RISE ASME TEMPERATURE & PRESSURE RELIEF VALVE VACUUM RELIEF VALVE ANGLE VALVE  1 REFER TO KEYED NOTE PLOOR DRAIN (FD) FLOOR DRAIN (FD) FLOOR DRAIN WITH P-TRAP AT 45" ANGLE (FD) HUB DRAIN (HD) ACCESS PANEL FOR TRAP PRIMER ACCESS PANEL LOCATION SYMBOL SHOCK ABSORBER WITH ACCESS PANEL AIR CHAMBER EXISTING CONNECT NEW TO EXISTING INVERT ELEVATION UQUARTER OF AN INCH SLOPE 1/8TH OF AN INCH SLOPE 1/8TH OF AN INCH SLOPE 1/16TH OF AN INCH SLOPE		ECCENTRIC REDUCER
RISE OR DROP PIPING PIPING UP -OR- PIPING UP & DOWN CAP ON END OF PIPE CLEANOUT (WALL OR CEILING) (CO) FLOOR CLEANOUT WITH 18'x18'x4" CONCRETE PAD (ECO) TWO-WAY CLEANOUT (PROVIDE 18'x24'x4" CONCRETE PAD OUTSIDE) PRESSURE REDUCING VALVE (PRV) BRANCH CONNECTION OUT OF TOP BRANCH CONNECTION OUT OF SIDE WY & 1/8TH BEND BRANCH CONNECTION WYE BRANCH CONNECTION HOSE BIBB PRESSURE GAUGE WITH COCK THERMOMETER  GAS PRESSURE REGULATOR TEST COCK GAS METER ZZ WALL HYDRANT VALVE IN RISE ASME TEMPERATURE & PRESSURE RELIEF VALVE VACUUM RELIEF VALVE ANGLE VALVE  1 REFER TO KEYED NOTE PLOOR DRAIN (FS) FLOOR DRAIN (FS) FLOOR DRAIN (FD) FLOOR DRAIN WITH P-TRAP AT 45' ANGLE (FD) HUB DRAIN (HD) ACCESS PANEL FOR TRAP PRIMER ACCESS PANEL LOCATION SYMBOL SHOCK ABSORBER WITH ACCESS PANEL AIR CHAMBER EXISTING CONNECT NEW TO EXISTING INVERT ELEVATION UQUARTER OF AN INCH SLOPE 1/8TH OF AN INCH SLOPE 1/16TH OF AN INCH SLOPE		REDUCED PRESSURE BACKFLOW PREVENTER (RPZ)
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WYE & 1/8TH BEND BRANCH CONNECTION  WYE BRANCH CONNECTION  HOSE BIBB  PRESSURE GAUGE WITH COCK  THERMOMETER  GAS PRESSURE REGULATOR  TEST COCK  GAS METER  WALL HYDRANT  VALVE IN RISE  ASME TEMPERATURE & PRESSURE RELIEF VALVE  VACUUM RELIEF VALVE  ANGLE VALVE  1 REFER TO KEYED NOTE  FLOOR DRAIN (FD)  FLOOR DRAIN (FD)  FLOOR DRAIN WITH P—TRAP (FD)  HUB DRAIN (HD)  ACCESS PANEL FOR TRAP PRIMER  ACCESS PANEL LOCATION SYMBOL  SHOCK ABSORBER WITH ACCESS PANEL  AIR CHAMBER  EXISTING  CONNECT NEW TO EXISTING  INVERT ELEVATION  QUARTER OF AN INCH SLOPE  1/8TH OF AN INCH SLOPE  1/16TH OF AN INCH SLOPE  DELTA CHANGE SYMBOL  RISER FLAG		
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1/8TH OF AN INCH SLOPE  1/16TH OF AN INCH SLOPE  DELTA CHANGE SYMBOL  RISER FLAG	IE=100.00'	INVERT ELEVATION
1/16TH OF AN INCH SLOPE  DELTA CHANGE SYMBOL  RISER FLAG	1/ <u>4" PER FO</u> OT	QUARTER OF AN INCH SLOPE
DELTA CHANGE SYMBOL  RISER FLAG		1/8TH OF AN INCH SLOPE
1 RISER FLAG		1/16TH OF AN INCH SLOPE
( RISER FLAG		DELTA CHANGE SYMBOL
P	( · · · )	RISER FLAG
	Р	

NOTE: NOT ALL SYMBOLS MAY APPLY TO THIS PROJECT.

#### PLUMBING SCOPE & SPECIFICATION

#### THE WORK OF THIS SECTION SHALL INCLUDE, BUT NOT BE LIMITED TO:

- A. A DOMESTIC HOT AND COLD WATER DISTRIBUTION SYSTEM TO SERVE ALL FIXTURES, AND EQUIPMENT.
- B. SANITARY SOIL WASTE AND VENT SYSTEMS TO SERVE ALL FIXTURES AND EQUIPMENT.
  C. NOT USED.
  DRAWINGS ARE DIAGRAMMATIC; CONFIRM DIMENSIONS AND LOCATIONS IN THE FIELD,
  ADVISE OF MAJOR DISCREPANCIES.
- GUARANTEE LABOR AND MATERIALS FOR ONE YEAR.
  ADHERE TO ALL APPLICABLE LOCAL CODES AND REGULATIONS.
  CONTRACTOR SHALL OBTAIN REQUIRED PERMITS AND PAY ALL FEES.
- VALVES SHALL BE MANUFACTURED BY NIBCO, HAMMOND, POWELL, STOCKHAM, WATTS OR EQUIVALENT APPROVED BY THE ENGINEER.
  BALL VALVES SHALL HAVE CAST BRONZE BODY, BLOWOUT PROOF STEMS, FULL SIZE PORT, 316 STAINLESS STEEL TRIM, TEFLON SEAT AND SEAL AND THRUST WASHERS. VALVES 2" AND SMALLER SHALL BE NIBCO T-585-70-66 OR APPROVED EQUIVALENT.

#### UNIONS IN COPPER OR BRASS LINES SHALL BE BRASS, THREADED PATTERN UNIONS.

## <u>EXCAVATION</u>

EXCAVATE TRENCHES FOR UNDERGROUND PIPING TO THE REQUIRED DEPTH.

CUT THE BOTTOM OF THE TRENCH OR EXCAVATION TO UNIFORM GRADE.

EXCAVATE 6" BELOW GRADE, FILL WITH BEDDING MATERIAL (SAND) AND TAMP WELL.

LAY OUT ALIGNMENT OF PIPE TRENCHES TO AVOID OBSTRUCTIONS. PROVIDE ASSURANCE

THAT PROPOSED ROUTE OF PIPE WILL NOT INTERFERE WITH BUILDING FOUNDATION BEFORE

ANY CUTTING IS BEGUN. SHOULD INTERFERENCE BE FOUND, CONTACT THE

ARCHITECT/ENGINEER BEFORE PROCEEDING.

#### BACKEII I

BACKFILL SHALL NOT BE PLACED UNTIL THE WORK HAS BEEN INSPECTED, TESTED AND APPROVED. USE SUITABLE FRIABLE SOILS AS BACKFILL MATERIAL. DO NOT USE PEAT, SILT, MUCK, DEBRIS OR OTHER ORGANIC MATERIALS. DEPOSIT BACKFILL IN UNIFORM LAYERS. PLACE BACKFILL MATERIAL IN UNIFORM LAYERS, 8" MAXIMUM LOOSE MEASURE. COMPACT TO NOT LESS THAN 95% OF MAXIMUM SOIL DENSITY AS DETERMINED BY ASTM D698 STANDARD PROCTOR.

#### PLUMBING PIPING HANGER SPACING

MAXIMUM SPACING SHALL BE 10 FOOT.

#### CLEANING, TESTING AND ADJUSTING

THIS CONTRACTOR SHALL FURNISH ALL LABOR, TOOLS, INSTRUCTIONS, AND SUPERVISION REQUIRED FOR THE PERFORMANCE OF ALL TESTS, CLEANING, AND MAKING NECESSARY ADJUSTMENTS TO OPERATION OF ALL FIXTURES AND EQUIPMENT.

#### PIPING INSULATION

ALL COLD & HOT WATER PIPING, FITTINGS AND VALVES SHALL BE INSULATED WITH NOMINAL 1-1/2" WALL THICKNESS FIBERGLASS PIPE INSULATION, OR AN APPROVED EQUAL HAVING FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DENSITY OF 50 OR LESS WHEN TESTED BY

PIPE INSULATION SHALL BE INSTALLED ACCORDING TO THE PROCEDURES OUTLINED BY THE MANUFACTURE.

FITTING COVER INSULATION SHALL BE FABRICATED AND INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDED PROCEDURES. SWEAT FITTINGS SHALL BE INSULATED WITH MITER CUT PIECES OF FIBERGLASS PIPE INSULATION THE SAME SIZE AS ON ADJACENT PIPING. THREADED FITTINGS SHALL BE INSULATED WITH SLEEVED FITTING COVERS FABRICATED FROM MITER CUT PIECES OF FIBERGLASS PIPE INSULATION ACCORDING TO THE MANUFACTURER'S SLEEVING SIZE RECOMMENDATIONS AND SHALL BE OVERLAPPED 2" AND SEALED TO THE ADJACENT PIPE INSULATION. ALL VALVES SHALL BE INSULATED WITH CUT PIECES OF FIBERGLASS PIPE INSULATIONS. ALL JOINTS AND MITER CUT PIECES ARE TO BE SEALED PER MANUFACTURER'S RECOMMENDATIONS.

SUPPORTING HANGERS SHALL BE DESIGNED TO RESIST COMPRESSION; SUPPORTING DEVICES SUCH AS SHORT WOOD DOWELS OR WOOD BLOCKS SHALL BE USED IN COMBINATION WITH GALVANIZED SHEET METAL HANGER SHIELDS. THE WOOD SUPPORTING DEVICES SHALL BE THE SAME THICKNESS AS THE INSULATION AND SEALED TO THE INSULATION WITH FACTORY APPROVED CONTACT ADHESIVE.

INSTALL THERMAL INSULATION ON CLEAN, DRY SURFACES AFTER ALL TESTING AND INSPECTION IS COMPLETED. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THESE SPECIFICATIONS AND WITH MANUFACTURER'S INSTRUCTIONS.

#### PIPE MATERIAL LIST

#### DOMESTIC WATER PIPING

ABOVE SLAB INSIDE THE BUILDING SHALL BE SEAMLESS ASTM B 88 TYPE L COPPER WATER TUBE WITH WROUGHT COPPER FITTINGS, ANSI B16.22. SOLDER MATERIAL SHALL BE 99.8% LEAD LEAD FREE AND COMPLIANT WITH THE "SAFE WATER DRINKING ACT". THE USE OF DRILLED—T CONNECTIONS IS NOT PERMITTED. PEX TUBING CONFORMING TO ALL STANDARD APPLICABLE CODE REQUIREMENTS FOR COMMERCIAL APPLICATIONS IS APPROVED AS ALTERNATE TO COPPER.

BELOW SLAB SHALL BE ASTM B 88 TYPE K COPPER WATER TUBE WITH WROUGHT COPPER FITTINGS, ANSI B16.22. ALL JOINTS SHALL BE BRAZED.

#### CONDENSATE AND INDIRECT DRAIN PIPING SHALL BE

TYPE M COPPER TUBING UP TO 1" ID, TYPE DWV TUBING AND COPPER FITTINGS FOR 1-1/4" AND LARGER SIZES, AND 95-5 SOLDER JOINTS. PEX TUBING CONFORMING TO ALL STANDARD APPLICABLE CODE REQUIREMENTS FOR COMMERCIAL APPLICATIONS IS APPROVED AS ALTERNATE.

#### SANITARY SOIL WASTE AND VENT PIPING SHALL BE

ABOVE SLAB INSIDE BUILDING SHALL BE SCHEDULE 40 DWV POLYVINYL CHLORIDE PIPE AND FITTINGS CONFORMING TO ASTM D-1784-82 WITH SOLVENT WELDED JOINTS. IN AIR SUPPLY OR RETURN PLENUMS, AND/OR WHERE FIRE RATED WALLS, PARTITIONS, OR FLOORS ARE PENETRATED, CONTRACTOR SHALL PROVIDE NO-HUB CAST IRON SYSTEM CONFORMING TO CISPI STANDARD NO. 301-75. NEOPRENE GASKETS SHALL CONFORM TO ASTM STANDARD C564-75.

BELOW SLAB SHALL BE SCHEDULE 40 DWV POLYVINYL CHLORIDE PIPE AND FITTINGS CONFORMING TO ASTM D-1784-82 WITH SOLVENT WELDED JOINTS.

#### VACUUM PIPING SHALL BE:

FOR BRAZED CONNECTION.

VACUUM PIPING SHALL BE:
PIPE SHALL BE SEAMLESS TYPE K OR L, (ASTM B819) HARD TEMPER COPPER
TUBING; COMPLY WITH NFPA 99, CHAPTER 6. PIPING SHALL BE PRECLEANED
AND PLUGGED BY SUPPLIER BEFORE SHIPMENT TO THE JOB SITE.

### FITTINGS SHALL BE WROUGHT COPPER, BRASS OR BRONZE DESIGNED EXPRESSLY FOR BRAZED CONNECTION.

OR IF LOCAL CODE AND MANUFACTURE ALLOWED PIPE CAN BE SCHEDULE 40 DWV POLYVINYL CHLORIDE PIPE AND FITTINGS CONFORMING TO ASTM D-1784-82 WITH SOLVENT WELDED JOINTS. IN AIR SUPPLY OR RETURN PLENUMS, AND/OR WHERE FIRE RATED WALLS, PARTITIONS, OR FLOORS ARE PENETRATED, CONTRACTOR SHALL PROVIDE NO-HUB CAST IRON SYSTEM CONFORMING TO CISPI STANDARD NO. 301-75. NEOPRENE GASKETS SHALL CONFORM TO ASTM STANDARD C564-75.

MAIN TRUNK LINES MUST HAVE A MINIMUM SLOPE OF 1/4" PER 10' TOWARD THE PUMP.

#### MEDICAL AIR, OXYGEN, NITROUS OXIDE GAS PIPING

PIPE SHALL BE SEAMLESS TYPE K OR L, (ASTM B819) HARD TEMPER COPPER TUBING OR STANDARD WEIGHT SCHEDULE 40 BRASS PIPE; NFPA 56F. PIPING SHALL BE PRECLEANED AND PLUGGED BY SUPPLIER BEFORE SHIPMENT TO

FITTINGS SHALL BE WROUGHT COPPER, BRASS OR BRONZE DESIGNED EXPRESSLY

ELECTRIC WATER HEATER						
ITEM NO.	TOTAL KW INPUT	GALS. PER HR. RECOVERY RATE 80°F RISE	STORAGE CAPACITY (GALLONS)	ELECTRICAL REQUIRED	STORED WATER TEMP	MANUFACTURER COMMENT
EWH-1	4.5	23.0	47.0	208V, 1ø	140°	RHEEM ELDS50
	NOTES:  1. PROVIDE HOT WATER EXPANSION TANK DOWNSTREAM OF CHECK VALVE ON COLD WATER SUPPLY. THERM-X-TROL ST-5.					

	HOT WATER CIRCULATION PUMP						
ITEM NO.	PUMP TYPE	FLOW RATE (GPM)	HEAD (FT)	ELECTRICAL REQUIRED	MOTOR (HP)	MANUFACTURER / MODEL	
HWCP-1	IN-LINE	10	35.0	120V, 1ø	1/8	TACO / 009-SF5-IFC	

#### NOTES:

- 1. PUMP SHALL BE LEAD-FREE AND COMPLIANT WITH THE "SAFE DRINKING WATER ACT".
- MOUNT PUMP IN AN ACCESSIBLE LOCATION.
   PUMP SHALL RUN ONLY DURING OCCUPIED HOURS. PLUMBING CONTRACTOR
- SHALL PROVIDE TIME—CLOCK FOR INSTALLATION BY ELECTRICAL CONTRACTOR.

  4. PROVIDE AQUASTAT ON HOT WATER RETURN LINE, WIRED TO START CIRCULATING
- PROVIDE AQUASTAT ON HOT WATER RETURN LINE, WIRED TO START CIRCULATING PUMP WHEN LINE WATER TEMPERATURE DROPS 10°F BELOW DESIRED HOT WATER LOOP TEMPERATURE.

#### 

NOTES:

1. MAKE WATER CONNECTIONS TO THERMOSTATIC MIXING VALVE(S) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. PROVIDE PIPE INCREASERS AND/OR VALVES AS REQUIRED.

SHOCK ARRESTORS					
P.D.I. SYMBOL	FIXTURE UNITS	CHAMBER LENGTH	SWEAT CONNECTION		
Α	1–11	9-5/8"	1/2"		
В	12-32	11-3/4"	3/4"		
C	33–60	14-11/18"	1"		
D	61–113	12-3/8"	1"		
E	114-154	15-3/8"	1"		
F	155-330	17-3/8"	1"		

#### FIRE SPRINKLER SYSTEM

- A. DESIGN AND FURNISH LABOR AND MATERIALS FOR THE COMPLETE MODIFICATION OF AN AUTOMATIC WET PIPE FIRE EXTINGUISHING SPRINKLER SYSTEM WITH THE ATTENDANT ACCESSORIES FOR THE ENTIRE AREA.
- B. STUDY THE GENERAL, STRUCTURAL, ELECTRICAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS, IN ORDER TO BECOME FAMILIAR WITH THE BUILDING AND DETAILS AS THEY APPLY TO THE WORK OF THIS SECTION. COOPERATE WITH OTHERS SO THAT THERE WILL BE NO CONFLICT OF SPACE REQUIRED. DUCTWORK AND ELECTRICAL WORK SHALL TAKE PRECEDENCE OVER OTHER WORK, EXCEPT WHERE IT IS ABSOLUTELY NECESSARY TO MAINTAIN COVERAGE PROTECTION.
- C. THE INSTALLATION OF THE ENTIRE SPRINKLER SYSTEM SHALL COMPLY WITH ALL RULES AND REGULATIONS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, THE GOVERNING BUILDING CODE, REQUIREMENTS OF NFPA PAMPHLET 13, AND OTHER LOCAL AUTHORITIES EXERCISING JURISDICTION.
- D. IT SHALL BE THE FIRE PROTECTION INSTALLER'S RESPONSIBILITY, PRIOR TO BID, TO VERIFY PRESSURE AT THE PROJECT SITE BY PERFORMING A FLOW TEST. DETERMINE IF THE AVAILABLE STATIC AND RESIDUAL PRESSURE WILL ADEQUATELY PROVIDE THE FIRE EXTINGUISHING SYSTEM WITH THE NECESSARY PRESSURE OR IF A FIRE PUMP, BREAK TANK AND NECESSARY APPURTENANCES ARE REQUIRED.
- E. SCHEDULE 40 BLACK STEEL PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA FOR APPLICABLE FIRE PROTECTION SYSTEMS. CONFORM TO ASTM A53 AND A120. PROVIDE PIPING WITH MALLEABLE IRON, CAST IRON, STEEL WELDED OR SCREWED FITTINGS. VICTAULIC GROOVED FITTINGS MAY BE USED ABOVE GRADE IN ACCESSIBLE LOCATIONS ONLY
- F. DESIGN DRAWINGS MUST BE SUBMITTED TO THE LOCAL FIRE DEPARTMENT JURISDICTION FOR REVIEW AND APPROVAL. EVIDENCE OF SUCH REVIEW AND APPROVAL SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE PRIOR TO SYSTEM INSTALLATION.
- G. NOTIFY THE LANDLORD'S REPRESENTATIVE AT LEAST 24 HOURS PRIOR TO ANY FIRE SPRINKLER WORK. CONTRACTOR WILL BEAR ANY CHARGES ASSOCIATED WITH FALSE ALARMS. THE SYSTEM MUST BE RECHARGED AND OPERATIONAL AT THE END OF THE WORK DAY.

PLAN MARK	WASTE /TRAP	VENT	CW	HW	DESCRIPTION
WC-1	4"	2"	3/4"		WATER CLOSET: KOHLER: K-3999 (T.A.S. COMPLIANT). FLOOR MOUNTED, WHITE VITREOUS CHINA, ELONGATED BOWL WITH CLOSE—COUPLED TANK AND BOLT COVERS, 16—1/2" HIGH, FULLY GLAZED 2—1/8" TRAPWAY, 1.28—GPF, 12" ROUGH—IN. TANK TO BE CONFIGURED WITH TRIP LEVER LOCATED ON LEFT SIDE OR ON RIGHT SIDE IN ORDER TO MEET T.A.S. REQUIREMENT THAT FLUSH CONTROLS BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREA.  TOILET SEAT: KHOLER: K—4636 ELONGATED OPEN FRONT WHITE QUITE—CLOSE PLASTIC SEAT WITH SELF—SUSTAINING CHECK HINGES.  SUPPLIES;MCGUIRE LF2166. 1/2" I.P.S. X 3/8" O.D. CHROME PLATED WHEEL HANDLE STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISER.
L-1	2"	2"	1/2"	1/2"	LAVATORY: KOHLER K-2007-0 (T.A.S. COMPLIANT) WALL MOUNTED, WHITE VITREOUS CHINA, NOMINAL 19" X 17" OVAL BOWL WITH CONCEALED FRONT OVERFLOW. FAUCET: KOHLER K-13466-CP BRASS CONSTRUCTION (2) AAA BATTERY POWER SUPPLY WITH TOUCHLESS LAVATORY FITTING. 6-3/4" SPOUT, VANDAL RESISTANT, 0.5 GPM. CHROME PLATED BRASS FLAT GRID STRAINER, WITH 1-1/2" X 4" 20 GAUGE GAUGE TAILPIECE. MCGUIRE 152.
SK-1	2"	2"	1/2"	1/2"	SINK: KARRAN U2418 UNDERMOUNTED, 18 GAUGE TYPE 304 STAINLESS STEEL, 24" X 18" X 9" DEEP, SINGLE COMPARTMENT WITH DRAIN OUTLET OFF—CENTER TO REAR OF BASIN.  FAUCET: AMERICAN STANDARD STUDIO S 7105.801  TWO—HANDLE WIDESPREAD LAVATORY FAUCET. COORDINATE WITH ARCHITECT FOR ADDITION OF SOAP DISPENSER. ROUGH—INS, FAUCET INSTALLATION, AND FINAL CONNECTIONS BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR TO PROVIDE STRAINER, ESCUTCHEONS AT WALL, SUPPLIES AND STOPS, ETC. AS REQUIRED IN ORDER TO PROPERLY INSTALL FIXTURE.
SK-2	2"	2"	1/2"	1/2"	SINK: KARRAN UV1515 UNDERMOUNTED, 18 GAUGE TYPE 304 STAINLESS STEEL, 14.5" ROUND X 6" DEEP, SINGLE COMPARTMENT WITH DRAIN OUTLET OFF-CENTER TO REAR OF BASIN. FAUCET: AMERICAN STANDARD STUDIO S PULL-DOWN BAR FAUCET 4803410 STAINLESS STEEL SINGLE HANDLE. ROUGH-INS, FAUCET INSTALLATION, AND FINAL CONNECTIONS BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR TO PROVIDE STRAINER, ESCUTCHEONS AT WALL, SUPPLIES AND STOPS, ETC. AS REQUIRED IN ORDER TO PROPERLY INSTALL FIXTURE.
SK-3	2"	2"	1/2"	1/2"	STERILIZATION SINK SPECIFIED BY DENTAL CONSULTANT, PROVIDED AND INSTALLED BY CONTRACTOR.  FAUCET SPECIFIED BY DENTAL CONSULTANT, PROVIDED AND INSTALLED BY CONTRACTOR.
SK-4	2"	2"	1/2"	1/2"	SINK: KARRAN U2418  SAME AS TYPE SK-1 EXCEPT WITH DIFFERENT FAUCET.  FAUCET: KRAUS "BOLDEN" #KPF-1610SS OR APPROVED EQUAL  SINGLE HANDLE 1.8 GPM SINGLE HOLE PRE-RINSE PULL DOWN FAUCET. COORDINATE WITH OWNER PRIOR TO ORDER. ROUGH-INS, FAUCET INSTALLATION, AND FINAL CONNECTIONS BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR TO PROVIDE STRAINER, ESCUTCHEONS AT WALL, SUPPLIES AND STOPS, ETC. AS REQUIRED IN ORDER TO PROPERLY INSTALL FIXTURE.
MS-1	3"	2"	3/4"	3/4"	MOP SINK: FIAT PRODUCTS: MSB-2424.  MOP SINK BASIN, 24" X 24" X 10" HIGH, MOLDED STONE, AND GRID STRAINER DRAIN. PROVIDE STAINLESS STEEL WALL GUARDS IN QUANTITY AS REQUIRED TO PROTECT ADJACENT WALLS.  FAUCET: FIAT PRODUCTS 830—AA  WALL MOUNTED 26" ABOVE TOP LEDGE OF BASIN, ALL BRASS SUPPLY FAUCET, 10" SPOUT WITH WALL BRACE AND PAIL HOOK, 3/4" MALE HOSE THREADED OUTLET AND VACUUM BREAKER, LEVER HANDLES, INTERGRAL STOP ARMS, WALL FLANGES, 1/2" FEMALE THREADED INLETS AND ADJUSTABLE CENTERS.  WALL GUARD: FIAT PRODUCTS: MSG-2424  MSG-2424 IS WALL MOUNTED ABOVE MOP SINK ON PLAN NORTH AND EAST WALLS.  COORDINATE WITH ARCH/OWNER.
WMB-1	2"	2"	1/2"	1/2"	WASHING MACHINE BOX: SIOUX CHIEF 688 SERIES WASHING MACHINE WATER SUPPLY AND DRAIN BOX. WHITE PLASTIC BOX AND FLANGE WITH 2" CENTER DRAIN OUTLET, CHROME PLATED QUARTER TURN ADAPTER BALL VALVES WITH 1/2" WATER CONNECTIONS. NOTE TO CONTRACTOR — NO STANDPIPE RECEPTOR FOR ANY CLOTHES WASHER SHALL EXTEND MORE THAN THIRTY (30) INCHES, NOR LESS THAN EIGHTEEN (18) INCHES ABOVE ITS TRAP. NO TRAP FOR ANY CLOTHES WASHER STANDPIPE RECEPTOR SHALL BE INSTALLED BELOW THE FLOOR, BUT SHALL BE ROUGHED IN NOT LESS THAN SIX (6) INCHES AND NOT MORE THAN EIGHTEEN (18) INCHES ABOVE THE FLOOR.
RVB-1			1/2"		REFRIGERATOR VALVE BOX: SIOUX CHIEF $696-G101(X)F$ REFRIGERATOR VALVE BOX, $7-1/4$ " X $5-3/4$ " X $3-1/2$ " ABS OUTLET BOX, $1/4$ " OUTLET CONNECTION. SUPPLY CONNECTION TO BE SELECTED BY CONTRACTOR (X) = (C = $1/2$ " MALE CPVC, M = $1/2$ " MIP/F.SWT P = $1/2$ " MALE SWEAT/PRESS/PUSH, V = VIEGA PUREFLOW PEX, W = $1/2$ " PEX F1960 GRIP, X = $1/2$ " PEX F1807/F2159 CRIMP)
FD-1	3"	2"			FLOOR DRAIN: SIOUX CHIEF 832-36P-SR-V PVC BODY WITH 6.5" ROUND STAINLESS STEEL GRATE, ALLOWS ADJUSTMENT BEFORE AND AFTER THE CONCRETE POUR. TRAP PRIMER PORT SHALL BE THREADED 1/2" FIP FOR OPTIONAL CONNECTION. STRAINER WITH VANDAL PROOF SCREWS.
FS-1	4"	2"			FLOOR SINK: SIOUX CHIEF 861-4-PZ-W-3-V BOTTOM OUTLET STAINLESS STEEL 12" SQUARE STAINLESS STEEL 3/4 GRATE AND RIM, ANCHOR FLANGE, 6-3/8" DEEP SUMP WITH PVC INTERIOR, STAINLESS STEEL MESH DEBRIS STRAINER WITH VANDAL PROOF SCREWS.
WCO	REFER TO PLANS				WALL CLEANOUT: SIOUX CHIEF 873-V  20 GAUGE 430 STAINLESS STEEL KIT SHALL INCLUDE A REMOVABLE STAINLESS STEEL ACCESS COVER, WHICH SHALL FASTEN WITH A STAINLESS STEEL SCREW TO A CAST BRASS CLEANOUT PLUG. PLUG SHALL BE TAPPED TO ACCEPT SCREW. KIT SIZE TO BE SELECTED BY CONTRACTOR (240 = 2" PLUG WITH 4" COVER, 350 = 3" PLUG WITH 5" COVER & 460 4" PLUG WITH 6" COVER.)
FCO	REFER TO PLANS				FLOOR CLEANOUT: SIOUX CHIEF 851-4-X-N-V STAINLESS FINISHED CLEANOUT SHALL HAVE A SCH. 40 HUB CONNECTION, WHICH CONFORMS TO ASTM D2665 {PVC). CONNECTION TO DRAINAGE SYSTEM SHALL BE MADE WITH A SOLVENT WELD JOINT TO PVC PIPE. CLEANOUT COVER SHALL MEET APPLICABLE LOAD REQUIREMENTS FOR INTENDED USE. CLEANOUT SHALL INCLUDE A SLOTTED, POLYPROPYLENE CLEANOUT PLUG, WITH THREADED BRASS INSERT TO ACCEPT COVER SCREW. CONNECTION SIZE TO BE SELECTED BY CONTRACTOR X = (3 = 3" SCH.40 HUB, 4 = 4" SCH.40 HUB & 6 = 6" SCH.40 HUB,) ADD OPTION C FOR CARPET MARKER.

PLUMBING FIXTURE SCHEDULE

NOTE:
1. CONTRACTOR SHALL VERIFY ALL PLUMBING FIXTURES SELECTIONS & FINISHES WITH OWNER/ARCHITECT PRIOR TO PURCHASE AND INSTALLATION.



PROJECT TEAM

OWNER
SUPER KIDS DENTAL
2410 E RIVERSIDE DRIVE, SUITE 12-H
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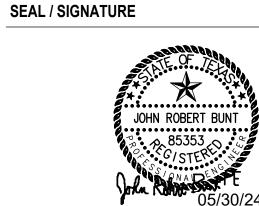
ARCHITECT
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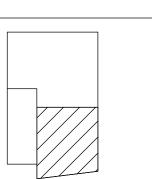


TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION #: F-9072 EXPIRES: 31 MARCH 2025

DESCRIPTION DATE



**KEY MAP** 



PROJECT STATUS

ISSUE FOR PERMIT

PROJECT NAME
SUPER KIDS DENTAL

PROJECT ADDRESS

6707 E RIVERSIDE DR., AUSTIN, TX 78741

PROJECT NUMBER

24017

DATE

05/30/24

PLUMBING SCHEDULES

# Cat 3-Dental

NFPA 99 (2012ed)—Category 3 Piped Gas Systems:

Sedation levels limited to minimal/light & moderate/medium sedation,, NO ANESTHESIA. Patients remain conscious & "capable of self—preservation".

Appointments are "Elective"...

0

6" DOWN FROM

CEILING...

'Natural Ventilation|"

VENTILATION TO EXTERIOR. 72 SQ. IN. EACH VENT

IBC MINIMUM
VENTILATION TO EXTERIOR..
36 SQ. IN. EACH VENT

Installat

nd

ifo

Appointments are Elective ...

Patients may <u>NOT</u> be kept overnight...

"Systems serving occupancies where interruption of the piped medical gas would terminate procedures but would not place patients at risk of morbidity or mortality." (PIP)

Category 3 Medical Gas Varifier (ref. 2015 99.5.3.12.1.2)

Emergency Shutoff System (ref. 2015 99.5.3.4.1) ——Required

TRIPLE GANG ELECTRICAL BOX FOR ALTERNATE

REQUIRED, RUN CAT6 FROM MANIFOLD TO ALARM PANEL.

RESTRAINTS LOCATE 40" FROM FLOOR

CAT 3 MAX. STORAGE= 3000 CU.FT. STANDARD "H" CYLINDER= 250 CU. FT.

STANDARD "G" CYLINDER= 244 CU. FT.

Category 3 Non-Flammable Medical Gas

Systems (ref. 2015 99.9.3.6.5.2.1)

Med gas room must have a 1 hr. fire

resistance rating per NFPA Code 2012...

of free flow ventalation in each vent...

CAT 3 piped gas and vacuum systems..

Both vents should be routed to outside...

If "Natural Ventilation" cannot be achieved,

add "force fan" at ceiling vent blowing into

room to force air exhaust thru lower vent...

Confirm "room changes per hour" rating of fan..

Fan system should be "continuous run" (24/7)... Consult IBC code for sprinkler requirements......

"Natural Ventilation"...two louvered openings

consisting of minimum 72 sq. inches each

NFPA 99 (2012)...Section 5.3.

One vent at 12" below ceiling

and one vent at 12" above floor..

PRE-DRYWALL INSTALLATION

Only If

by Code

ZONE VALVE SHUT-OFF BOX

LOCATE IN PATIENT AREA AT CONVENIENT LOCATION
BETWEEN MANIFOLD AND OUTLET STATION
REQUIRED ONLY WHERE TANK ROOM IS CONSIDERED REMOTE)

WRAP WET RAGS AROUND PIPING AT EACH END WHEN BRAZING

LOCATED NO MORE
THAN 4'-0" FROM THE MANIFOLD
AND ABOVE 60" MINIMUM AFF...

ÖÖÖÖ

MANIFOLD TO REGULATOR HOSES

MANIFOLD COVER

FLOOR

Dental Air Supply System (ref. 2015 99.5.3.3.6.1)

Emergency Shutoff System (ref. 2015 99.5.3.4.1)

MOUNTING CREWS (1)

Dental Vacuum System (ref. 2015 99.5.3.3.10)

Central Storage (ref. 2015 99.5.3.3.4)

Warning System (ref. 2015 99.5.3.9)

ALARM PANEL

LOCATE IN A WELL MONITORED AREA

SUCH AS RECEPTION OR ACTIVE HALLWAY

#### Confirm Compliance to NFPA Standard 99(2015 Edition)

Manifold Systems comply with requirements for Category 3, Non-Flammable Medical Gas Systems established by the National Fire Protection Association NFPA 2012 99.5.3.6

Confirmed code to year 2015....

A MEDICAL GAS LICENSED PLUMBER MUST BE

RESPONSIBLE FOR THE INSTALLATION OF THE

PLUMBER MUST HAVE ASSE 6010 ACCREDITATION.

VARIFIER MUST HAVE ASSE 6030 ACCREDITATION.

ZONE VALVES: REQUIRED PER NFPA99.. WHERE THE CENTRAL

POINTS, THE MAIN SUPPLY LINE SHALL BE PROVIDED WITH A

TREATMENT FACILITY AS TO BE ACCESSIBLE FROM USE-POINT

STANDARD ELECTRICAL OUTLET

NOT AN OXYGEN ENRICHED ATMOSPHERE.

ALLOWED BY NFPA CODE

Daniel Shoemaker....Accutron NFPA

DENTAL CYLINDER SIZES:

Wrote Standard NFPA M99 (2015) 5.3.1

"E" CYLINDER....24 CUBIC FEET

"M" CYLINDER....122 CUBIC FEET

"G" CYLINDER.....244 CUBIC FEET

"H" OR "K" CYLINDER.....250 CU.FT.

Business phone: 623-780-2020.....

99 (2012) 5.3.

Confirmation Contact:

commitee member...

SUPPLY IS REMOTE FROM THE MEDICAL GAS SYSTEM USE

SHUT-OFF VALVE (ZONE VALVE) LOCATED IN THE SINGLE

CATEGORY 3 MEDICAL GAS SYSTEM.

LOCATIONS IN AN EMERGENCY .....

#### Category 3 Non-Flammable Medical Gas Systems (ref. 2015 99.5.3)

- Have not more than 3000 cu. ft. total capacity of all gases (excluding nitrogen and air) connected and in storage at one time.
- Have a listed pressure regulator directly connected to each cylinder.
   Supply either a single treatment facility
- Supply either a single treatment facility.
- Supply system storage location shall be provided with 2 louvered openings having a minimum of 72 square inches each...(IBC standards require 36 sq. inches each)
- Supply system locations that are remote must be locked...
   Where the central gas supply system is remote from the outlet stations, a zone valve (pressure sensitive shut—off valve) is required...

#### Catagory 3 Medical Gas Piping (ref. 2015 99.5.1.10)

- Piping to be annealed (soft temper) ASTM B819 (Type K or L) copper tubing that has been cleaned for oxygen service, and capped prior to installation.
- Joints to be brazed without use of flux.

  TO PREVENT CROSS CONNECTION OF OXYGEN AND NITROUS OXIDE:
- ✓ All oxygen tubing to be 1/2" O.D.✓ All nitrous oxide tubing to be 3/8" O.D.

#### ✓ All vacuum tubing to be 5/8" O.D.1. While brazing, purge piping system with low flow oil—free dry nitrogen to prevent

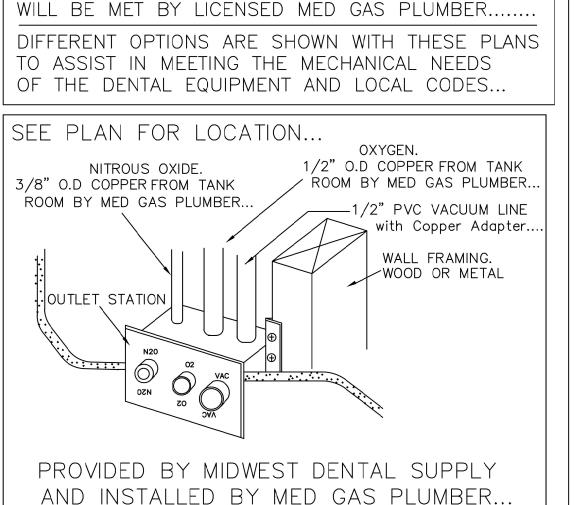
- formation of copper oxide in the lines.

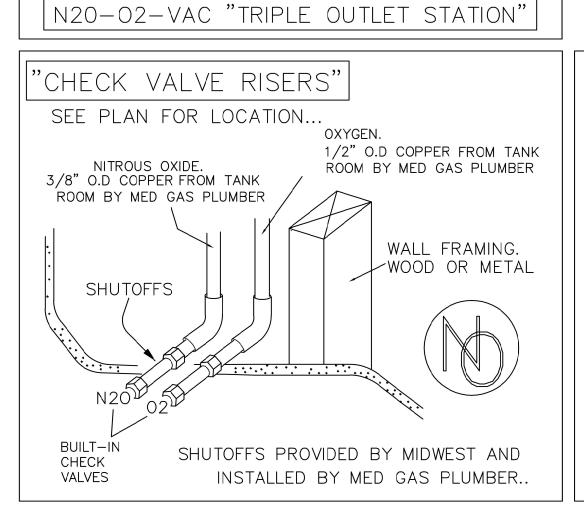
  2. After brazing of all joints, pressurize piping system to 150 psig with oil—free dry nitrogen and leak test all joints by means of soapy water or other equally effective
- means of leak detection safe for use with oxygen.

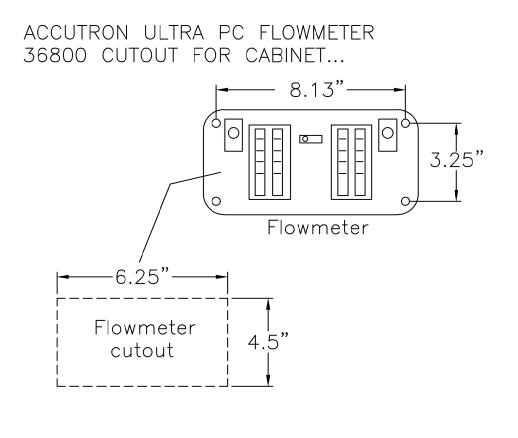
  3. Allow piping system to remain pressurized to 150 psig for 24 hours with source shut—off valve closed. Maximum allowable pressure loss is 5 psig.
- 4. Blow piping system clear with oil—free dry nitrogen.
  5. Purge piping system with intermittent high flow oil—free dry nitrogen to remove particulate matter. Flow each outlet fully until purging produces no discoloration in
- 6. Cap piping system. No further brazing shall be performed.

#### Category 3 Non-Flammable Medical Gas Systems (ref. 2015 99.5.3.10.1.6)

MED GAS PLUMBER TO CONFER WITH CITY CODE OFFICIALS TO DETERMINE VACUUM, DENTAL AIR, AND MED GAS LINE ROUTING.. TO RUN DENTAL GAS (AIR, NITROUS OXIDE, & OXYGEN) UNDER A SOLID CONCRETE FLOOR, REQUIRES A PVC SLEEVE SEPARATING THE COPPER LINE FROM ANY CONTACT WITH CONCRETE DUE TO THE NEGATIVE CHEMICAL REATION BETWEEN THE TWO MATERIALS.. NFPA CLARIFICATION FOR 2015 PERMITS THE UNPROTECTED RUN OF DENTAL GAS IN FILL DIRT.. RESPONSIBILITY OF MEETING THESE CODES, BOTH WITH THE CITY AND WITH THE THIRD PARTY CERTIFICATION AUTHORITY REQUIRED BY THE STATE, WILL BE MET BY LICENSED MED GAS PLUMBER......







# MidwestDental® EQUIPMENT · SERVICES · SUPPLIES

Some cities have adopted the following code:
Contractor confirm with local municipality if this code
is being enforced at time of construction...
Confirm Compliance to NFPA Standard 99(2021 Edition)
Chapter 15.4.2.6.1

Chapter 15.4.2.6.1 "All (dental) medical gas systems shall have an emergency shutoff valve accessible from all use-point locations in an emergency."

Thus... a Zone Valve will be required in the facility when the municipality has adopted this edition of the NFPA Standard 99 code...

# MIDWEST DENTAL Equipment • Services • Supplies 2429 109th Street Grand Prairie, Texas 75050 Toll Free: 800 766 2025

Dr. Asha Patel

PAGE 7 OF 7

	Austin, TX 78727
Equipment Rep:	Scott Jovich
Date:	April 19, 2024
Drawn By:	DDS
Checked By:	WC
Architect :	William Cruz, AAIA

Dental Medical Gas

e: NOT TO SCALE

# At this time, NFPA 2005, 2012, & 2015 are in use in North America...Consult with your local municipality to confirm which code(s) they have currently adopted... Use specs only for Symbols on Plan

NITROUS OXIDE AND OXYGEN MANIFOLD location. Provide copper tubing per code and install continuously to MED GAS locations. Manifold supplied by Midwest, plumbing contractor to install per MFG. specs. Nitrous storage closet to be constructed per NFPA Guidelines. Installation by Medical Gas Certified plumber. Vent to NFPA code...NFPA 2012 99.5.3.6

CONTRACTOR to install tank restraints provided with manifold per cut sheet & to NFPA code...

Nitrous oxide and oxygen "tubing", when run within floor slabs and underground, must be installed

NITROUS OXIDE & OXYGEN outlet location. Provide copper tubing per codes. NFPA 2012 99..5.3.6
Risers or Dual Outlet Station supplied by dental company... Contractor install per codes. Must be Medical Gas Certified Plumber......See cut sheets provided by Midwest Dental.....

NITROUS OXIDE, OXYGEN & VACUUM outlet location. Provide copper piping per codes. Triple Outlet
Station supplied by dental company.. Med Gas plumber install per codes. Must be Medical Gas Certified...
Oxyen & Nitrous Oxide=NFPA 2012 99.5.3.6 Vacuum=NFPA 99.5.3.8...

SENTINEL/ALARM system for med gas...Required by fire code..

Measurement on plan is from finished floor to center of Sentinel box....

Run special cable (Cat6, Ethernet4 twisted pr.,RJ45 end connects)

from tank room to sentinel/alarm location...

Electrician to acquire above cable from Med Gas Plumber...

Med Gas Manifold to be installed by Med Gas Licensed Plumber....

Electrician install:

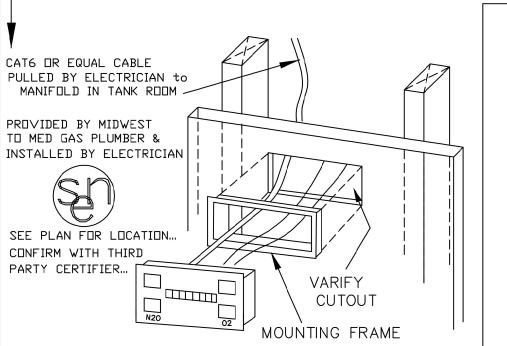
120v duplex in tank room no more than 4'-0" from manifold and above 60" from floor....

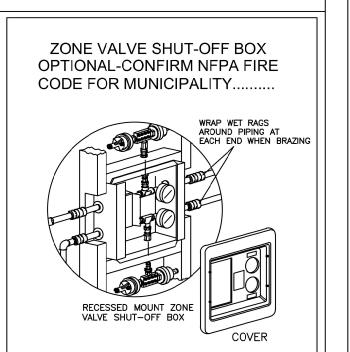
\*\*Sentinel must be located at a point in the office where it can be continually visually monitored by staff during working hours...

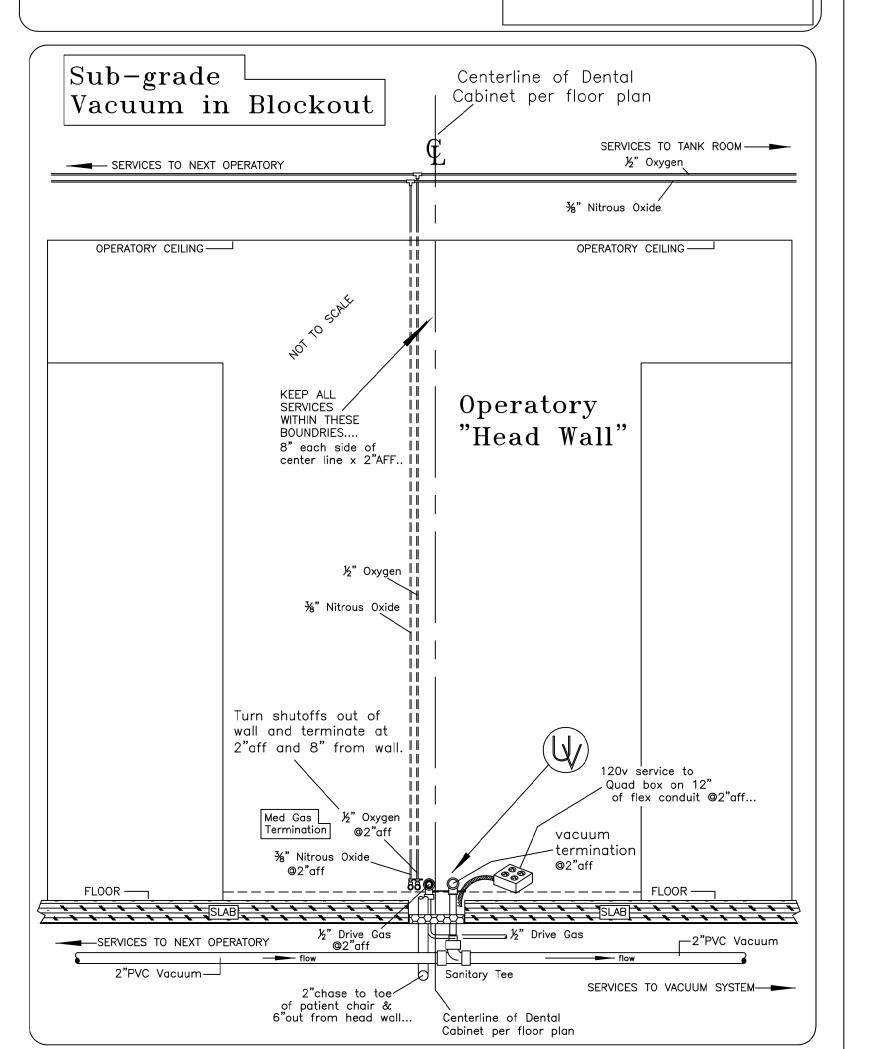
Confirm location approval with Med Gas third party certifiers..... \*\*\*

ZONE VALVE for nitrous oxide and oxygen with wiring per manufacturer's specifications. Valve provided by Midwest installed by med gas licensed plumber....

Electrician provide cat6 or equal from Tank Room manifold to Zone valve... (2)









#### PROJECT TEAM

OWNER
SUPER KIDS DENTAL
2410 E RIVERSIDE DRIVE, SUITE 12-H
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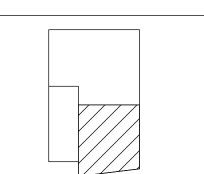
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION #: F-9072 EXPIRES: 31 MARCH 2025

#	DESCRIPTION	DATE
1	CITY OF AUSTIN RESPONSE #1	06/20/24

#### SEAL / SIGNATURE



KEY MAP



PROJECT STATUS

ISSUE FOR PERMIT

PROJECT NAME
SUPER KIDS DENTAL

PROJECT ADDRESS

6707 E RIVERSIDE DR., AUSTIN, TX 78741

PROJECT NUMBER

24017 **DATE**06/25/24

PLUMBING SPECIFICATIONS