

RESPONSIBILITY MATRIX

ITEMS	Owner Provided	Owner Installed	Contractor Provided	Contractor Installed	REMARKS
GENERAL CONDITIONS					
Building permits	Y				
Third party inspection			Y	Y	Any 3rd party inspections required by city
Test & balance			Y	Y	
Temporary utilities			Y	Y	
Final clean up			Y	Y	
Insurance			Y	Y	
Protection of all finished surfaces (both owner and General Contractor)			Y	Y	
Temporary Labor			Y	Y	
Dumpster			Y	Y	
Glosscoat Package			Y	Y	
Storage container			Y	Y	
VI. WOOD AND PLASTICS					
Telephone demark cabinet			Y	Y	GC is responsible for receiving, storing, and protecting all Millwork (See remarks at right. See below for responsibility)
Display Shelves			Y	Y	GC to install
Cash Wrap			Y	Y	GC to install
Dispensary			Y	Y	GC to install
Cutting Station			Y	Y	GC to install
Vanities (Restrooms)			Y	Y	GC Supply and install
VII. THERMAL & MOISTURE					
Roofing penetrations			Y	Y	
Insulation			Y	Y	
VIII. DOORS AND WINDOWS					
Rear Service door			Y	Y	GC to bring rear door to proper working order
Doors			Y	Y	
Storefront			Y	Y	
IX. FINISHES					
Vinyl flooring			Y	Y	Per Specifications
Concrete Polish			Y	Y	Stencil Provided by Owner
Bishops Floor Logo			Y	Y	
FRP			Y	Y	
Paint			Y	Y	
Tile flooring			Y	Y	
Tile Walls			Y	Y	
Floor protection			Y	Y	Contractor is responsible for protecting flooring from damage/diors after installation.
X. SPECIALTIES					
Grab bars			Y	Y	
Hand towel dispensers in restrooms			Y	Y	
Toilet paper dispensers			Y	Y	
Restroom mirrors			Y	Y	
Cutting Station Mirrors			Y	Y	
ADA & IC tactile signs per city, local and state codes			Y	Y	
Fire extinguishers			Y	Y	
All specialty signage per city or local codes			Y	Y	
XI. FURNISHINGS					
Customer Seating			Y	Y	GC to unload/store/assemble as required. GC to both into concrete.
Cutting Station Chairs			Y	Y	GC to unload/store/assemble as required
Shampoo Chairs			Y	Y	GC to unload/store/assemble as required
Mini Refrigerator			Y	Y	GC to unload/store/assemble as required
Hot Tower Cabinet			Y	Y	GC to unload/store/assemble as required
Step Trash Can			Y	Y	GC to unload/store/assemble as required
Hot Coat and Umbrella Stand			Y	Y	GC to unload/store/assemble as required
Fatigue Mats			Y	Y	GC to unload/store/install as required
Safe			Y	Y	
Decor			Y	Y	
Signage			Y	Y	GC to Coordinate with Owner/Vendors
Storage room shelving			Y	Y	GC to install Owner selected shelving
XV. HVAC					
Thermostats and remote sensors			Y	Y	
HVAC Units			Y	Y	
HVAC Distribution			Y	Y	
XVI. PLUMBING					
Plumbing fixtures			Y	Y	Required lighting supplier - National account
Water Fountain			Y	Y	Required lighting supplier - National account
Washer/Dryer			Y	Y	If required by code
XVII. ELECTRICAL					
Light fixtures			Y	Y	Required lighting supplier - National account
Light fixture Lamps			Y	Y	Required lighting supplier - National account
Fire Alarm system			Y	Y	
Telephone Systems			Y	Y	
Telephone/Internet rough-in			Y	Y	
Telephone/Internet cabling			Y	Y	
Interior Recessed Access Panel - Telephone Board			Y	Y	
Telephone equipment installation			Y	Y	
Telephone backer board at Demark			Y	Y	
Audio Visual System			Y	Y	
Air emergency lighting			Y	Y	

SCOPE OF WORK:

1. PROJECT IS A TENANT FINISH-OUT OF AN EXISTING SPACE IN A SHELL RETAIL BUILDING CONSISTING OF A RETAIL AREA AT THE FRONT, HAIR CUTTING STATIONS, A RESTROOM, AND A UTILITY ROOM. THERE IS NO EXTERIOR SCOPE OF WORK.

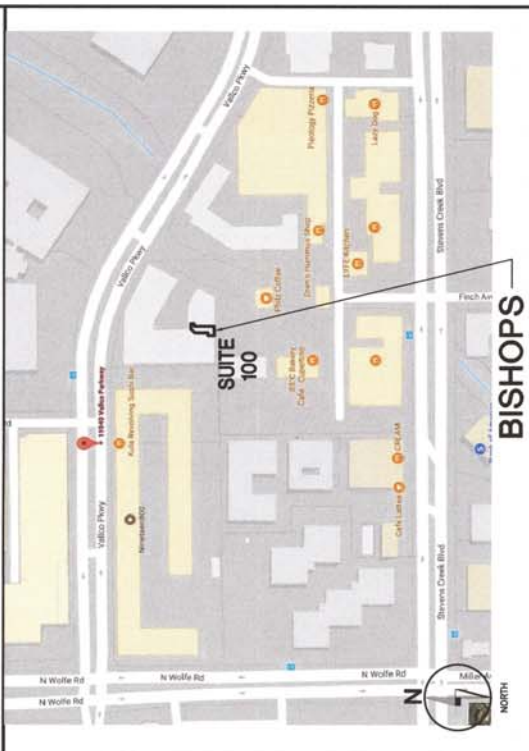
BISHOPS

**MAIN STREET CUPERTINO
19540 VALLCO PARKWAY
SUITE 100
CUPERTINO, CA 95014**

DEVELOPMENT LOCATION MAP



BUILDING KEY PLAN



LIST OF CONTACTS

TENANT
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CUPERTINO, CA 95014
CONTACT:
MIKE ROHDE
PH: 408-777-3081, FAX: 408-725-0370

LANDLORD REQUIRED SUB-CONTRACTORS:
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STATEWIDE ROOFING
PH: 408-286-7828

FIRE ALARM:
BAY ALARM
PH: 408-785-1182

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CONTACT:
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NOTES:

- SHOP DRAWINGS FOR FIRE SPRINKLER AND FIRE ALARM ARE TO BE A DEFERRED SUBMITTAL BY THE SUB-CONTRACTOR PRIOR TO INSTALLATION.
- SIGN DRAWINGS ARE TO BE A DEFERRED SUBMITTAL BY THE SIGN VENDOR AND MUST SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION.

INDEX TO DRAWINGS:

SHEET TRADE	DESCRIPTION
GENERAL	G001 COVER SHEET G002 ADA GUIDELINES G003 SYMBOLS, ABBREVIATIONS, GEN NOTES G004 SPECIFICATIONS G005 CAL-GREEN REQUIREMENTS
ARCHITECTURAL	A001 ARCHITECTURAL SITE PLAN D101 DEMOLITION PLAN & LIFE SAFETY & OCCUPANCY PLAN A101 FLOOR PLAN & FURNISHING PLAN A121 REFLECTED CEILING PLAN, SUSPENDED CEILING DETAILING A201 INTERIOR ELEVATIONS A601 DOOR SCHED, HARDWARE SCHED, GENERAL DETAILS MW01 MILLWORK
MECH	MEP10 MEP SPECIFICATIONS MEP2.0 ADDITIONAL MEP INFORMATION M1.0 MECHANICAL PLANS, SCHEDULES, NOTES M1.1 MEP SITE PLAN M2.0 SEISMIC MECHANICAL DETAILS M2.1 MECHANICAL TITLE 24 SHEETS M2.2 MECHANICAL TITLE 24 SHEETS M2.3 MECHANICAL TITLE 24 SHEETS
PLUMB	P1.0 PLUMBING SUPPLY & WASTE PLAN P1.1 PLUMBING RISERS
ELEC	E1.0 POWER PLAN, SCHEDULE, LIGHTING PLAN E2.0 ELECTRICAL SCHEDULE, RISER, T24 NOTES E3.0 ELECTRICAL TITLE 24 SHEETS E3.1 ELECTRICAL TITLE 24 SHEETS E3.2 ELECTRICAL TITLE 24 SHEETS

BUILDING CODE INFORMATION

BUILDING CODE
2018 CALIFORNIA BUILDING CODE VOLUMES 1 & 2
FIRE CODE
2018 CALIFORNIA FIRE CODE
PLUMBING CODE
2018 CALIFORNIA PLUMBING CODE
ELECTRICAL CODE
2018 CALIFORNIA ELECTRICAL CODE
MECHANICAL CODE
2018 CALIFORNIA MECHANICAL CODE

ENERGY CODE
2018 CALIFORNIA ENERGY CODE
ACCESSIBILITY CODE
AND 2018 CALIFORNIA GREEN BUILDING STANDARDS CODE
TITLE 24 ACCESS REGULATIONS, ANSI 117.1

OCCUPANCY CLASSIFICATION
BUSINESS - GROUP B

SHELL BUILDING CONSTRUCTION TYPE
II-B

FIRE SPRINKLER SYSTEM
FULLY SPRINKLERED
LEASE SQ. FT. 960 SQ.FT.
OCCUPANCY LOAD: 10 OCCUPANTS

BUSINESS: 960 S.F. / 100 = 10 OCCUPANTS

MINIMUM NUMBER OF EXITS REQ'D - 1
1 EXIT PROVIDED
PER TABLE 1006.2.1 ONE EXIT IS REQUIRED BASED ON B OCCUPANCY IF THE OCCUPANT LOAD IS LESS THAN 49 AND THE MAX TRAVEL DISTANCE IS LESS THAN 100 FEET. THE MAX DISTANCE IS 66'-0".

MAXIMUM TRAVEL DISTANCE W/ SPRINKLERED SPACE IS 250'
MAXIMUM TRAVEL DISTANCE IN SPACE IS 66'-0"

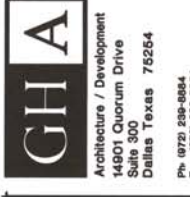
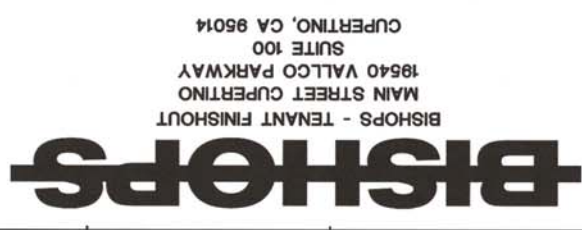
MINIMUM NUMBER OF PLUMBING FIXTURES (CPC TABLE A & 422.1)
PLUMBING LOAD FACTOR: B - 960 SF/200 = 5 PERSONS, 1 UNISEX FACILITY IS ALLOWED PER 422.2 EXCEPTION 3

WC REQ'D - 1 UNISEX
URINAL REQ'D - 0
LAV REQ'D - 1

WC PROVIDED - 1 UNISEX
URINAL PROVIDED - 0
LAV PROVIDED - 1

WATER FOUNTAIN REQ'D - 1
WATER FOUNTAIN PROVIDED - 1

SERVICE SINK REQ'D - 1
SERVICE SINK PROVIDED - 1



DO NOT SCALE DRAWINGS
CONTRACTOR TO VERIFY
ALL EXISTING CONDITIONS AND
DIMENSIONS-NOTIFY ARCHITECT
OF ANY DISCREPANCIES PRIOR
TO BEGINNING CONSTRUCTION

NO REVISION

ISSUE

ISSUE FOR PERMIT 10/30/17

PROJECT NUMBER
C170339

SHEET NUMBER
G001

ACCESSIBILITY NOTES

604.2.1 DOOR AND GATE HARDWARE
 HANDLES, PULL, LATCHES, LOCKS AND OTHER OPERABLE PARTS ON DOORS AND GATES SHALL COMPLY WITH 308.4. OPERABLE PARTS OF SUCH HARDWARE SHALL BE 34 INCHES (865 MM) MINIMUM AND 44 INCHES (1120 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.

604.2.2 DOOR AND GATE CLOSERS
 DOOR CLOSERS AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LEAD IS 5 SECONDS MINIMUM.

308.4 OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PUSHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS (22.2 N) MAXIMUM.

304 TURNING SPACE
 304.1 FLOOR OR GROUND SURFACES OF A TURNING SPACE SHALL COMPLY WITH 302. CHANGES IN LEVEL ARE NOT PERMITTED.

304.1.1 CIRCULAR SPACE
 THE TURNING SPACE SHALL BE A SPACE OF 60 INCHES (1525 MM) DIAMETER. THE SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPETING WITH 302.

302.5 CLEAR FLOOR OR GROUND SPACE
 302.5.1 THE CLEAR FLOOR OR GROUND SPACE SHALL BE 30 INCHES (760 MM) MINIMUM BY 48 INCHES (1220 MM) MINIMUM. ONE FULL UNOBSTRUCTED SIDE OF THE CLEAR FLOOR OR GROUND SPACE SHALL ADJOIN AN ACCESSIBLE ROUTE OR ADJOIN ANOTHER CLEAR FLOOR OR GROUND SPACE.

302.5.2 STRUCTURAL STRENGTH
 ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHEN A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS (1112N) IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE.

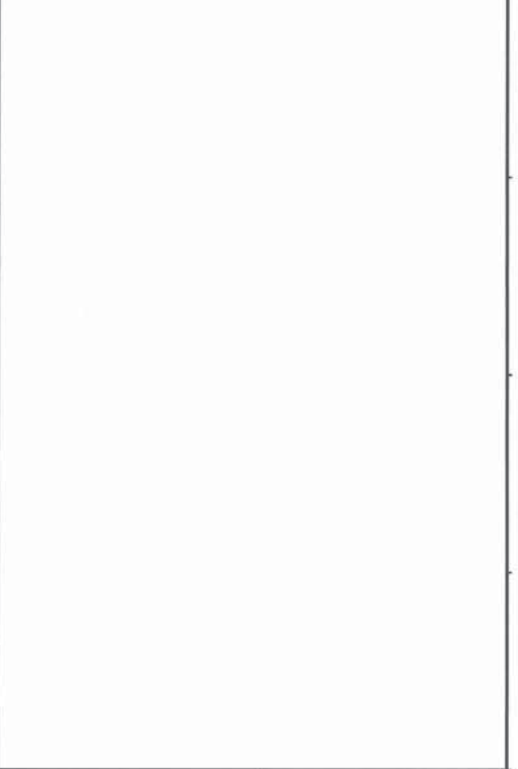
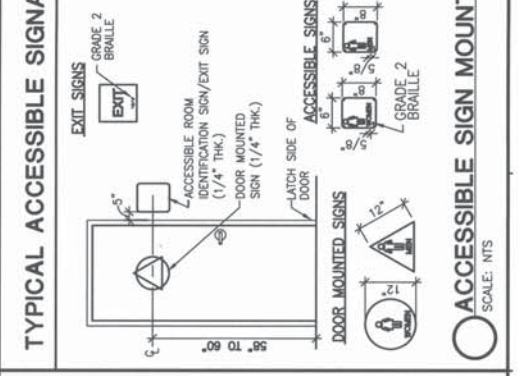
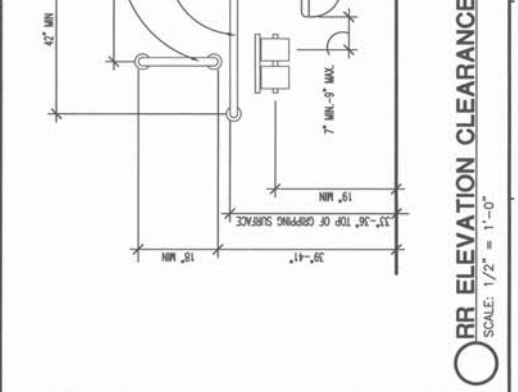
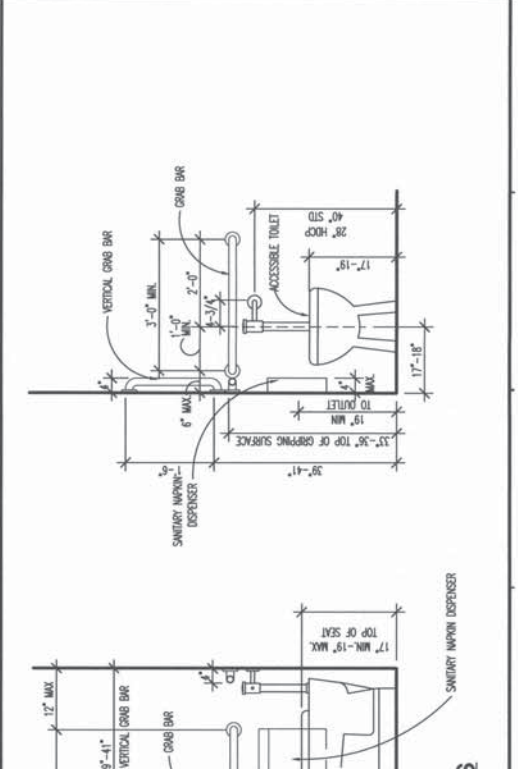
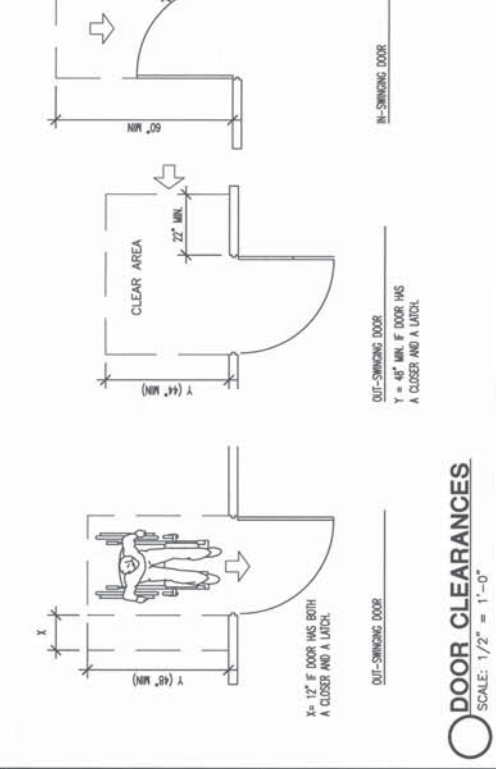
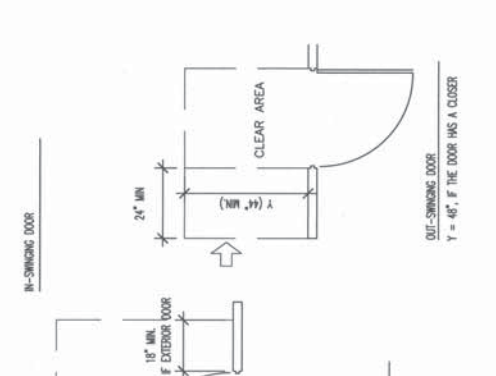
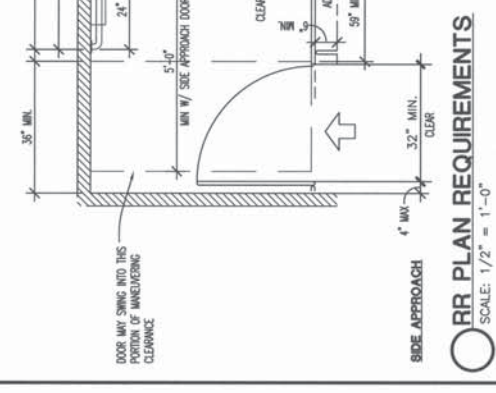
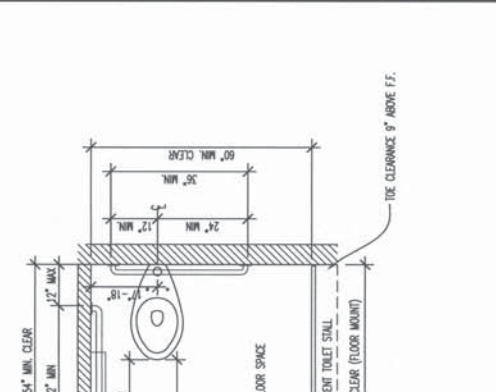
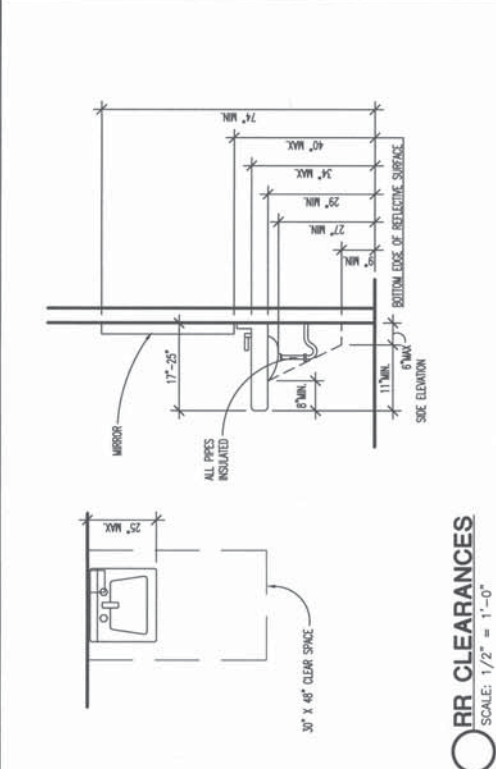
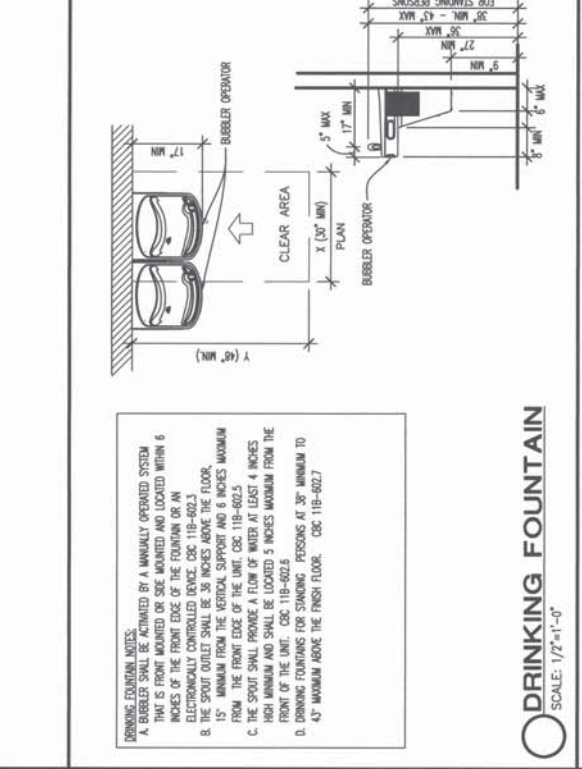
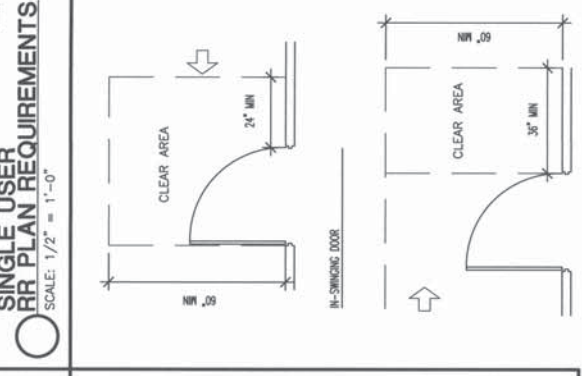
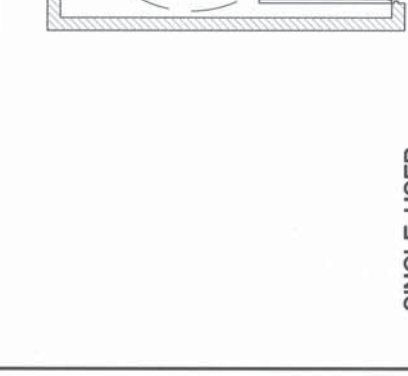
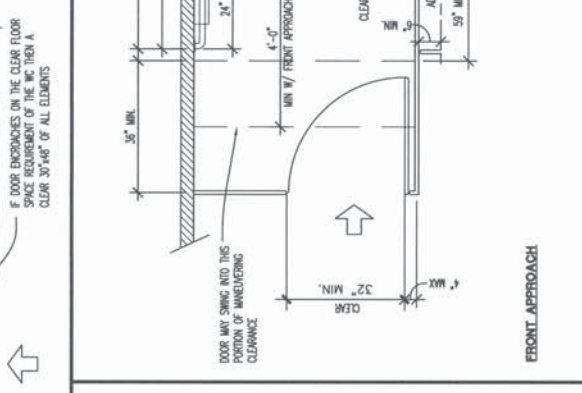
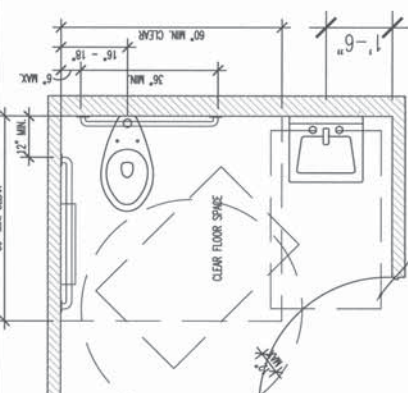
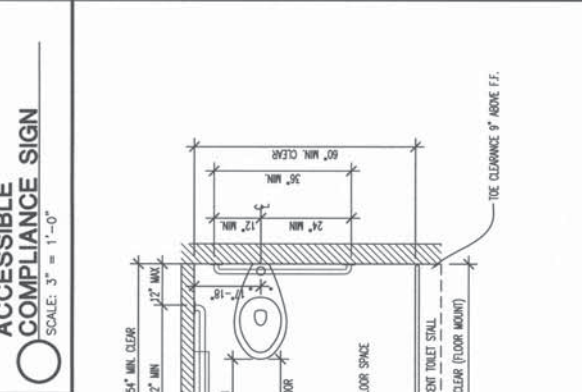
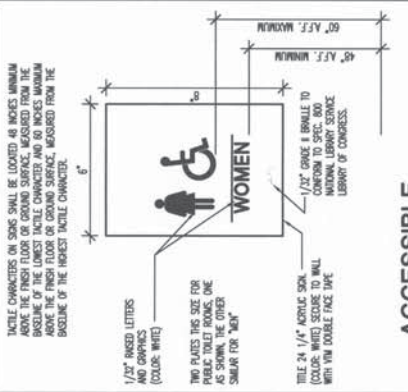
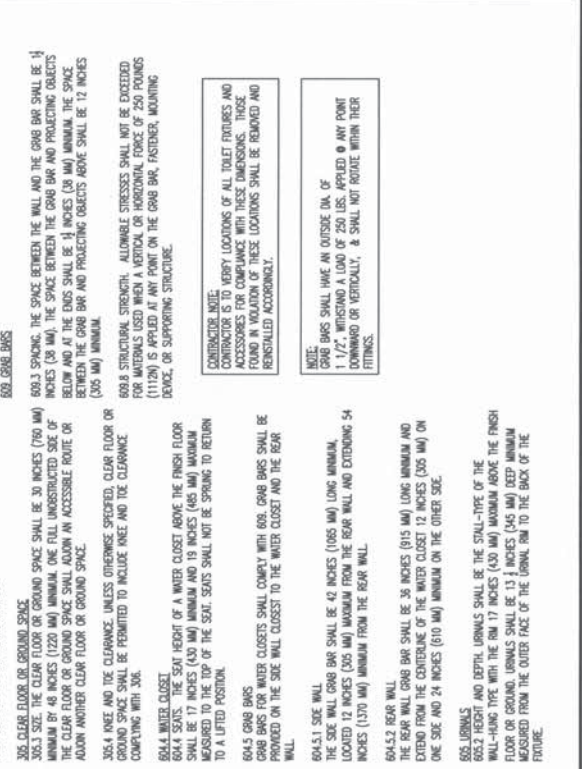
302.5.3 WATER CLOSET
 302.5.3.1 THE SEAT HEIGHT OF A WATER CLOSET ABOVE THE FINISH FLOOR SHALL BE 17 INCHES (430 MM) MINIMUM AND 19 INCHES (485 MM) MAXIMUM MEASURED TO THE TOP OF THE SEAT. SEATS SHALL NOT BE SPRUNG TO RETURN TO A LIFTED POSITION.

302.5.4 GARB BINS
 GARB BINS FOR WATER CLOSETS SHALL COMPLY WITH 606. GARB BINS SHALL BE PROVIDED ON THE SIDE WALL CLOSEST TO THE WATER CLOSET AND THE REAR WALL.

604.5.1 SIDE WALL
 604.5.1.1 THE REAR WALL SHALL BE 40 INCHES (1016 MM) LONG MINIMUM. LOCATED 40 INCHES (1016 MM) MAXIMUM FROM THE REAR WALL AND EXTENDING 54 INCHES (1370 MM) MINIMUM FROM THE REAR WALL.

604.5.2 REAR WALL
 THE REAR WALL GRAB BAR SHALL BE 36 INCHES (915 MM) LONG MINIMUM AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12 INCHES (305 MM) ON ONE SIDE AND 24 INCHES (610 MM) MINIMUM ON THE OTHER SIDE.

604.5.3 URINALS
 604.5.3.1 HEIGHT AND DETAIL URINALS SHALL BE THE STALL-TYPE OF THE WALL-HUNG TYPE WITH THE RIM 17 INCHES (430 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND. URINALS SHALL BE 13 1/2 INCHES (343 MM) DEEP MINIMUM MEASURED FROM THE OUTER FACE OF THE URINAL RIM TO THE BACK OF THE FITTING.



D101

PROJECT NUMBER
C170339

SHEET NUMBER

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ISSUE

NO REVISION

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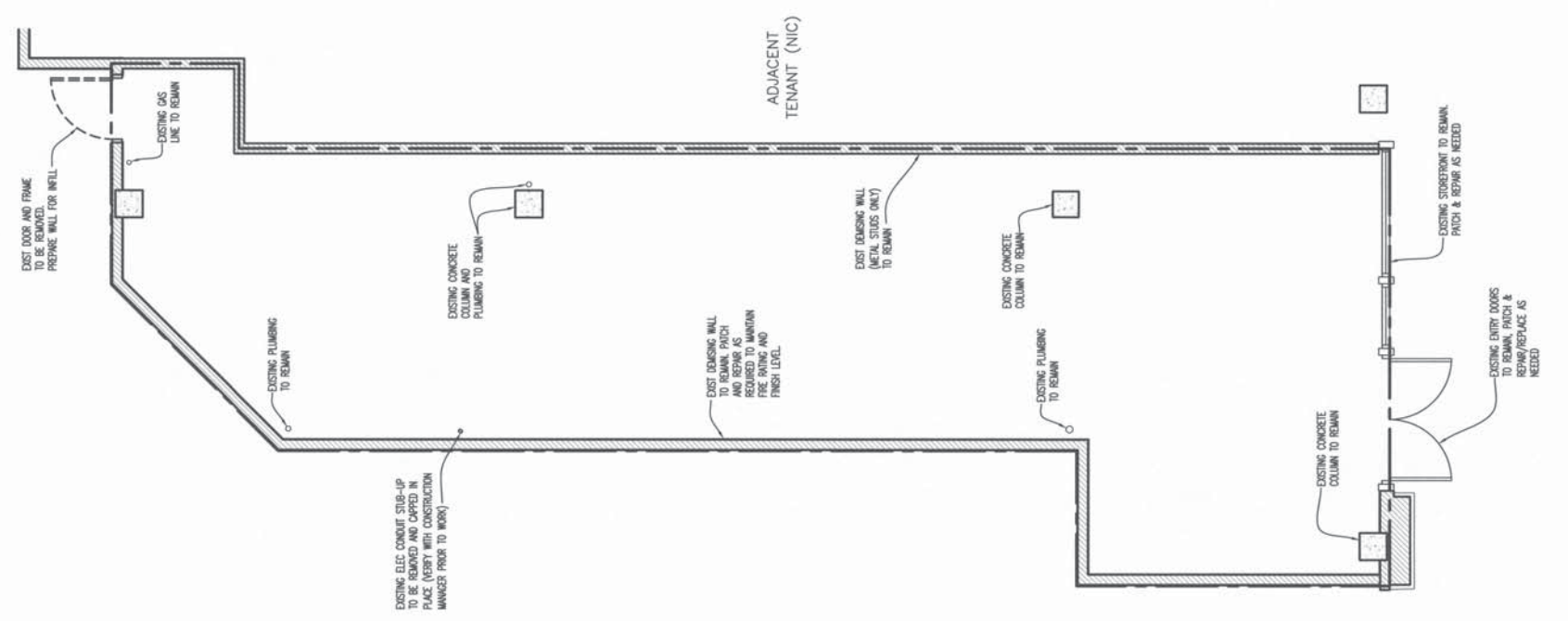
DEMOLITION GEN NOTES:

- CONTRACTOR TO ON-SITE VERIFY THE EXTENT OF DEMOLITION SHOWN HERE PRIOR TO BID AND COORDINATE WITH OWNER'S REPRESENTATIVE THE FULL SCOPE OF WORK.
- ITEMS WHICH ARE TO REMAIN AND ARE DAMAGED DURING PERFORMANCE OF WORK SHALL BE REPAIRED TO THEIR ORIGINAL CONDITION OR REPLACED WITH NEW.
- DO NOT OVERLOAD STRUCTURAL ELEMENTS. PROVIDE NEW SUPPORTS AND REINFORCEMENT FOR EXISTING STRUCTURE DAMAGED BY DEMOLITION OR REMOVAL WORK.
- WEATHER PROTECT ALL SURFACES AT ALL TIMES WITH VESICULES.
- PROTECT ALL ELECTRICAL AND MECHANICAL SERVICES, WHICH ARE TO REMAIN.
- REMOVE ALL ELECTRICAL AND MECHANICAL SERVICE TO BE REMOVED IN A MANNER CONSISTENT WITH ALL LOCAL AND STATE REGULATIONS REGARDING THE SPECIFIC UTILITY AND SATISFACTORY TO THE OWNER AND BUILDING OFFICIALS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REQUESTING ALL INSPECTIONS REQUIRED.
- ON COMPLETION OF EACH UNIT WORK, DEMOLITION DEBRIS SHALL BE REMOVED AND SHALL BE LEFT IN A CLEAN CONDITION, SATISFACTORY TO THE OWNER.
- REMOVE AND TRANSPORT DEBRIS AND RUBBER IN A MANNER THAT WILL PREVENT DAMAGE ON STREETS AND ADJACENT AREAS. CLEAN UP SPILLAGE FROM STREETS AND ADJACENT AREAS, WHERE OCCURS.
- COMPLY WITH FEDERAL, STATE AND LOCAL HAULING AND DISPOSAL REGULATIONS.
- AFTER DEMOLITION, THE CONTRACTOR SHALL VERIFY AND MAKE FULL OPERATION OF EXISTING ELECTRICAL DEVICES THAT ARE TO REMAIN.
- NO WALL OR PART OF WALL SHALL BE PERMITTED TO FALL IN ANY DIRECTION (UNRESERVED).
- REMOVE DUST BARRIERS AT LOCATIONS DIRECTED BY LANDLORD.
- ALL WORK SHALL COMPLY WITH ALL STATE AND LOCAL BUILDING CODES, ORDINANCES, AND ANY GOVERNING AGENCIES HAVING JURISDICTION OVER THE PROJECT.
- ALL CONSTRUCTION AND MATERIALS SHALL BE AS SPECIFIED AND AS REQUIRED BY THE CURRENT EDITION OF THE BUILDING CODE, LOCAL CODES, AND AUTHORITIES.
- THE CONTRACTOR SHALL COMPLY WITH OPERATIONS ON THE SITE TO AREAS AS PERMITTED BY THE LANDLORD.
- GC TO PROVIDE CONSTRUCTION BARRICADES AS REQUIRED BY LANDLORD FIELD VERIFY REQUIREMENTS WITH LANDLORD.
- MAINTAIN INTEGRITY OF ALL FIRE RATED PARTITIONS OR SHIFTS - GC TO REPAIR/REPLACE FIRE PROOFING DAMAGED DURING DEMOLITION.
- ON ALL EXISTING DOORS TO REMAIN, TENANT SHALL VERIFY COORDINATION & VARIANCE REQUIRED TO USE NEW CONDITION. COORDINATE WITH ARCHITECT REPAIR/REPLACE & HANGING.
- GENERAL CONTRACTOR TO VERIFY PROVISIONS PRIOR TO DEMOLITION TO DETERMINE EXTENT OF WORK MARKED AND TO MAINTAIN STRUCTURAL INTEGRITY. ELECTRICAL CONTRACTOR TO DISCONNECT ALL ELECTRICAL ITEMS AND REMOVE WIRING AT AREAS OF DEMO SHOWN DASHED. REFER TO NEW PLAN & INSPECT PROVISIONS TO DETERMINE EXTENT OF WORK. CAP ELECTRICAL LINES WHERE REMOVED. PLUMBING CONTRACTOR TO DISCONNECT, CAP AND REMOVE PLUMBING FIXTURES, WHEEL, SEWER AND GAS PIPING AS REQUIRED PER NEW PLAN. ARCHITECT PROVIDES TO DETERMINE EXTENT OF WORK, VERIFY QUANTITY AND LOCATIONS.
- ANY CHANGES TO THE DRAWINGS OR CONTRACT DOCUMENTS SHALL BE APPROVED IN WRITING BY OWNER'S REP PRIOR TO START OF WORK.
- GENERAL CONTRACTOR TO COORDINATE WITH ALL TRADES DURING DEMOLITION.
- CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER OF ITEMS IN QUESTION AND/OR CONTACTS PRIOR TO CONTINUING DEMO.
- SPRINKLER SYSTEM TO REMAIN. MODIFICATIONS TO THE HEIGHT AND LOCATION OF SPRINKLER HEADS NEED TO BE COORDINATED WITH MECHANICAL DUCT LAYOUT.
- EXISTING STRENGTHENING SYSTEMS THAT ARE TO REMAIN MUST HAVE HOLES, DAMAGE, ETC. TO BE PATCHED & REPAIRED AS NEEDED.
- REMOVE UNUSED FIRE ALARM EQUIPMENT AS NECESSARY.
- WHEN WALLS, COLUMNS OR OTHER SUPPORTING AND/OR BRACING ELEMENTS ARE SCHEDULED FOR DEMOLITION, STRUCTURAL SUPPORTS AND BRACING FOR THE ADJACENT STRUCTURES SHALL BE PROVIDED AND MAINTAINED UNTIL THE PERMANENT SUPPORTING STRUCTURES ARE IN PLACE AND ABLE TO SUPPORT IMPOSED LOADS.

DEMO WALL LEGEND

	EXISTING WALLS TO REMAIN
	EXISTING WALLS/STRUCTURE/ITEM TO BE REMOVED

01 DEMOLITION PLAN
SCALE: 1/4"=1'-0"

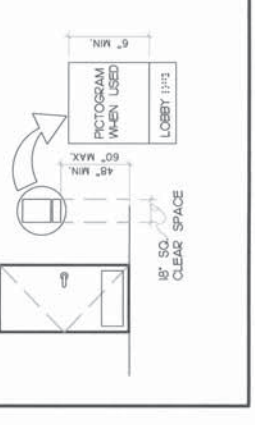


LIFE SAFETY GENERAL NOTES:

- ALL EGRESS DOORS SHALL BE READY OPERABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
- PROVIDE SIGN ON OR NEAR THE MAIN EXIT DOOR, READING "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED."

TACTILE SIGNAGE:

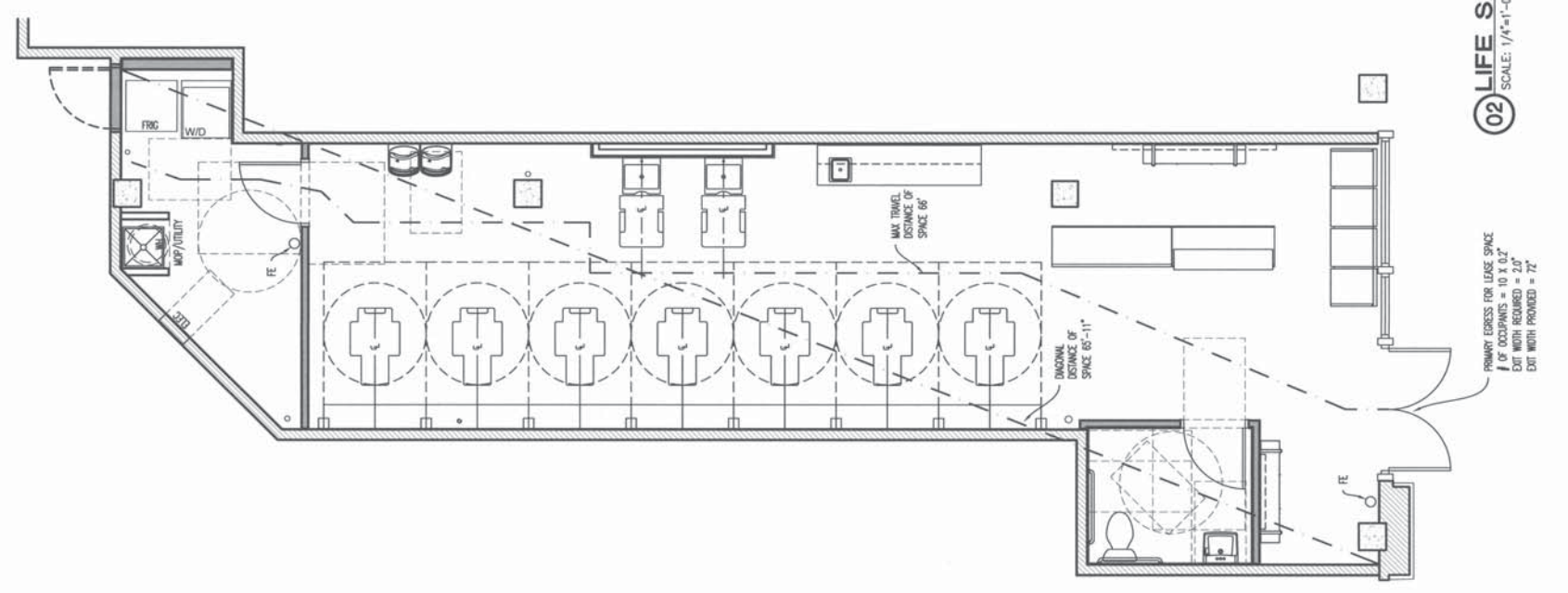
- WHEN SIGNS IDENTIFY A PERMITTED ROOM OR SPACE OF A BUILDING OR SITE, OR WHEN SIGNS DIRECT OR GIVE INFORMATION ABOUT A PERMANENT DOOR OR SPACE OF A BUILDING OR SITE, CORRESPONDING TACTILE SIGNAGE SHALL BE INSTALLED.
- WHEN SIGNS IDENTIFY, OR GIVE INFORMATION ABOUT ACCESSIBLE ELEMENTS AND FEATURES OF A BUILDING OR SITE, THEY SHALL INCLUDE THE APPROPRIATE SYMBOL OF ACCESSIBILITY OR PICTOGRAM AND TACTILE SIGNAGE. THESE PICTOGRAMS SHALL BE PLACED DIRECTLY BELOW THE PICTOGRAM. THE OUTSIDE BORDER OF THE PICTOGRAM SHALL BE MINIMUM 6" IN HEIGHT.
- VISUAL CHARACTERS SHALL BE UPPERCASE, STANDARD SANS SERIF FONT. THE HEIGHT OF VISUAL CHARACTERS SHALL BE A MINIMUM 5/8" PLUS 1/8" PER FOOT OF VIEWING DISTANCE OVER SIX FEET. CHARACTERS WITH SPACES SHALL BE 53X MINIMUM AND 110X MAXIMUM OF THE CHARACTERS. CHARACTERS WITHOUT SPACES SHALL BE A MINIMUM OF 10X OF THE CHARACTER HEIGHT, AND A MAXIMUM OF 20X. TACTILE SIGNAGE SUPPLEMENTING THE INFORMATION SHALL BE PROVIDED, EITHER AS PART OF THE VISUAL SIGN OR A SEPARATE TACTILE SIGN PROVIDED.
- TACTILE CHARACTERS SHALL BE UPPERCASE, STANDARD SANS SERIF FONT, RANSED 1/32" OFF THE BACKGROUND. THE HEIGHT OF TACTILE CHARACTERS SHALL BE BETWEEN 3/8" AND 2". CHARACTERS WITH SPACES SHALL BE 53X MINIMUM AND 110X MAXIMUM OF THE HEIGHT OF THE CHARACTERS. CHARACTERS WITHOUT SPACES SHALL BE A MINIMUM OF 10X CHARACTER HEIGHT, AND A MAXIMUM OF 20X. CHARACTERS SHALL BE ACCOMPANIED BY GRADE 2 BRAILLE.
- GRADE 2 BRAILLE SHALL HAVE DASHED OR ROUNDED DOTS RANSED 1/40" OFF THE BACKGROUND, WITH DOTS SPACED 1/10" WITH-IN CELLS, AND 1/4" BETWEEN CELLS. (OR SPACED PER AIA HAS TABLE 703.5)
- TACTILE SIGNS SHALL BE MOUNTED 48" MINIMUM AND 60" MAXIMUM ABOVE THE FLOOR TO THE CENTERLINE OF THE SIGN. AN 18" X 18" CLEAR SPACE IS REQUIRED IN FRONT OF THE TACTILE SIGN BEHIND THE AREA OF ANY DOOR SWING, WHERE SIGNS ARE MOUNTED AT DOORS. THE SIGN SHALL BE ON THE LATCH SIDE OF THE DOOR. WHERE SIGNS ARE MOUNTED AT DOUBLE DOORS, OR WHERE THERE IS NO WALL SPACE, THE SIGN SHALL BE MOUNTED ON THE NEAREST ADJACENT WALL, PREFERABLY THE RIGHT SIDE.
- CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND. CHARACTERS, SYMBOLS AND BACKGROUNDS SHALL HAVE A NON-GLOSS FINISH.



OCCUPANCY CALCULATIONS
FROM OCCUPANCY CALCULATIONS BASED ON 2016 CBC

OCCUPANTS ARE CALCULATED IN EACH INDIVIDUAL SPACE, THEN ROUNDED UP.

ASSEMBLY AREAS	TOTAL SQ. FT.	OCC LOAD
BUSINESS 100 GROSS	960	10
TOTAL OCCUPANTS		10



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

PRIMARY EGRESS FOR LEASE SPACE
OF OCCUPANTS = 10 X 0.2"
EXIT WIDTH REQUIRED = 2.0"
EXIT WIDTH PROVIDED = 7.2"



DO NOT SCALE DRAWINGS
CONTRACTOR TO VERIFY
ALL EXISTING CONDITIONS AND
DIMENSIONS—NOTIFY ARCHITECT
OF ANY DISCREPANCIES PRIOR
TO BEGINNING CONSTRUCTION

NO REVISION

ISSUE

ISSUE FOR PERMIT 10/30/17

PROJECT NUMBER
C170339

SHEET NUMBER

A101

DATE OF THIS PRINTING - 10/26/17

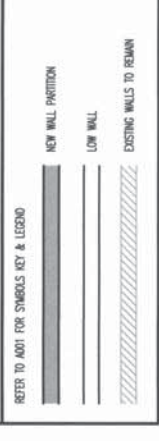
WALL TYPES:

- A EXISTING BEARING WALL PER U-1419. 6" CA METAL STUDS FROM FLOOR TO CEILING. 1" CA POLYURETHANE INSULATION. 5/8" TYPE X GYPSUM BOARD ON FIBER INSULATION. FIRE JOINTS AND FIRE GASKETS AT DECK. REFER TO 02/A101
- A1 NEW EXISTING WALL PER U-1419. 6" CA METAL STUDS FROM FLOOR TO DECK @ 16" O.C. WITH 5/8" TYPE X GYPSUM BOARD. 5" MINERAL WOOL OR FIBER INSULATION. FIRE JOINTS AND FIRE GASKETS AT DECK. REFER TO 02/A101
- A2 NEW EXISTING WALL PER U-1419. EXISTING BEARING 6" CA METAL STUDS FROM FLOOR TO DECK @ 16" O.C. EXISTING 5/8" TYPE X GYPSUM BOARD BOTH SIDES. 5" MINERAL WOOL OR FIBER INSULATION. FIRE JOINTS AND FIRE GASKETS AT DECK. REFER TO 02/A101
- B 3-5/8" METAL STUDS @ 16" O.C. WITH 5/8" COP BO TO DECK ON BOTH SIDES WITH BATT INS FULL DEPTH OF STUD. REFER TO 02/A101
- C 3-5/8" METAL STUDS @ 16" O.C. WITH 5/8" COP BO BOTH SIDES TO 10'-0" A.F.F. REFER TO 02/A101
- C1 3-5/8" METAL STUDS @ 16" O.C. WITH 5/8" COP BO BOTH SIDES TO 14'-0" A.F.F. REFER TO 02/A101
- C2 6" METAL STUDS @ 16" O.C. WITH 5/8" COP BO ONE SIDE TO 6" ABOVE CEILING. EXIST CONC WALL. PREPARE SURFACE TO RECEIVE NEW PAINT FINISH WHERE EXPOSED. REFER TO 02/A101
- D LOW WALL CONST. 3-5/8" METAL STUDS @ 8" O.C. WITH 5/8" GYPSUM BOTH SIDES. REFER TO 02/A101

WALL TYPE NOTES:

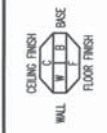
1. ALL WALLS EXTENDING TO DECK TO UTILIZE A SIP TRUCK TO ALLOW FOR A MINIMUM OF 3/4" VERTICAL MOVEMENT.
2. AT ALL WALL TYPES, PROVIDE TILE BRACKET BOARD WHERE MET WALLS OCCUR. BRACKET BOARD SHALL BE HEIGHT OF TILE FINISH SHOWN ON ELEVATIONS.
3. ALL WALLS SHALL RECEIVE LEVEL 4 SMOOTH FINISH, TO BE CONTINUED IN FIELD BY CN.
4. ALL WALLS EXTENDING ABOVE 15'-0" SHALL BE FRAMED WITH 18 GA METAL FRAMING.
5. WALLS AT MIP SINK TO RECEIVE TFR.
6. FRAMING CONTRACTOR SHALL PROVIDE SOLID WOOD BLOCKING AT ALL WALL MOUNTED FIXTURES AND ACCESSORIES INCLUDING, BUT NOT LIMITED TO - WALL MOUNTED TV'S, REFRIGERATORS, CUPBETS, COFFERS, CLOSET SHARING AND STORAGE, TOILET ROOM EQUIPMENT AND ACCESSORIES, MIP SINKS, TV LOCATIONS, DINING FOUNDATIONS, AND WALL MOUNTED LIGHT FIXTURES.

LEGEND:

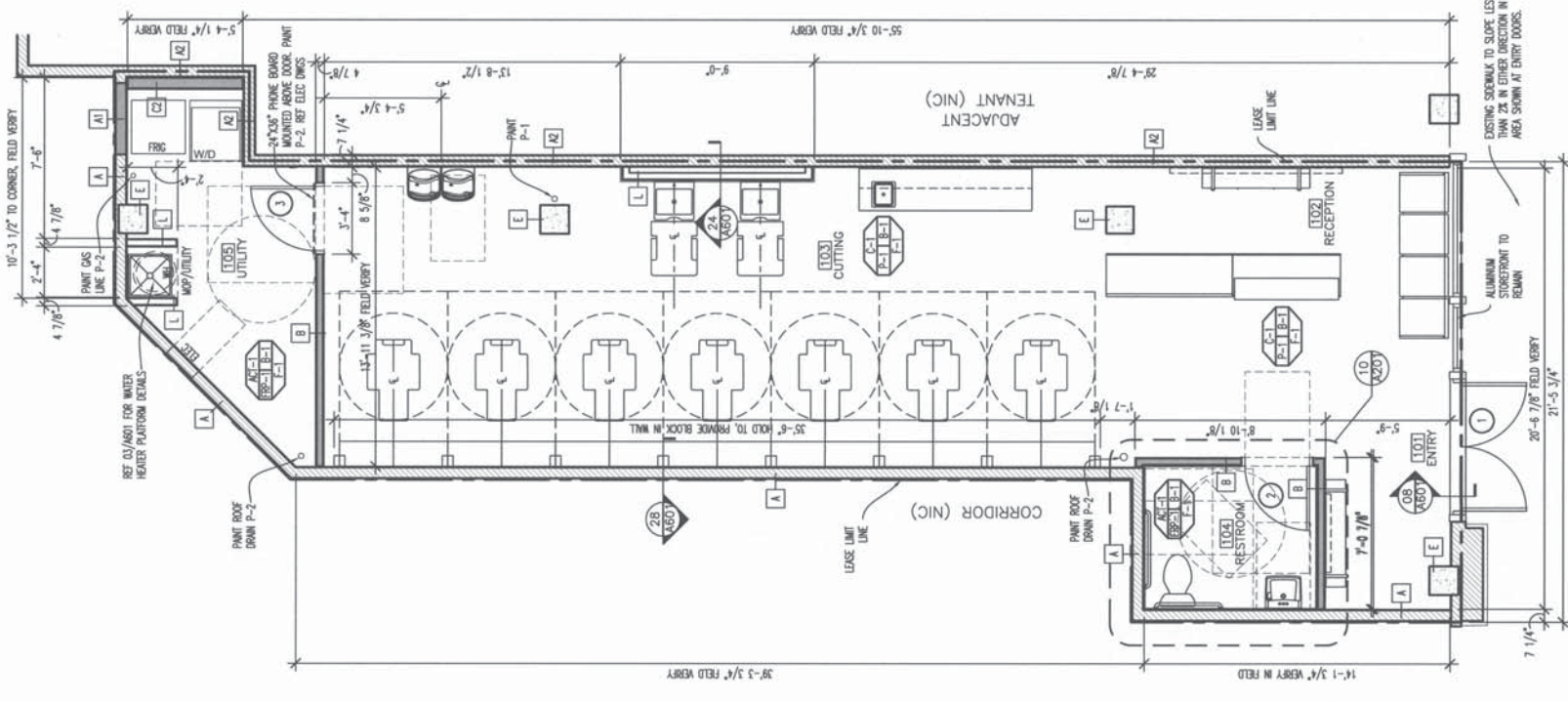


GENERAL NOTES:

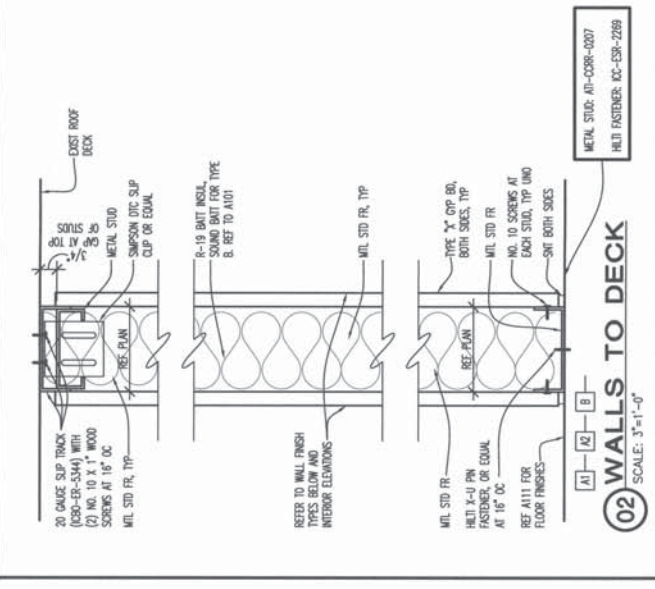
1. PROVIDE (1) ONE FIRE EXTINGUISHER PER 3,000 S.F. VERIFY WITH LOCAL FIRE MARSHAL FOR TYPE & FINAL LOCATIONS PRIOR TO INSTALLATION.
2. REFER TO KEY PLANS FOR INTERIOR ELEVATIONS KEYS ON INTERIOR ELEVATION SHEETS.
3. ALL WOOD BLOCKING TO BE FIRE RETARDANT TREATED TYPICAL.
4. INTERIOR FRAMING TO BE MIN 22 GA METAL FRAMING AT 16" O.C. UNLESS NOTED OTHERWISE. ALL FRAMING TO BE 3-5/8" METAL FRAMING UNLESS NOTED OTHERWISE. IF APPLICABLE, REFER TO STRUCTURAL NOTES FOR ADDITIONAL FRAMING INFORMATION.
5. GC TO INSULATE BEHIND ALL PLUMBING IN EXTERIOR WALLS TYP.
6. ALL DIMENSIONS TO FACE OF FINISH U.N.O.
7. INTERIOR "HOLD" OR "CLEAR" DIMENSIONS ARE FINISH DIMENSIONS.
8. REF ELECTRICAL DRAWINGS FOR OUTLETS HEADS. USE GFI OUTLETS WHERE REQUIRED BY CODE.
9. REFER TO OWNER'S VENDOR FOR INTERIOR SOUND SCOPE.
10. ALL INTERIOR DOORS FRAMES SHALL BE SET AT 4" FROM ADJACENT PERPENDICULAR PARTITION UNLESS OTHERWISE NOTED OR DIMENSIONED.
11. CONTRACTOR SHALL PERFORM SITE VISIT AND VERIFY ALL EXISTING CONDITIONS BEFORE PROCEEDING AND PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND EXISTING SITE CONDITIONS IMMEDIATELY UPON DISCOVERY AND SHALL OBTAIN WRITTEN DIRECTION BEFORE COMMENCING CONSTRUCTION OF ANY ITEMS IN QUESTION.



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



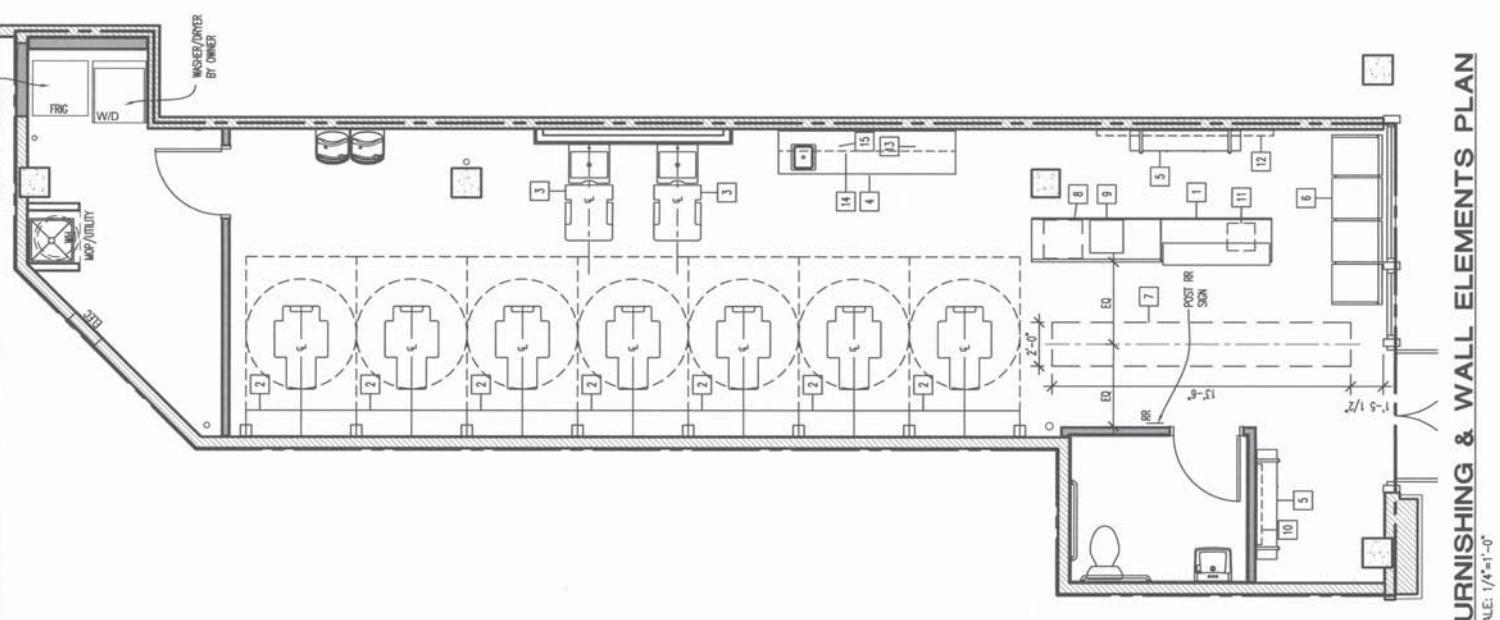
WALL LEGEND DETAILING:



02 WALLS TO DECK
SCALE: 3/4"=1'-0"

- NOTE:** FINISHED/PROVIDE IS PROVIDED BY OWNER BUT MUST COMPLY WITH THE FOLLOWING CODE SECTIONS OF THE CALIFORNIA BUILDING CODE:
- A. WASHING MACHINE SHALL COMPLY WITH CBC 119-611.1.
 - B. DRYER MACHINE SHALL COMPLY WITH CBC 119-611.1.
 - C. PROVIDE CLEAR FLOOR SPACE IN ACCORDANCE WITH CBC 119-611.2.
 - D. OPERABLE PARTS, INCLUDING THE DOORS, LINT SCREENS, AND DEFLECTOR AND LEACH COMPARTMENTS, SHALL COMPLY WITH CBC 119-509 PER CBC 119-611.3.
 - E. TOP LOADING MACHINES SHALL HAVE THE DOOR TO THE LAUNDRY COMPARTMENT LOCATED 36" MINIMUM ABOVE THE FINISH FLOOR PER CBC 119-611.4.
 - F. FRONT LOADING MACHINES SHALL HAVE THE BOTTOM OF THE OPENING TO THE LAUNDRY COMPARTMENT LOCATED 15" TO 36" ABOVE THE FINISH FLOOR PER CBC 119-611.4.

- KEYED FURNISHING NOTES:**
- 1 - CASH WRP, REF: 04/MW01
 - 2 - CUTTING STATION, REF: 20/AM01
 - 3 - SHARPO STATION, REF: 24/AM01 AND PLUMB DRAWINGS
 - 4 - DISPENSARY, REF: 19/MW01
 - 5 - PRODUCT DISPLAY, REF: 02/MW01
 - 6 - CHAIR SEATING, B.O.
 - 7 - LOGO PRINTED ON FLOOR
 - 8 - MINI REFRIGERATOR, MOUNTED UNDER CABINET
 - 9 - SINK, MOUNTED UNDER CABINET
 - 10 - 50" TV MOUNTED ON WALL BRACKET
 - 11 - AV SYSTEM, MOUNTED UNDER CABINET
 - 12 - MENU BOARD SYSTEM
 - 13 - COUNTERTOP TUNEL NUMBER B.O.



04 FURNISHING & WALL ELEMENTS PLAN
SCALE: 1/4"=1'-0"

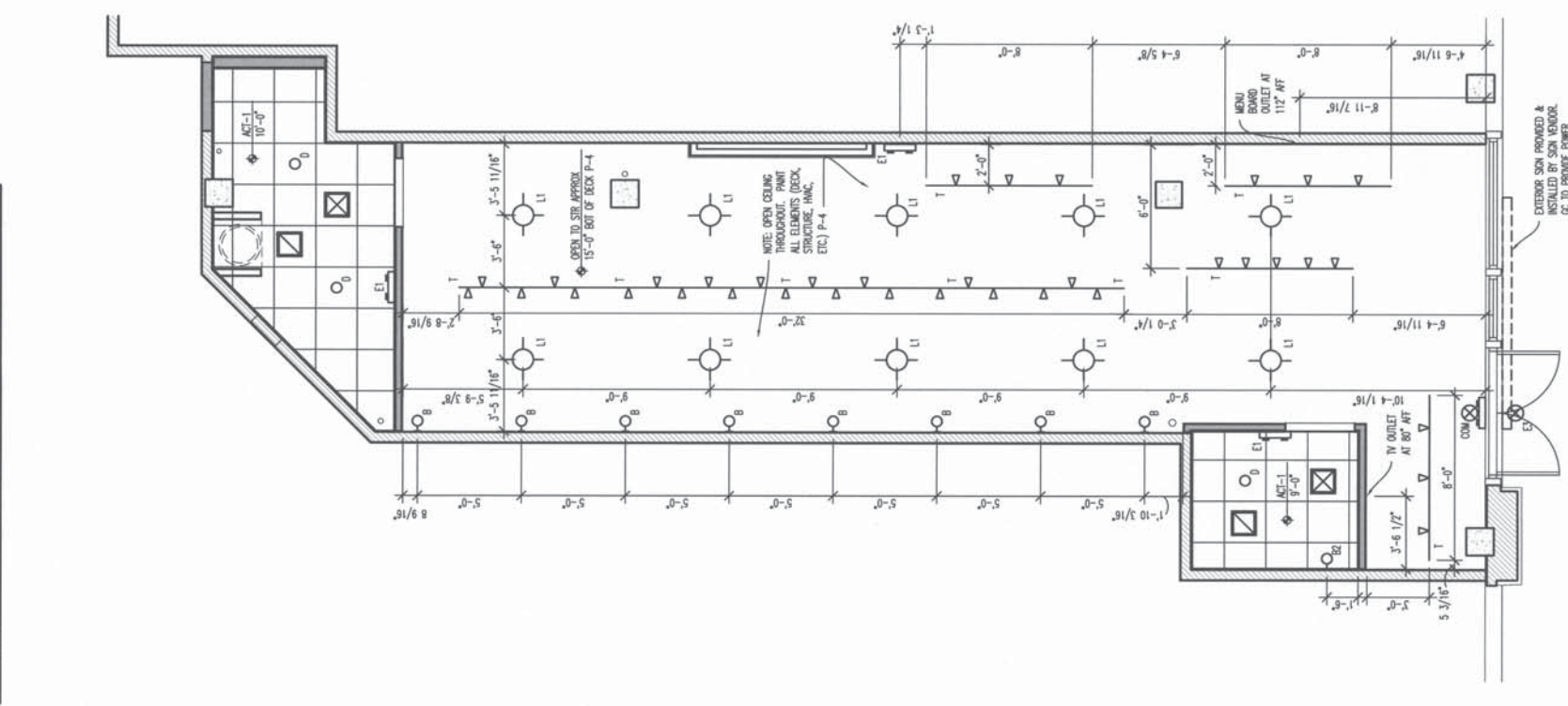


FINISH	DESCRIPTION
B	BASES
B-1	WOOD BASE: MANUFACTURER: G.C. SARGENT PRODUCT: 1/4" S&S WHITE OAK BASE COLOR: SWH 51-1
B-2	WALL BASE: MANUFACTURER: BOPE PRODUCT: 4" OAK BASE - 700 SERIES COLOR: CHOCOLAD #123
C-1	CEILING / GYP / WALL COVERINGS EXPOSED COILING TO STRUCTURE AND DECK PAINT ALL EXPOSED ELEMENTS INCLUDING HMC OUTWORK P-4
ACT-1	2" x 2" ACOUSTIC SUSPENDED CEILING GRID: STANDARD 15/16" STEEL - WHITE FINISH TILES: ANTISTATIC ULTRA HEALTH ZONE SOURCE LAY IN (OR APPROVED EQUAL) - WHITE FINISH, CENTER GRID IN SPACE - OR AS SHOWN.
FRP-1	FRP - WHITE - GC PROVIDED INSTALL OVER 5/8" GYP OR TILE BACKER BO AT WET LOCATIONS
WT-1	PRODUCT: 4"x4" SUNSHY WALL TILE MFR: VALLEJO & BOCH, SUNSHY-2115, COLOR: WHITE, SMOOTH 1050 INSTALLATION: RANKING BAND GRADE: CUSTOM BANDING PRODUCTS, COLOR: B&W DAVE GRAY, 1/4" JOINT. GROUT: NOTE: USE GROUT BOOST STAIN RESISTANT GROUT ADHESIVE (MIXES WITH CEMENT BASED GROUT) IN PLACE OF WATER.
F	FLOOR FINISHES / TILE EXPOSED CONCRETE, GRIND AND POLISH PER BELOW: DRAG/DOT TWO PASSES OVER WITH 40 METALS DRAG/DOT TWO PASSES OVER WITH 150 METALS DRAG/DOT TWO PASSES OVER WITH 300 METALS CONCRETE POLISH WITH 3000 RPM APPLY SCOTFELD FORMULA ONE LEISFEEER CONCRETE POLISH WITH 400 RPM PHO CONCRETE POLISH WITH 800 RPM PHO CONCRETE POLISH WITH 1,200 RPM PHO CONCRETE POLISH WITH 1,500 RPM PHO APPLY POLISH WITH 1,500 RPM PHO HIGH SPEED BURSH WITH 3,000 RPM DRUMS UNRECOMMENDED PHO
P	PAINT & STAIN MANUFACTURER: SHEWEN-WILLIAMS COLOR/FINISH: SW-7624 SLATE TILE - SKIN NOTE: ALL WALLS TO BE PAINTED P-1 UNLESS NOTED OTHERWISE
P-1	MANUFACTURER: SHEWEN-WILLIAMS COLOR/FINISH: HSBM-4025 OFFWHITE WHITE - SKIN
P-2	MANUFACTURER: SHEWEN-WILLIAMS COLOR/FINISH: SW-6884 OCEANIC ORANGE - SKIN
P-3	MANUFACTURER: SHEWEN-WILLIAMS COLOR/FINISH: SW-7624 SLATE TILE - DRY-FALL FLAT
P-4	MANUFACTURER: MINK COLOR/FINISH: SOE CLASSIC GREY 271, SOE DARK WALNUT 2716, MINK WOOD FINISH STAIN

NO.	REVISION	ISSUE
1		DO NOT SCALE DRAWINGS CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS-NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION
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RCP NOTES

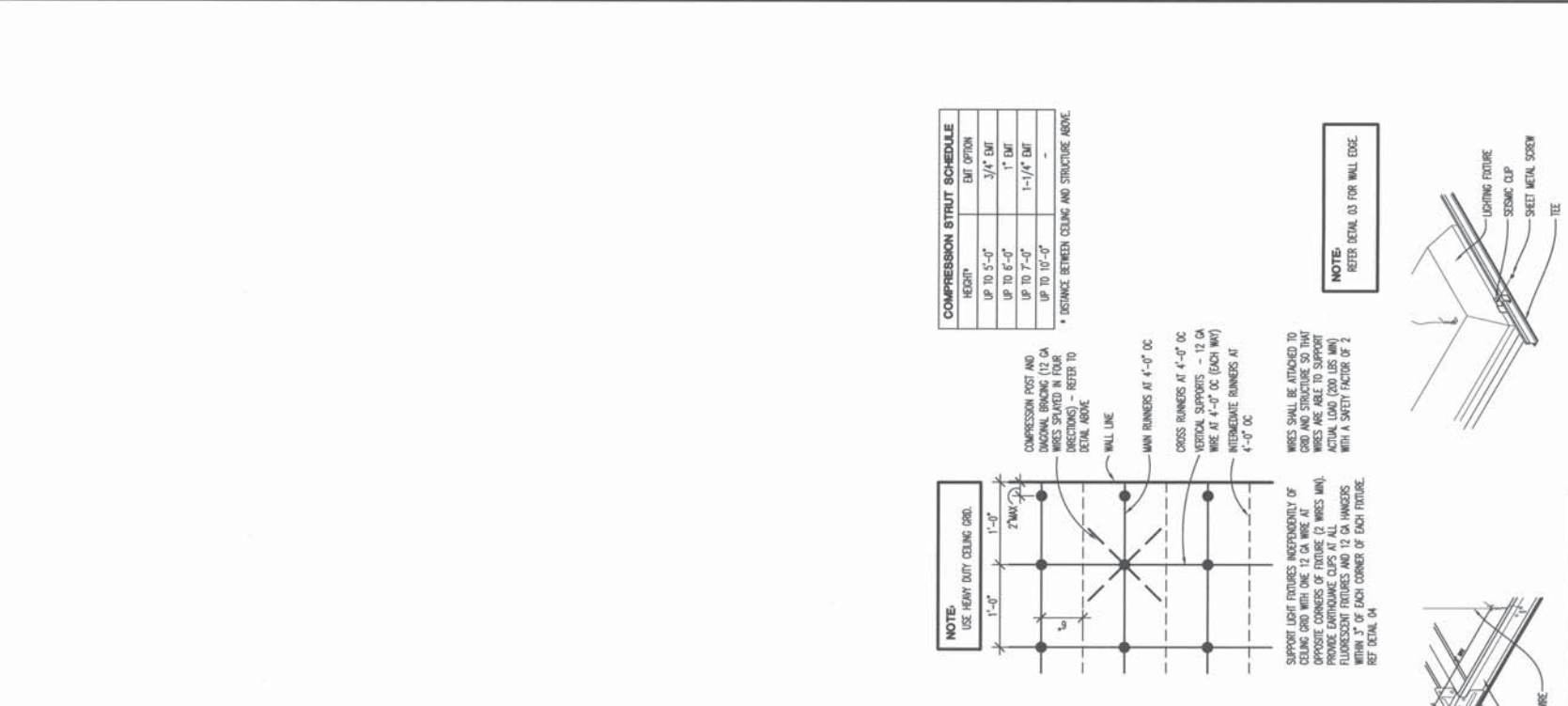
1. ALL ACOUSTIC TILE JOINT LINES TO BE ALIGNED & COORDINATED FOR FINISH PLACEMENT, MAKING LESS THAN 1/2" OF A TILE BEYOND THE PERIMETER WHEREVER POSSIBLE.
2. ANY LIGHT NOT DIMENSIONALLY LOCATED IS TO BE CENTERED IN THE CEILING TILE, CEILING AREA, OR ROOM AS APPLICABLE. ALL "CM" TYPE FIGURES TO BE MOUNTED IN THE CENTER OF THE CEILING TILES UNLESS NOTED OTHERWISE.
3. SPRINKLER MODIFICATIONS/INSTALLATION DRAWINGS ARE BY OTHERS, UNDER SEPARATE PERMIT.
4. REFER TO DETAIL AND NOTES ON DWG(A121) FOR TYPICAL SUSPENDED CEILING ATTACHMENTS AND SUPPORT.
5. REFER TO DWG(A121) FOR TYPICAL SUSPENDED CEILING ATTACHMENTS AND SUPPORT.
6. GC TO PROVIDE STRUCTURAL BLOCKING FOR ALL EXTERIOR SOUNGE. COORDINATE EXACT LOCATIONS WITH SOUNGE VENDOR.



01 REFLECTED CEILING PLAN
SCALE: 1/4"=1'-0"

RCP NOTES

1. ALL WIRES (VERTICAL AND SPACED) SHALL BE #12 GA. ONLY STEEL.
2. EACH END OF ALL WIRES SHALL HAVE 3 TIGHT TURNS WITHIN 1 1/2" OF ATTACHMENT.
3. VERTICAL HANGER WIRES SHALL OCCUR AT 4' ON CENTER.
4. ALL WIRE RUNNERS WITHIN 8' MAX. OF ALL WALLS AND C.G. DISCONTINUITIES.
5. VERTICAL HANGER WIRES SHALL NOT BE MORE THAN 1" IN 8" OUT OF PLUMB.
6. SPRAY WIRES (I AT 90 DEGREES FROM EACH OTHER) SHALL BE PROVIDED AT 12" ON CENTER.
7. ALL WIRE RUNNERS AND HANGERS SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES.
8. ALL C.G. LIGHT FIXTURES AND HMC AIR REGISTERS SHALL BE SUPPORTED BY A MIN. OF (2) HANGERS AT OPPOSITE CORNERS. C.G. SYSTEM SHALL NOT SUPPORT OTHER TIE/D.



02 SUSPENDED CEILING AT WALL
SCALE: 1/4"=1'-0"

03 LIGHT FIXTURE IN SUSPENDED CEILING
SCALE: 1/4"=1'-0"

04 CEILING SUPPORT
SCALE: 1/4"=1'-0"

DO NOT SCALE DRAWINGS
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NO. | REVISION

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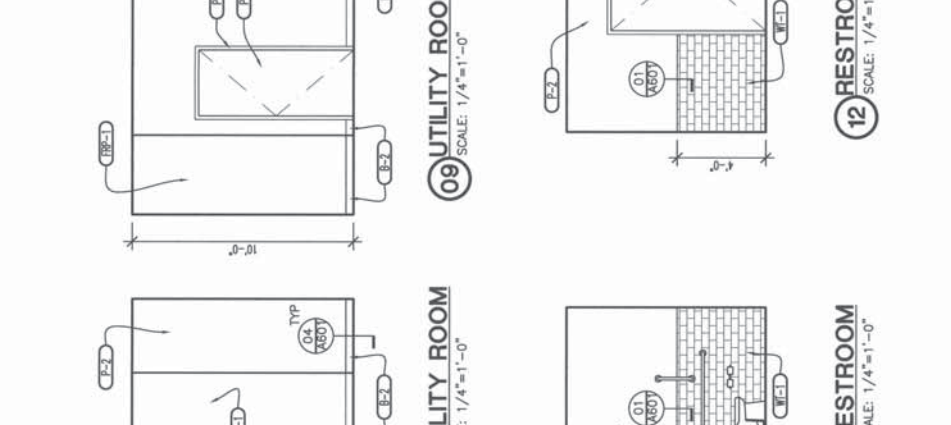
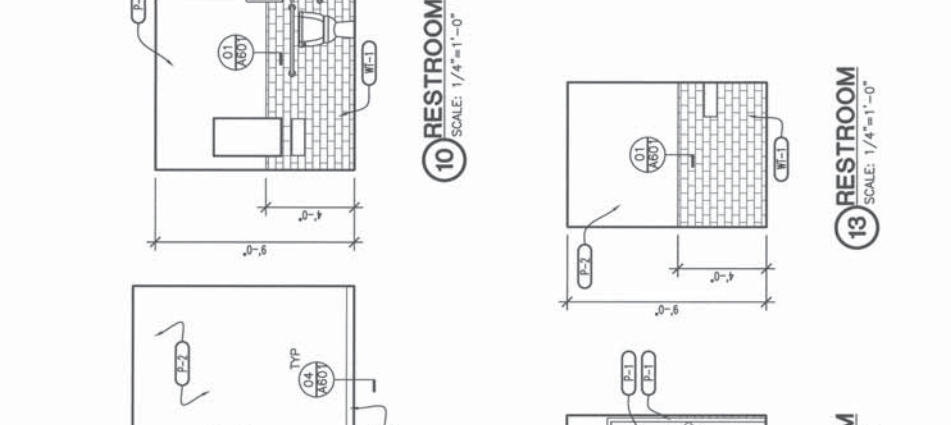
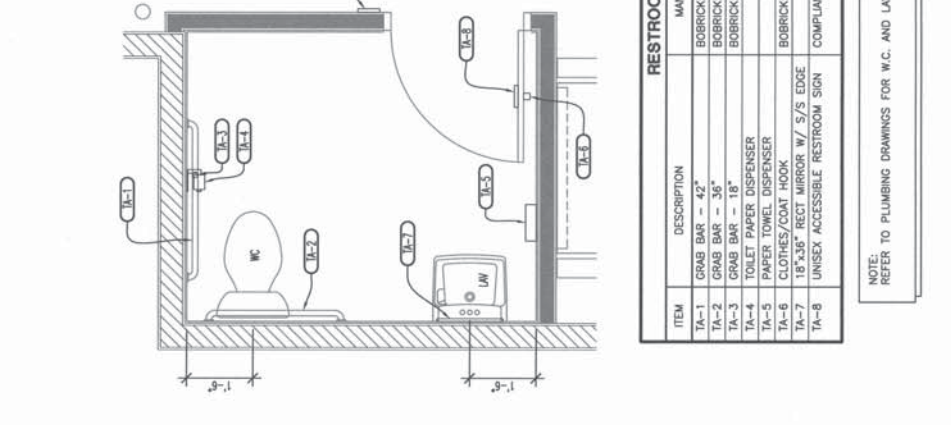
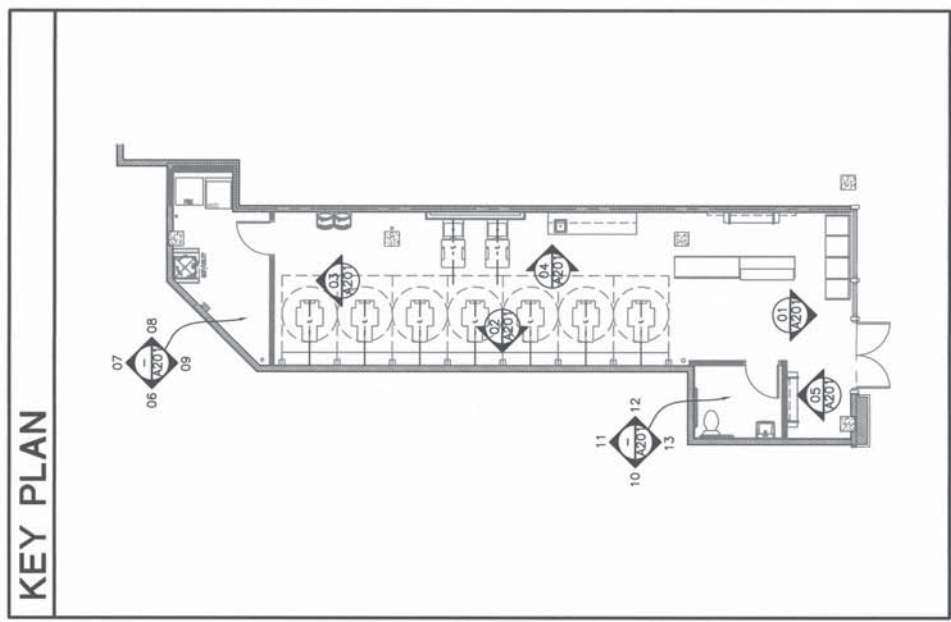
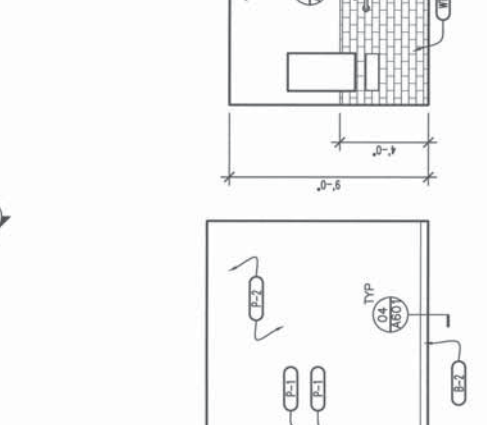
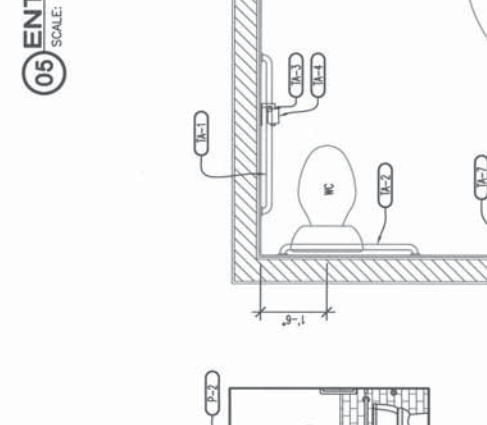
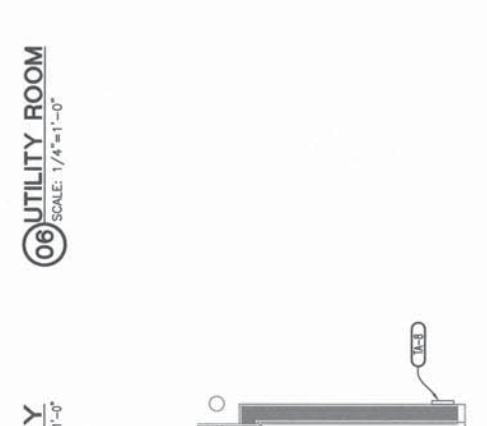
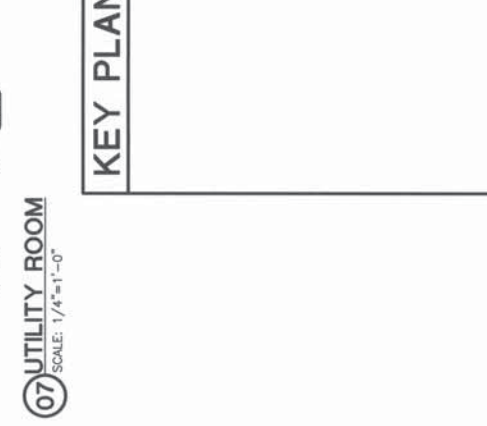
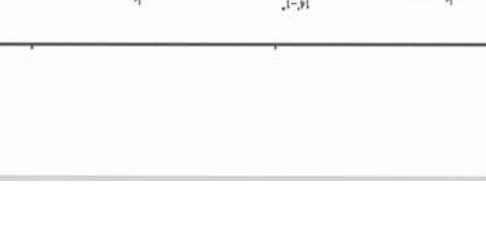
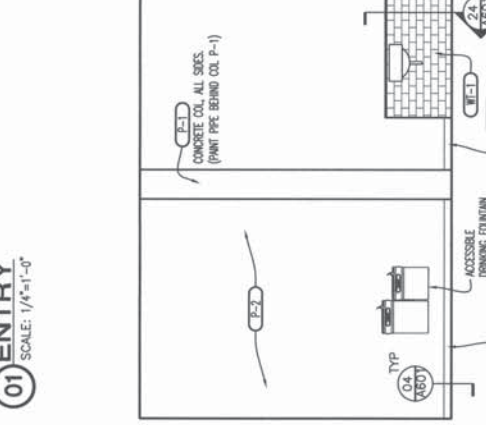
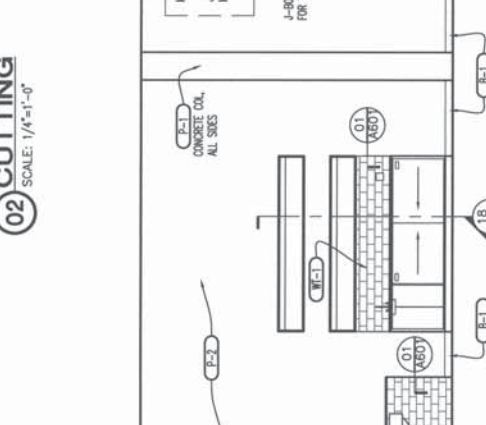
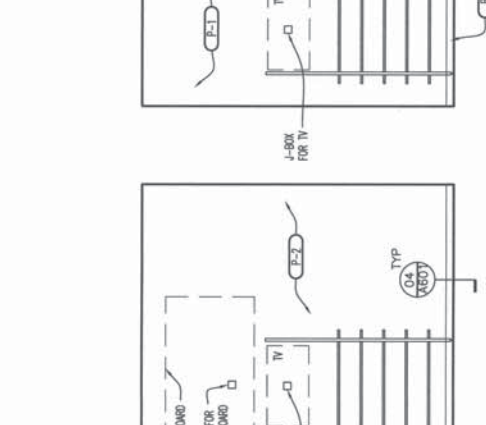
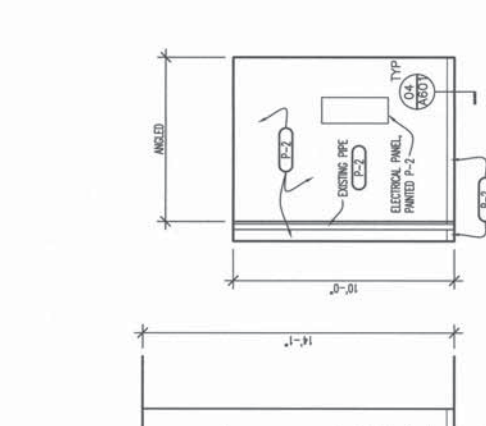
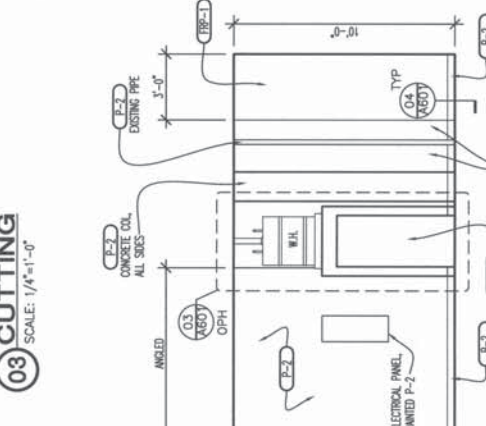
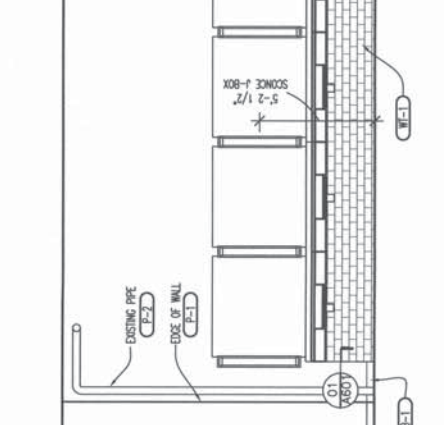
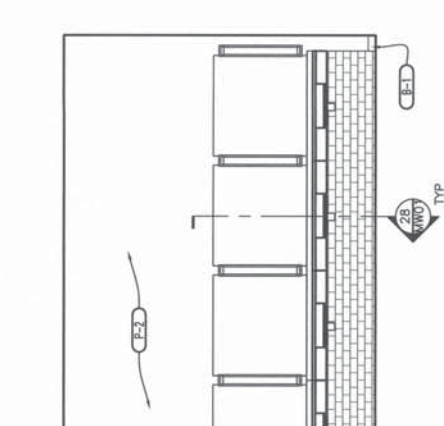
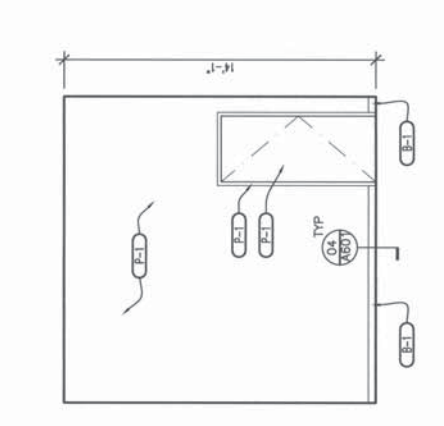
ISSUE FOR PERMIT 10/30/17

PROJECT NUMBER
C170339

SHEET NUMBER
A201

DATE OF THIS PRINTING - 10/26/17

FINISH	DESCRIPTION
B	BASIS
B-1	WOOD BASE MANUFACTURER: CC SOURCE PRODUCT: 1/4" S&S WHITE OAK BASE COLOR: STAIN S-1
B-2	WALL BASES, ROYCE PRODUCT: 1" COE BASE - 700 SERIES COLOR: CHARCOAL J123
C	CEILING / GYP / WALL COVERING
C-1	EXPOSED CEILING TO STRUCTURE AND DECK PAINT ALL EXPOSED ELEMENTS INCLUDING HANG DOWNWORK P-4
ACT-1	1" x 2" ACUSTIC SUSPENDED CEILING GRID: STANDARD 15/16" STEEL WHITE FINISH TELES: HANGING ULTRAM HEALTH ZONE SQUARE LAY IN (OR APPROVED EQUAL) - WHITE FINISH CENTER GRID IN SPACE - OR AS SHOWN
FRP-1	FRP - WHITE - GC PROVIDED INSTALL OVER 5/8" OR 1" TILE BACKER BD AT WET LOCATIONS
WT-1	PRODUCT: 1/4" SHINY WALL TILE MFR: KALESON & BOCK, SERRA-2115, COLOR: WHITE SMOOTH 1050 INSTALLATION: RANKING BOND GRADE: CUSTOM BUILDING PRODUCTS, COLOR: B370 DOVE GRAY, 1/4" JOINT. GROUT NOTE: USE GROUT BOOST STAIN RESISTANT GROUT ADHESIVE (MIXES WITH CEMENT BASED GROUT) IN PLACE OF WATER.
F	FLOOR FINISHES / TILE
F-1	EXPOSED CONCRETE: GRIND AND POLISH PER BELOW: GRIND/OUT TWO PASSES OVER WITH 40 METALS GRIND/OUT TWO PASSES OVER WITH 150 METALS CONCRETE POLISH WITH 100 RESINS APPLY SCORFED FORMULA ONE COARD # SOLER CONCRETE POLISH WITH 400 KENTH PAD CONCRETE POLISH WITH 1,500 KENTH PAD APPLY SCORFED FORMULA ONE COARD # SOLER HIGH SPEED BURSH WITH 3,000 GRIT DAMMO IMPREGNATED PAD
P	PAINT & STAIN
P-1	MANUFACTURER: SHERWIN-WILLIAMS COLOR/FINISH: SW-7624 SLATE TILE - SATIN NOTE: ALL WALLS TO BE PAINTED P-1 UNLESS NOTED OTHERWISE
P-2	MANUFACTURER: SHERWIN-WILLIAMS COLOR/FINISH: HSBM-4026 OCEANO WHITE - SATIN
P-3	MANUFACTURER: SHERWIN-WILLIAMS COLOR/FINISH: SW-6884 OCEANIC ORANGE - SATIN
P-4	MANUFACTURER: SHERWIN-WILLIAMS COLOR/FINISH: SW-7624 SLATE TILE - DRY-FALL FLAT
SI-1	MANUFACTURER: MINWAX COLOR/FINISH: SOE CLASSIC GREY 271, SOE DARK WALNUT 2716, MINWAX WOOD FINISH SUN



ITEM	DESCRIPTION	MANUFACTURER	MOUNTING HEIGHT	REMARKS
TA-1	GRAB BAR - 42"	BORRICK B-6808-42	36" A.F.F. TO TOP OF GRIPPING SURFACE	STAINLESS STEEL
TA-2	GRAB BAR - 36"	BORRICK B-6808-36	36" A.F.F. TO TOP OF GRIPPING SURFACE	STAINLESS STEEL
TA-3	GRAB BAR - 18"	BORRICK B-6808-18	MOUNT VERTICAL W/ BOTTOM AT 39" A.F.F.	STAINLESS STEEL
TA-4	TOILET PAPER DISPENSER		15" MIN. A.F.F.; 48" MAX. A.F.F.	TENANT PROVIDED, GC INSTALLED
TA-5	PAPER TOWEL DISPENSER		48" MAX. TO DISPENSING SURFACE	TENANT PROVIDED, GC INSTALLED
TA-6	CLOTHES/COAT HOOK	BORRICK B-78727	48" A.F.F. MAX. TO TOP OF HOOK	MOUNT TO BACK OF DOOR TYP
TA-7	18"x36" RECT MIRROR W/ S/S EDGE		40" A.F.F. TO BOTTOM OF MIRROR SURFACE	RESTROOMS CENTER OVER LAVATORY
TA-8	UNISEX ACCESSIBLE RESTROOM SIGN		60" A.F.F. TO CENTERLINE, 8" MAX. FROM DOOR LATCH	BLACK PLASTIC, REF TYPICAL ACCESSIBLE SIGNAGE, 0002

NOTE:
 REFER TO PLUMBING DRAWINGS FOR W.C. AND LAVATORY SPECIFICATIONS

DO NOT SCALE DRAWINGS
 CONTRACTOR TO VERIFY
 ALL EXISTING CONDITIONS AND
 DIMENSIONS—NOTIFY ARCHITECT
 OF ANY DISCREPANCIES PRIOR
 TO BEGINNING CONSTRUCTION

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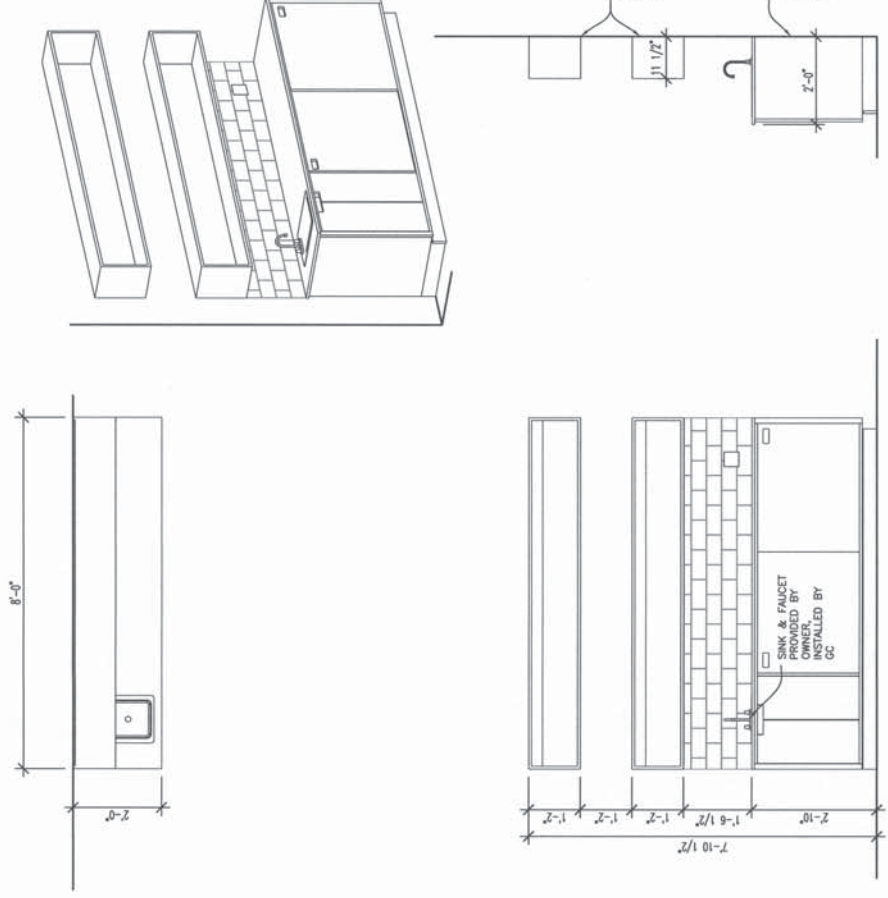
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PROJECT NUMBER
C170339

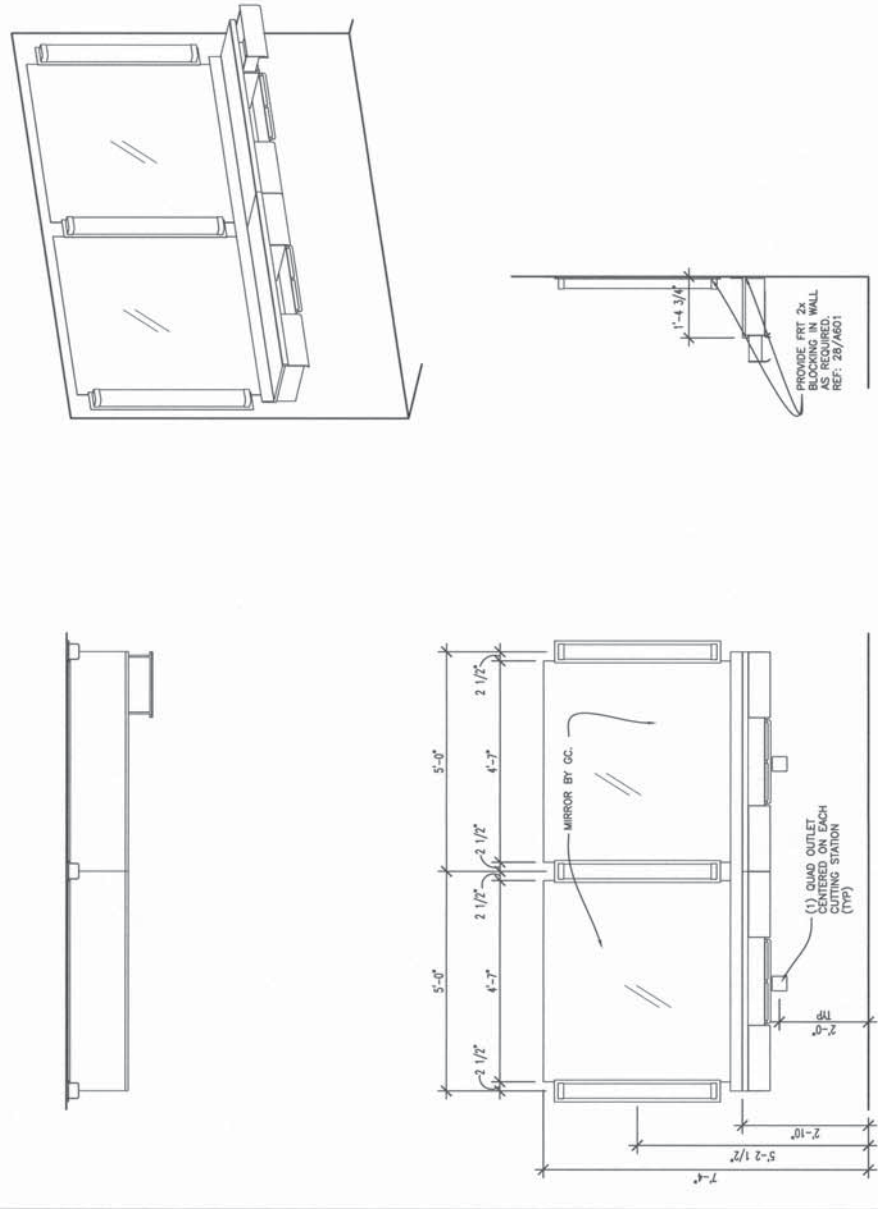
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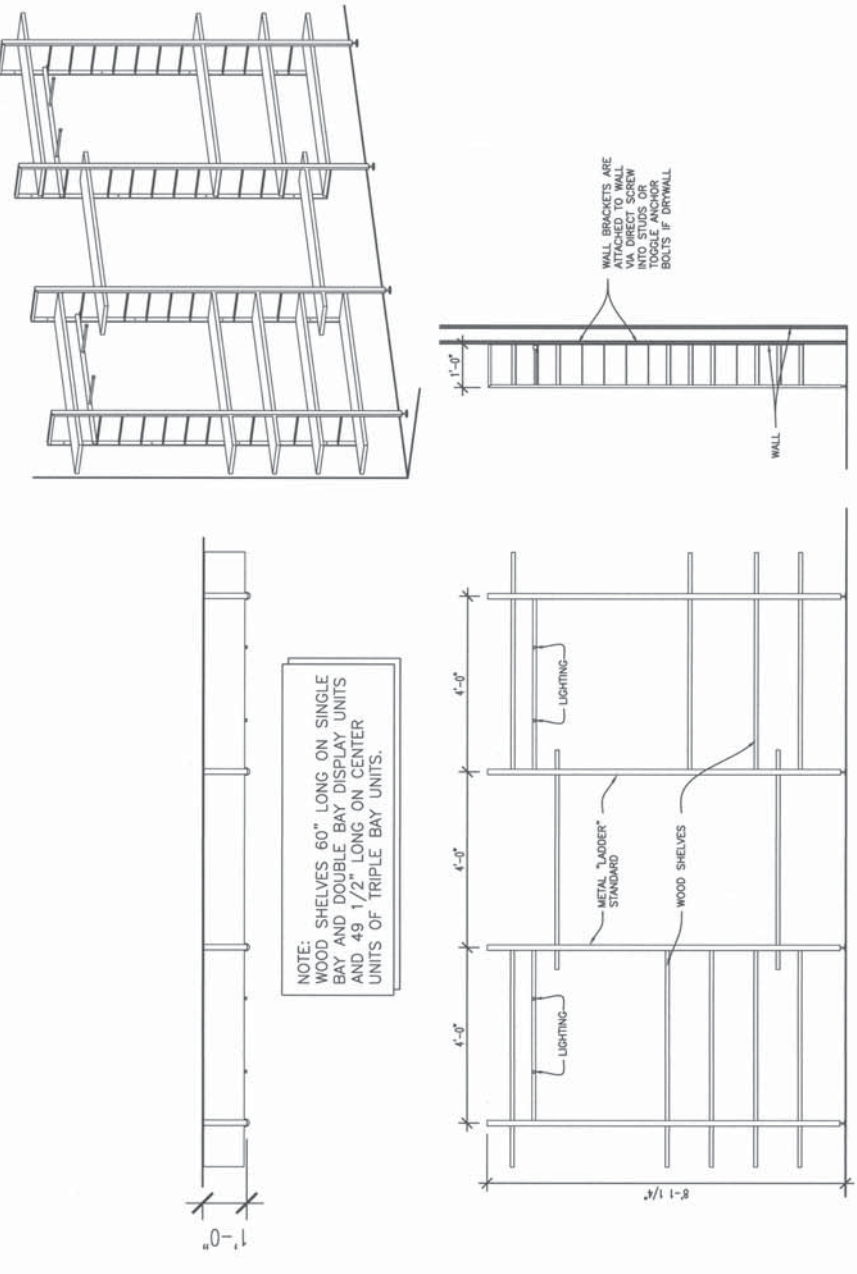
DATE OF THIS PRINTING - 10/26/17



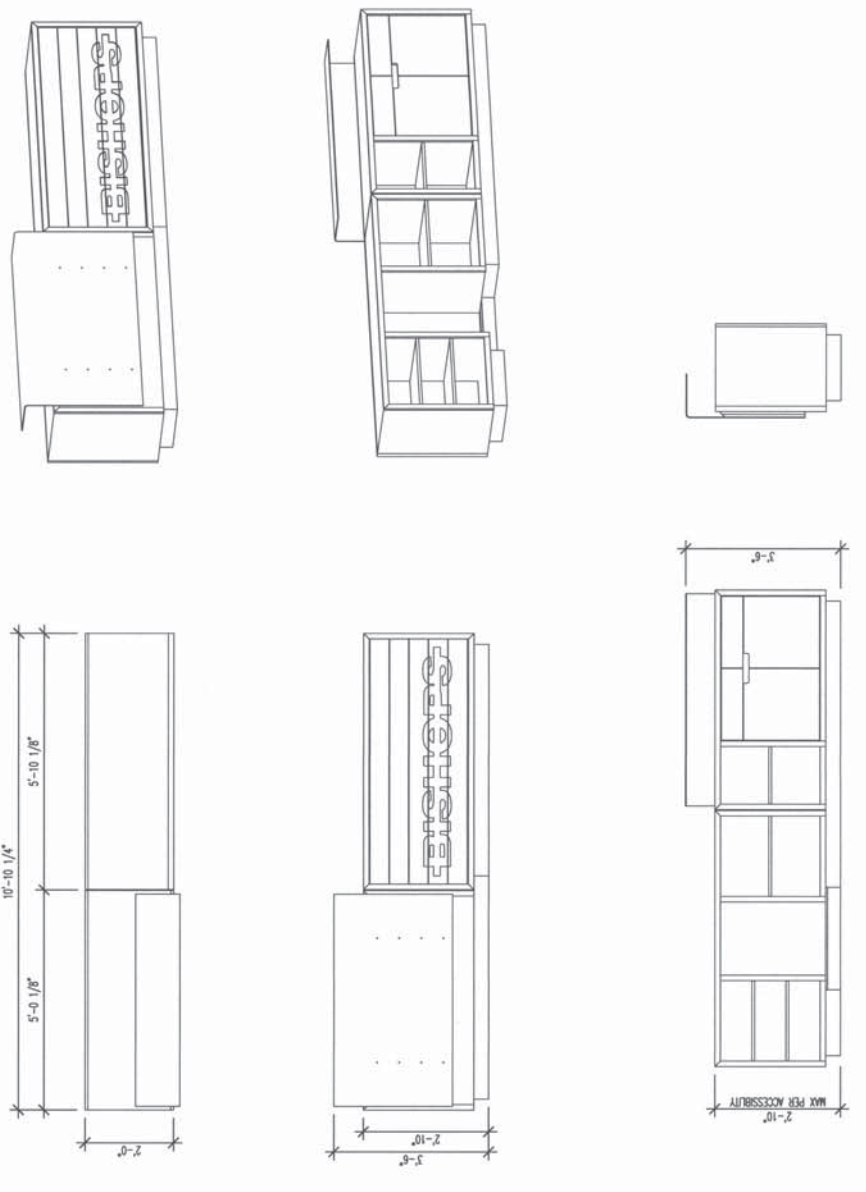
18 DISPENSARY
 SCALE: 1/2"=1'-0"



20 CUTTING STATION - 2 UNITS
 SCALE: 1/2"=1'-0"



02 DISPLAY SHELVES
 SCALE: 1/2"=1'-0"



04 CASH WRAP - S SHAPE
 SCALE: 1/2"=1'-0"

BISHOPS

BISHOPS - TENANT FINISHOUT
 MAIN STREET CUPERTINO
 19540 VALLEJO PARKWAY
 SUITE 100
 CUPERTINO, CA 95014

DO NOT SCALE DRAWINGS
 CONTRACTOR TO VERIFY
 ALL EXISTING CONDITIONS AND
 DIMENSIONS-NOTIFY ARCHITECT
 OF ANY DISCREPANCIES PRIOR
 TO BEGINNING CONSTRUCTION

Peter A. Leptuch, P.E.
 CA-M35700/CA-E19072
 1236 Golden Gate
 Aubrey, TX 76227
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ISSUE FOR PERMIT 10/30/17

PROJECT NUMBER
C170339

SHEET NUMBER
MEP1.0

SPECIFICATIONS
 DATE OF THIS PRINTING - 10/28/17

UPON A CALL FOR HEATING, THE FIRST STAGE OF HEATING WILL BE ENABLED AND WILL OPERATE UNTIL THE SPACE TEMPERATURE IS SATISFIED. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE THEN THE SECOND STAGE OF HEATING WILL BE ENABLED (IF APPLICABLE).

VENTILATION/ECONOMIZER CONTROL:
 WHERE REQUIRED BY AHJ, OR WHERE CALLED FOR ELSEWHERE IN THE DRAWING SET, THE OUTSIDE AIR DAMPER SHALL BE OPEN DURING THE OCCUPIED HEATING AND COOLING MODES FOR CODE REQUIRED. THE OUTSIDE AIR DAMPER SHALL BE CLOSED DURING THE UNOCCUPIED MODE. IN THE OCCUPIED MODE, THE CO2 SENSOR SHALL MONITOR THE OUTSIDE AIR DAMPER WHEN THE UNIT OPERATING IN THE MINIMUM OUTSIDE AIR MODE.

THE ECONOMIZER MODE IS ENTIRELY CONTROLLED AND WILL BE OPERATIONAL WHENEVER COOLING IS REQUIRED AND WHENEVER THE OUTSIDE AIR DAMPER IS OPEN MORE THAN 60%.

FIRE PROTECTION SYSTEM

1. SPRINKLER SYSTEM TO BE NFPA 13 AND SPRINKLER MONITORED WITH OCCUPANCY NOTIFICATION COMPLYING WITH ILC MOVEMENTS - 803.4.
2. SPRINKLER AND FIRE ALARM WORK SHALL BE DONE UNDER A SEPARATE PERMIT (DESIGN/BUILD) BY LICENSED FIRE SPRINKLER AND FIRE ALARM CONTRACTORS.

18270 FIRE ALARM SYSTEM

- 1.1 FINISH AND INSTALL FIRE ALARM POWER BOOSTER TO EXISTING BUILDING FIRE ALARM PANEL AS INDICATED ON DRAWINGS. THE FIRE ALARM SYSTEM NEW DEVICES SHALL BE FORMALLY PLANNED BY A LICENSED FIRE ALARM CONTRACTOR WHO SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF THE SYSTEM. THE SYSTEM SHALL COMPLY WITH THE NATIONAL FIRE ALARM AND SIGNAL ASSOCIATION (NFPA) STANDARDS, THE CALIFORNIA FIRE ALARM AND SIGNAL ASSOCIATION (CFASA) STANDARDS, AND THE LOCAL FIRE MARSHAL. DESIGN SHALL COMPLY WITH NFPA 72. PROVIDE VOICE EVACUATION MODULES WITH ALL NECESSARY APPURTENANCES.
- 1.2 REMOTE ANNUNCIATOR
 PROVIDE AN ALPHANUMERIC ANNUNCIATOR WITH INTEGRAL ALPHANUMERIC DISPLAY, SYSTEM CONTROL/TEST SWITCHES, KEY OPERATED EMERGENCY STOP AND BACK BOX. COORDINATE LOCATION WITH AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION.
- 1.3 MANUAL STATIONS
 PROVIDE ANULOG ADDRESSABLE MANUAL STATIONS WITH PROTECTIVE COVERS (WITH INTEGRAL HOON AND BY BATTERY) AS SHOWN ON THE PLANS.
- 1.4 SYSTEM SMOKE DETECTORS
 PROVIDE ANULOG ADDRESSABLE PHOTOELECTRIC SMOKE DETECTORS WITH BAKES AS SHOWN.
- 1.5 DUCT MOUNTED SMOKE DETECTORS
 PROVIDE PHOTOELECTRIC SMOKE DETECTORS WITH SHAPING TUBES AND ADDRESSABLE CONTROL RELAYS AS SHOWN ON THE PLANS AND AS REQUIRED TO COMPLY WITH THE MECHANICAL CODE. WHERE AH-DUCT SMOKE DETECTORS ARE INSTALLED IN REZEARED LOCATIONS MAKE THEM 10 FEET ABOVE THE FINISHED FLOOR OR IN ARRANGEMENT WHERE THE DETECTORS ALARM OR SUPERVISORY INDICATOR IS NOT VISIBLE TO RESPONDING PERSONNEL, THE DETECTOR SHALL BE PROVIDED WITH REMOTE ALARM OR SUPERVISORY INDICATOR IN A LOCATION ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION. ADDITIONALLY, LABEL REMOTE ALARMS TO INDICATE BOTH THEIR FUNCTION AND THE AIR HANDLING UNIT(S) ASSOCIATED WITH EACH DETECTOR.
- 1.6 ADDRESSABLE MONITOR MODULES
 PROVIDE ADDRESSABLE MONITOR MODULES AS SHOWN ON THE PLANS TO MONITOR SPRINKLER FLOW SWITCHES, SPRINKLER VALVES, SUPERVISORY SWITCHES AND SPRINKLER FLOW PUMP (AS REQUIRED)
- 1.7 ADDRESSABLE CONTROL MODULES
 PROVIDE ADDRESSABLE CONTROL MODULES AS REQUIRED FOR INTERFACE WITH THE ELEVATOR CONTROLS, ELEVATOR POWER CONTROLS AND HVAC CONTROLS (AS REQUIRED)
- 1.8 ALARM SIGNALS
 PROVIDE 15/75-WATT SPONGE/STROBE ALARM SIGNALS AS SHOWN ON THE PLANS FOR ALL PUBLIC AREAS. PROVIDE 15/75-WATT STROBE VISUAL ALARM SIGNALS FOR ALL STROBE ONLY LOCATIONS AS SHOWN ON THE PLANS, 110 CABELA.
- 1.9 WIRING
 WIRING SHALL BE CONCEALED IN CONDUIT. PROVIDE WIRING AND CONDUIT AS DIRECTED BY THE MANUFACTURER'S AUTHORIZED DISTRIBUTOR.
- 1.10 APPLICABLE CODES AND STANDARDS
 ALL EQUIPMENT SHALL BE UL LISTED FOR ITS INTENDED USE.
- 1.11 ALL RACKS AND WIRING SHALL BE INSTALLED IN COMPLIANCE WITH NFPA STANDARD 70 (NATIONAL ELECTRIC CODE)

18270 FIRE ALARM SYSTEM

- 1.11 SYSTEM OPERATION
 ACTIVATION OF ANY FIRE ALARM INITIATING DEVICE SHALL IMMEDIATELY CAUSE THE FOLLOWING ACTIONS TO BE INITIATED:
 a. IDENTIFY THE TYPE OF ALARM, SPECIFIC DEVICE AND LOCATION ON THE BACK LIT LCD DISPLAY AT THE BUILDING FIRE ALARM CONTROL PANEL AND AT THE REMOTE ANNUNCIATORS
 b. CAUSE THE SYSTEM ALARM LED TO FLASH AT THE FIRE ALARM CONTROL PANEL
 c. CAUSE ALL SYSTEM HORNS TO SOUND
 d. CAUSE ALL VISUAL ALARMS SIGNALS TO FLASH
 e. ACTIVATE THE DIALING CONTROL TO REPORT THE TYPE OF ALARM AND LOCATION TO THE REMOTE ANNUNCIATOR
 f. ACTIVATE SIGNALS TO THE BUILDING DOOR LOCK CONTROLS TO DEACTIVATE LOCKS
 g. ACTIVATE SIGNALS TO THE HVAC CONTROLS TO INITIATE SHUT DOWN OR REDUCING OF AIR HANDLING SYSTEMS
- 1.12 ACTIVATION OF ANY SPRINKLER VALVE SUPERVISORY SWITCH SHALL AUTOMATICALLY CAUSE THE SYSTEM SUPERVISORY SIGNALS TO SOUND AND AN ALARMS INDICATOR TO SOUND AT THE CONTROL PANEL AND AT THE REMOTE ANNUNCIATORS
 a. CAUSE THE SYSTEM SUPERVISORY SIGNALS TO SOUND
 b. IDENTIFY THE SUPERVISORY CONDITION, SPECIFIC DEVICE AND LOCATION ON THE BACK LIT LCD DISPLAY AT THE SYSTEM CONTROL PANEL AND THE REMOTE ANNUNCIATOR.

ADDITIONAL FIRE PROTECTION NOTES:

CUPERTINO, CA NOTE
 THIS BUILDING IS SPRINKLERED AND HAS A BUILDING FIRE ALARM SYSTEM. FIRE PROTECTION DRAWINGS TO MODIFY EXISTING SYSTEMS WILL BE SUBMITTED SEPARATELY FOR SEPARATE PERMIT BY LICENSED FIRE SPRINKLER/FIRE ALARM CONTRACTOR.

DRAWING INFORMATION IS DISTRIBUTED THROUGHOUT THE DOCUMENT SET. CONTRACTORS SHALL THOROUGHLY REVIEW ALL SHEETS AND SHALL NOTIFY CONSTRUCTION MANAGER FOR CLARIFICATION OF DISCREPANCIES ARE FOUND.

REQUIRED CONTRACTORS:
 ROOFER - STURMANN ROOFING (408) 288-7628
 MECHANICAL CONTRACTOR - MECHANICAL CONTRACTOR (408) 288-1182
 FIRE ALARM BY ALARM (408) 288-1182
 ALL CONTRACTORS SHALL BE PRE-APPROVED BY LANDLORD PRIOR TO AWARDED CONTRACTS. ANY AWARDED CONTRACTS SHALL BE CONSIDERED NULL AND VOID, UNLESS THE LANDLORD HAS PROVIDED WRITTEN APPROVAL.

RELATED TO HIS WORK.

ALL MATERIALS SHALL BE NEW AND SHALL FIT THE SPACE AVAILABLE. VERIFY ALL DIMENSIONS AT THE SITE.

ALL VALVES, DAMPERS, ETC., SHALL BE SO LOCKED AND INSTALLED TO PERMIT ACCESS FOR SERVICE WITHOUT DAMAGE TO BUILDING OR FINISHED MATERIALS.

ALL EQUIPMENT AND WORK SHALL BE GUARANTEED FOR ONE YEAR AFTER FINAL ACCEPTANCE BY LANDLORD AND TENANT.

LABEL ALL RISERS WITH RISER AND TENANT'S NAME.

185-02 MATERIALS

1. BASE BID SHALL BE FOR DOUBLE-WALL INSULATED ROUND SPINAL SUPPLY DUCTWORK.
2. BASE BID SHALL BE FOR UNINSULATED SINGLE-WALL METAL DUCT WORK FOR EXHAUST AND RETURN DUCTWORK.
3. FABRICATE AND INSTALL RECTANGULAR AND ROUND DUCTWORK IN ACCORDANCE WITH SMOGA "HMC DUCT CONSTRUCTION STANDARDS" OF THE LATEST EDITION.
4. NOT USED.
5. INSTALL ROUND AND RECTANGULAR WITH SUPPORT SYSTEMS INDICATED IN SMOGA STANDARDS. PROVIDE SWAY AND SEISMIC BRACING AS REQUIRED BY STATE AND LOCAL CODES OR BY LANDLORD.
6. ALL JOINTS AND SEAMS SHALL BE SEALED. TOTAL LEAKAGE SHALL NOT EXCEED 0.6 FOR THE SYSTEM.
7. ALL DUCTWORK SHALL BE INSTALLED WITH INSIDE CLEAR DIMENSIONS AS NOTED ON DRAWINGS. WHERE DUCTWORK SIZE IS LARGER THAN CONNECTED DEVICE SMOOTH DUCT TRANSITIONS ARE TO TAKE PLACE JUST PRIOR TO DEVICE CONNECTIONS.
8. FLEXIBLE AIR DUCT AT AIR SERVICES SHALL BE 1" INSULATED CLASS 1 AND RATED FOR THE OPERATING PRESSURE OF THE SYSTEM. DUCT CONSTRUCTION MATERIAL MUST ADHERE TO LOCAL CODES AND LANDLORD'S REQUIREMENTS, AND SHALL BE FULLY CONVEGLED FROM VIEW WITH RUNS NO MORE THAN 5'-0".
9. PROVIDE MANUAL LOCKING GASKET VOLUME CONTROL DAMPERS WITH HANDLE OPERATORS IN EACH BRANCH DUCT AND AS SHOWN ON PLANS TO FACILITATE AIR BALANCING. ALL RECTANGULAR DAMPERS IN OUTSIDE AIR, RELIEF AIR, EXHAUST OR RETURN AIR DUCTS ARE TO BE OF OPPOSED BLADE TYPE.
10. PROVIDE PRIMARY FIRE DAMPERS WHERE INDICATED OR REQUIRED BY CODES. FIRE DAMPERS SHALL BE UL LISTED. FIRE DAMPERS SHALL HAVE THE BLADES OUT OF THE AIRSTREAM AND A 100% FUSIBLE LINK, TYPE A, AS MINIMUM.

DUCTWORK INSULATION

1. INSTALL INSULATION PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES. INSULATION MUST COMPLY WITH NFPA 704.
2. RECTANGULAR DUCTWORK SHALL BE INTERNALLY INSULATED WITH 1" THICK, 1 1/2" LB. DENSITY LEXER (G-0.28 @ 797). LEXER IS TO HAVE A COATED SURFACE EXPOSED TO AIRSTREAM TO PREVENT EXFOSION. APPLY ADHESIVE AND MECHANICAL FASTENERS AS RECOMMENDED BY SMOGA AND THE MANUFACTURER. PREVENT LINER SEPARATION FROM THE DUCT. ALL TRANSVERSE EDGES TO BE COATED WITH ADHESIVE.
3. ALL ROUND AND OUTSIDE AIR DUCTWORK SHALL BE EXTERNALLY INSULATED WITH A MINIMUM OF 1 1/2" THICK, #1 DENSITY (R-5.0) DUCT WRAP WITH WOOD BARBERS. WOOD BARBERS IS TO BE INSTALLED THROUGHOUT DUCT SYSTEM. ALL JOINTS MUST BE TYPED TO THAT NO INSULATION FEER IS VISIBLE. EXTEND DUCTWORK INSULATION WITHOUT INTERRUPTION THROUGH WALLS, FLOORS, AND SIMLAR PENETRATIONS.
4. ALL INSULATION SHALL HAVE A FLAME SPREAD RATING OF NOTE MORE THAN 25 AND A SMOKE DEVELOPED RATING OF NO MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM C 411, OR AS REQUIRED BY LOCAL CODES.

TESTING, ADJUSTING AND BALANCING

1. TESTING, ADJUSTING AND BALANCING OF ALL WORK SHALL BE MADE BY AN INDEPENDENT CONTRACTOR WHO IS CURRENTLY LICENSED AS A BALANCING CONTRACTOR (MAY BE NATIONAL ENVIRONMENTAL BALANCE BUREAU (NEBB) BALANCING CONTRACTOR). ALL BALANCING WORK MUST BE COMPLETE AND DONE IN ACCORDANCE WITH THE MOST RECENT STANDARDS OF THE SOCIETY. PAYMENT OF ALL COSTS FOR TESTING AND BALANCING SHALL BE INCLUDED IN THE BID. TESTING AND BALANCING REPORT MUST INCLUDE THE OUTSIDE AIR CFMS AND THE EXHAUST CFMS.
2. BALANCE AIR AND WATER QUANTITIES TO WITHIN +/- 1% OF THAT INDICATED ON THE DRAWINGS. ANY REQUIRED CHANGES IN SEASONS, REELS, BALLERS (FOR THE ACTION OF DAMPERS, REELS TO CHANGE SCHEDULED FLOW RATES SHALL BE PERFORMED BY THE HVAC CONTRACTOR WITH NO ADDITIONAL COST TO THE TENANT.
3. FOUR COPIES OF THE BALANCE REPORT SHALL BE SUBMITTED TO TENANT AND LANDLORD FOR APPROVAL.

RECORD DRAWINGS

1. AT THE END OF THE PROJECT THIS CONTRACTOR SHALL SUBMIT 4 COPIES OF RECORD DRAWINGS SHOWING EXACT LOCATIONS OF UNITS, DUCTS, DIFFUSERS, ETC.
2. ECOMONIZER
 GENERALLY, AN ECONOMIZER IS REQUIRED BY THE LATEST VERSIONS OF EEC IN ALL JURISDICTIONS EXCEPT SOUTH FLORIDA (CLIMATE ZONE 1). THE MECHANICAL CONTRACTOR SHALL ORDER ALL NEW ROOF-TOP HVAC UNITS, WATER SOURCE HEAT PUMPS, OR OTHER MECHANICAL UNITS THAT ARE TO BE OPERATED MORE THAN 1000 HOURS PER YEAR. THE MECHANICAL CONTRACTOR SHALL ORDER ALL COMPATIBLE ECONOMIZER UNITS. ECONOMIZER WHERE CONTROLS ARE TO BE FIELD INSTALLED, AND TO INSTALL ALL COMPATIBLE SENSORS OUTSIDE AIR DUCTS AND DUAL ENTHALPY SENSORS. CONTROLS, ETC. ON SPLIT SYSTEMS A NECESSARY TO MEET LOCAL CODE. THE CONTRACTOR SHALL VERIFY WITH THE LOCAL INSPECTOR WHAT VERSION OF ENERGY CODE IS EMPLOYED IN THE JURISDICTION OF THE PROJECT AND FOR UNITS OTHER THAN PACKAGED ROOFTOP UNITS MAY OBTAIN THE ECONOMIZER PHOAGE WHERE THE AHJ DOES NOT REQUIRE IT.

ROOFTOP UNIT SEQUENCE OF OPERATION - CO2 SENSOR & ECONOMIZER

THE SUPPLY FAN IS TO RUN CONTINUOUSLY DURING THE OCCUPIED MODE AND CYCLE ON AND OFF DURING THE UNOCCUPIED MODE BASED ON A CALL FOR HEATING OR COOLING. THE UNOCCUPIED SET POINT FOR COOLING WILL BE 65 F AND HEATING AND 60 F. THE UNOCCUPIED SET POINT FOR HEATING WILL BE 55 F AND HEATING AND 60 F.

THE ADJUSTABLE ROOM THERMOSTAT WITH AUTOMATIC HEATING/COOLING CHANGEOVER SHALL CONTROL THE SPACE TEMPERATURE BASED ON SET POINT. THE CONTROL OF THE OCCUPIED/UNOCCUPIED SETBACK MODE SHALL BE THROUGH THE LIGHT SENSING FUNCTION OF THE THERMOSTAT. PROVIDE 24/7 CONTROLLABLE TYPE, THERMOSTATS SHALL HAVE AUTOMATIC REHEATER, 5 DEGREE DEVIATION (TEMPERATURE SET-POINT OVERLAP RESTRICTIONS) AND SHALL ALLOW AUTOMATIC RESTART AND TEMPORARY OPERATION AS REQUIRED FOR MAINTENANCE, PER ENERGY CODE.

SCHEDULES:
 THE UNIT SHALL BE TOTALLY DISABLED WHEN THE DUCT MOUNTED SMOKE DETECTOR IS ACTIVATED. PROVIDE REMOTE TEST STATION/ALARM WHEN REQUIRED BY CODE. PROVIDE LANDLORD REQUIRED SEQUENCE OR INTERFACE AS REQUIRED.

COOLING CONTROL:
 UPON A CALL FOR COOLING, THE FIRST STAGE OF COOLING WILL BE ENABLED AND WILL OPERATE UNTIL THE SPACE TEMPERATURE IS SATISFIED. IF THE SPACE TEMPERATURE CONTINUES TO INCREASE THEN THE SECOND STAGE OF COOLING WILL BE ENABLED (IF APPLICABLE).

HEATING CONTROL:
 UPON A CALL FOR HEATING, THE FIRST STAGE OF HEATING WILL BE ENABLED AND WILL OPERATE UNTIL THE SPACE TEMPERATURE IS SATISFIED. IF THE SPACE TEMPERATURE CONTINUES TO DECREASE THEN THE SECOND STAGE OF COOLING WILL BE ENABLED (IF APPLICABLE).

18220 TELEPHONE SERVICE

1.1 SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE, 600 OR 200 VOLT, WITH NUMBER OF POLES REQUIRED. FUSED SAFETY SWITCHES SHALL BE QUICK-BREAK, QUICK-BREAK MECHANISM, VISIBLE BLAZES WITH REACTION TYPE FUSE CLIPS AND NEHA CLASS "LUV" FUSES. THE SWITCHES SHALL BE NEHA 3R FOR OUTDOOR. ALL SWITCHES SHALL BE LOADABLE.

PLUMBING SPECIFICATIONS

SECTION 15-A - PLUMBING

15A-01 GENERAL:

- A. ALL PLUMBING WORK SHALL CONFORM TO THE LANDLORD'S CRITERIA, THE STATE, COUNTY, CITY, LOCAL CODES AND ORDINANCES, SAFETY AND HEALTH CODES, NFPA CODES, ENERGY CODES AND ALL OTHER APPLICABLE CODES AND REQUIREMENTS. INCORPORATE ALL REQUIREMENTS WITH THIS WORK, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT. ADVISE ARCHITECT IF REQUIREMENTS ARE CONTRARY TO THESE PLANS. IT IS INTENDED THAT THE CONTRACTOR SHALL PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM.
- B. THIS CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LICENSES, PERMITS, INSPECTIONS AND FEES REQUIRED OR RELATED TO HIS WORK.
- C. CONTRACTOR SHALL DETERMINE THE LOCATION OF EXISTING WATER SUPPLY AND DRAIN LINES AND MAKE PROPER CONNECTIONS THEREIN, INCLUDING VENTS.
- D. ALL MATERIALS SHALL BE NEW AND SHALL FIT THE SPACE AVAILABLE. VERIFY ALL DIMENSIONS AT THE SITE.
- E. ALL VALVES, CLEANOUTS, ETC., SHALL BE SO LOCKED AND INSTALLED TO PERMIT ACCESS FOR SERVICE WITHOUT DAMAGE TO BUILDING OR FINISHED MATERIAL.
- F. ALL PLUMBING EQUIPMENT AND WORK SHALL BE GUARANTEED FOR ONE YEAR AFTER FINAL ACCEPTANCE BY LANDLORD AND TENANT.

15A-02 MATERIALS

- A. REFER TO PLANS FOR SCHEDULES OF EQUIPMENT AND FITTINGS. AMERICAN STANDARD, WALKER AND COMBE ARE CONSIDERED ACCEPTABLE AS EQUALS. ALL PLUMBING EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- B. SANITARY PIPING:
 1. WHERE NOT OTHERWISE SPECIFIED THROUGHOUT THE DRAWING SET, WASTE, DRAIN AND VENT PIPING SHALL BE PER LOCAL CODE AND AUTHORITY HAVING JURISDICTION. VENT PIPING ABOVE FLOOR 2" OR SMALLER MAY BE UNGRADED STEEL.
 2. PROVIDE LINE-ITEM TO UTILIZE PVC, OBTAIN APPROVAL FROM INSPECTOR PRIOR TO INSTALLATION THAT PVC IS ALLOWED FOR THE SPECIFIC HMC LAYOUT FOR THIS PROJECT.
 3. INSULATE ALL HORIZONTAL RUNS OF PIPING LOCATED IN CEILING SPACES OF TENANTS IN SPACES BELOW WHEN APPLICABLE. INSULATION TO BE AS SPECIFIED FOR WATER PIPING.
 4. CONDENSATE PIPING SHALL BE TYPE "L" HARD DRAIN COPPER TUBE WITH 65-5 TH-ARMYARY SOLIDIFIED JOINTS AND WROUGHT COPPER FITTINGS WITH DELICTIC SEPARATION BETWEEN DISSIMILAR METALS. CONDENSATE PIPING BELOW ROOF DECK MAY BE PVC. PROVIDE SHROBITE TRANSITION FROM PVC TO COPPER.
 5. ANY WASTE PIPING EXPOSED IN FINISHING AREAS SHALL BE PROTECTED FROM MECHANICAL DAMAGE AND SHALL BE PROVIDED WITH FREEZE PROTECTION (VENT PIPE & INSULATION) WHERE SUBJECT TO POSSIBLE FREEZING CONDITIONS.
- C. POTABLE WATER PIPING
 1. UNDER PIPING IN CEILING SPACE AND WITHIN WALLS MAY BE TYPE "L" COPPER OR PEX. INSULATED PER MANUFACTURER'S INSTRUCTIONS. PROVIDE SWAY-BITE TRANSITIONS, OR APPROVED EQUALS.
 2. BULK GRADE TYPE "Y", ANNEALED TEMPERED COPPER TUBE FOR PPE SIZES 2 INCHES AND SMALLER. BRAZE ALL JOINTS.
 3. SIMLAR APPLICABLE. TRANSITIONS BETWEEN COPPER AND PLASTIC PIPE SHALL BE MADE BY SHROBITE OR SIMLAR TRANSITIONS, RATED FOR USE WITH SUCH MATERIALS AS ARE BEING USED.
 4. PIPING OF DISSIMILAR METALS MUST BE DI-ELECTRICALLY SEPARATED.
- E. INSULATE ALL HOT WATER, COLD WATER AND CONDENSATE PIPING WITH 1" THICK (R-4.23 @ 797) PIPE INSULATION WITH AN ALL SERVICE JACKET TO MEET LOCAL CODES AND UL FLAME SPREAD AND SMOKE DEVELOPED RATINGS. OVERS-CORNING OR EQUAL.
- F. INSULATE THE TRAP, SANITARY AND SUPPLY PIPES UNDER LAUNDRY WITH 1/2" MINISTROUS "SHROBLET" PIPING INSULATION OR THERMO MODEL 102W "HARD LAW GUARD" INSULATION KIT.
- G. INSTALL AIR CHAMBER SHOCK ABSORBERS IN BOTH HOT AND COLD LINES OF PIPING SYSTEM TO PREVENT NOISE AND DAMAGE DUE TO WATER HAMMER. J.A. SMITH 5000 SERIES ALL STAINLESS STEEL "HYDROSHOCK" OR EQUAL, INSTALLED IN AN UPRIGHT POSITION.
- H. ALL BRANCH PIPING SYSTEMS SHALL HAVE ACCESSIBLE SERVICE VALVE. PROVIDE SHUT OFF VALVES IN THE SUPPLY PIPING TO EVERY FITTING. PROVIDE ACCESS DOORS WHERE NECESSARY.
- I. INSTALL ALL NECESSARY PIPE HANGERS, SHOULDS AND CHAMBERS TO PROPERLY SUPPORT ALL PIPING AND FITTINGS. HANGERS SHALL BE TYPE OF PIPING AND SEISMIC BRACING WHERE REQUIRED BY CODES.
- J. STERILIZE WATER SYSTEM IN ACCORDANCE WITH LOCAL CODES.
- K. CLEAN-OUTS AND FLOOR DRAINS SHALL BE INSTALLED PER LOCAL CODES.
- L. ESCALATORS SHALL BE CHARGE PLATED. SIZE AS REQUIRED AND PLACE AT ALL PPE PENETRATIONS AT WALL, FLOORS AND CEILINGS IN FINISHED AREAS.
- M. LEAKAGE TESTS SHALL BE PER LOCAL CODES.
- N. PLUMBING SHALL BE SEALED WATERTIGHT AND PERFORMED IN ACCORDANCE TO THE LANDLORD'S CRITERIA. USE LANDLORD APPROVED ROOFING PRODUCTS WHERE APPLICABLE.
- O. NOT USED.
- P. GAS PIPING
 1. PROVIDE A COMPLETE GAS PIPING SYSTEM IF APPLICABLE. REFER TO PLANS TO DETERMINE IF A GAS SYSTEM IS REQUIRED.
 2. GAS LINES SHALL BE BLACK STEEL, SCHEDULE 40, ASTM A-132, WITH WALLEABLE THREADED FITTINGS FOR 2" AND SMALLER, AND WITH WELDED JOINTS FOR 2 1/2" AND LARGER.
 3. PROVIDE A GAS COCK, DIRT LEG, AND UNION CONNECTION TO EACH PIECE OF EQUIPMENT.
 4. FITCH PIPING AT A UNIFORM GRADE OF 1/4" IN 15 FEET UPWARD IN DIRECTION OF FLOOR. SUPPORT SHALL BE PROVIDED BY THE CONTRACTOR. SUPPORT SHALL BE PROVIDED BY THE CONTRACTOR. SUPPORT SHALL BE PROVIDED BY THE CONTRACTOR.
 5. GAS PIPING EXPOSED ON ROOF MUST BE PAINTED WITH RUST-INHIBITING PAINT.
 6. GAS PIPING INSTALLED IN RETURN AIR PLenums SHALL BE SLEEVED AND VENTED OR WELDED IN ACCORDANCE WITH THE LOCAL GAS COMPANY, LOCAL CODE AND APPLICABLE NFPA 54 CODES.
 7. TESTING AND PURGING OF GAS PIPING SHALL BE DONE PER THE REQUIREMENTS OF THE LOCAL GAS COMPANY AND COORDINATION GAS SERVICE AND MEET REQUIREMENTS WITH THE LOCAL GAS COMPANY AND THE WALL'S OPERATIONS MANAGER PRIOR TO BID. INCLUDE INSTALLATION OF GAS METER COSTS IN BID.

MECHANICAL SPECIFICATIONS

SECTION 15-C - HEATING, VENTILATION, AIR CONDITIONING

15C-01 GENERAL:

- A. ALL WORK SHALL CONFORM TO THE LANDLORD'S CRITERIA, THE STATE, COUNTY, CITY CODES AND ORDINANCES, SAFETY AND HEALTH CODES NFPA CODES, ENERGY CODES AND ALL OTHER APPLICABLE CODES AND REQUIREMENTS. INCORPORATE ALL REQUIREMENTS WITH THIS WORK, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT. ADVISE ARCHITECT IF REQUIREMENTS ARE CONTRARY TO THESE PLANS. IT IS INTENDED THAT THE CONTRACTOR SHALL PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM.
- B. THIS CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LICENSES, PERMITS, INSPECTIONS, AND FEES REQUIRED OR RELATED TO HIS WORK.

ELECTRICAL SPECIFICATIONS

18100 WIRING INCLUDES:

- 1.1 CONTRACTOR SHALL PROVIDE THE FOLLOWING:
 a. LABOR
 b. MATERIALS
 c. SUPPLIES
 d. PERMITS AND INSPECTION FEES
 e. COORDINATION OF FINAL INSPECTION AND APPROVAL
 f. COORDINATION OF TELEPHONE SERVICE WITH LOCAL TELEPHONE COMPANY.
 g. ONE YEAR GUARANTEE
- 1.2 CONTRACTOR SHALL PERFORM THE FOLLOWING:
 a. COORDINATE WITH OTHER TRADES OF ELECTRICAL EQUIPMENT INSTALLATION.
 b. MATERIAL PROTECTION DURING CONSTRUCTION.
 c. TEST OF ENTIRE SYSTEM IN PRESENCE OF OWNER OR HIS REPRESENTATIVE AND CORRECT ANY DEFICIENCIES DETECTED.
 d. COORDINATION OF ELECTRICAL SERVICE AND WEATHERING WITH LOCAL POWER COMPANY.
 e. COORDINATION OF TELEPHONE SERVICE WITH LOCAL TELEPHONE COMPANY.
- 1.3 GOVERNING CODES SHALL BE THE FOLLOWING:
 a. LOCAL MUNICIPALITY ELECTRICAL CODE (NEC)
 b. PER LATEST NATIONAL ELECTRICAL CODE (NEC)
 c. UTILITY COMPANY REGULATIONS
 d. CURRENT APPLICABLE BUILDING CODES
 e. LOCAL BUILDING CODES AND ORDINANCES
 f. THE NATIONAL MANUFACTURER'S ASSOCIATION STANDARDS (NEMA)
 g. UNDERWRITER LABORATORIES INCORPORATED STANDARDS (UL)
 h. AMERICAN NATIONAL STANDARD INSTITUTE (ANSI)
 i. THE MANUFACTURER'S RECOMMENDATION
- 1.4 MATERIALS WILL BE:
 a. NEW
 b. UL LISTED

18110 BUSBARS

- 1.1 USE AND TYPES
 a. SERVICE ENTRANCE - RIGID STEEL
 b. FEEDERS - RIGID STEEL EXCEPT ABOVE 6"-8" AND INDOOR THEN ENIT BRANCH CIRCUIT, TELEPHONE OR COMMUNICATIONS - ENIT
 c. IN EXHIB OR CONCRETE - SCHEDULE 40 PVC
 d. REDUCED LIGHTING FIXTURES - FLEXIBLE STEEL CONDUIT (SHORT BUT MINIMUM 7')
 e. REDUCED LIGHTING CONNECTION TO EQUIPMENT OR IN RET LOCATIONS - LIQUID TIGHT FLEXIBLE STEEL CONDUIT (MINIMUM 3')
 f. ALL BUSWAYS, UNLESS SPECIFICALLY INDICATED TO BE EXPOSED, SHALL BE CONCEALED IN WALLS, CEILING OR FLOORS.
 g. PAINT ALL UNEXPOSED FINISHES COLOR AS DIRECTED BY ARCHITECT.
- 1.2 CONDUIT BUSING
 a. PROVIDE INSULATED CONDUIT BUSING AT EACH END OF EVERY CONDUIT RUN.

18120 Wires and Cables 800 VOLTS

- 1.1 COLOR CODING 208Y/120V 480Y/277V
 PHASE A BROWN
 PHASE B YELLOW
 PHASE C RED
 NEUTRAL WHITE
 GROUND GREEN
- 1.2 INSULATED, THIN, THIN, THIN, XHW 75 DEGREE C (THIN OR BETTER, WET-HEAT FOR BELOW GRADE).
- 1.3 PROVIDE COPPER UNLESS ALUMINUM IS SPECIFICALLY SHOWN ON THE DRAWINGS. WHEN ALUMINUM CONDUCTORS ARE UTILIZED - PROVIDE COMPRESSION LUG FITTINGS.
- 1.4 FUTURE WIRE 600 VOLTS, 200 DEGREE C #14 AND MINIMUM STRANDED, THINNE COPPER WITH SILICONE RUBBER INSULATION AND AN OVERWALL JACKET OF GLASS Braid, AND RATED AS NEC TYPE "S"-2

18130 BOXES

- 1.1 ATTACHED SECURELY TO BUILDING CONSTRUCTION OR SUPPORT FROM SAME
- 1.2 MASONRY BOXES SHALL BE IMCO OR STEEL CITY
- 1.3 EXPOSED BOXES SHALL BE CAST TYPE SIMILAR TO CHOUSE HIBDS TYPE FS
- 1.4 ALL OTHERS SHALL BE STAMPED STEEL

18140 WIRING DEVICES

- 1.1 RECEPTACLES
 a. DUPLEX - 15 AMPS, 125V, AC GROUNDING LUG
 b. SINGLE - 15 AMPS, 125V, AC GROUNDING LUG
 c. COORDINATE COLOR OF DEVICE WITH ARCHITECT. ALSO SEE NOTES ON E10
 d. COORDINATE FINISH AND COLOR OF COVER PLATE WITH ARCHITECT, ALSO SEE NOTES ON E10
- 1.2 WALL SWITCHES
 a. SINGLE POLE - 20 AMPS, SINGLE THROW, QUIET TYPE, GROUNDING
 b. COORDINATE COLOR OF DEVICE WITH ARCHITECT, ALSO SEE NOTES ON E10
 c. COORDINATE FINISH AND COLOR OF COVER PLATE WITH ARCHITECT, ALSO SEE NOTES ON E10
- 1.3 THE CLOCK
 a. FINISH AND INSTALL A TWENTY FOUR (24) HOUR (7) DAY THE CLOCK INCLUDING ALL INTERNAL WIRING AND LOAD BALANCING (PANEL) FOR CONTROLLING THE STOREFRONT SIGN AND SHOW WINDOW LIGHTING, WHETHER SUCH WORK IS OR IS NOT SHOWN ON PLANS OR SPECIFICATIONS

18170 PANEL DEVICES

- 1.1 PANEL BOARDS SHALL HAVE, BUT NOT BE LIMITED TO THE FOLLOWING:
 a. THREE PHASE, 4 WIRE, COPPER BUSING, NEMA 1 ENCLOSURE FOR INDOOR, NEMA 3R FOR OUTDOOR.
 b. GROUND BUS WITH SET SCREW CONNECTIONS
 c. SOLID METAL, NOT INDOOR WITH SET SCREW CONNECTION
 d. TYPE WRITTEN DIRECTORY
 e. TYPE WRITTEN DIRECTORY
 f. PLAIN, BLACK WITH 1" HIGH WHITE LETTERS TO INDICATE PANEL NAME
 g. SQUARE D, GENERAL ELECTRIC OR SIMENS
- 1.1 FEEDERS AND BRANCH CIRCUITS
 a. PROVIDE A GREEN INSULATED GROUND CONDUCTOR, SIZED PER THE NEC IN EACH RACEWAY

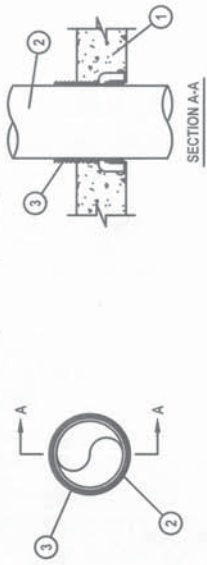
18200 LIGHTING FIXTURES

- 1.1 COORDINATE FIXTURE TRIMS WITH CEILING IN/ON WHICH IT IS BEING INSTALLED.
- 1.2 MATCH VOLTAGE OF FIXTURE TO CIRCUIT TO WHICH FIXTURE IS SHOWN CONNECTED
- 1.3 PROVIDE LOW TEMPERATURE HIGH EFFICIENCY ELECTRONIC BALLASTS IN FLUORESCENT FIXTURES
- 1.4 PROVIDE THERMAL OVERLOAD PROTECTION IN BOTH FLUORESCENT AND NONFLUORESCENT FIXTURES
- 1.5 MARKING DESCRIPTION IN LIGHTING FIXTURE SCHEDULE TAKES PRECEDENCE OVER CATALOG NUMBER
- 1.6 PROVIDE INTERNAL DISCONNECTING MEANS FOR ALL FLUORESCENT FIXTURES PER THE NEC

18210 EXISTING CONDITION

- 1.1 VISIT SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS IN AND AROUND THE BUILDING

F Rating — 4 Hr
T Rating — 1/2 Hr
L Rating At Ambient — 1 CFM/sq ft (See Item 2)
L Rating At 400 F — Less Than 1 CFM/sq ft (See Item 2)
W Rating — Class 1 (See Item 4)



1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150) (1600-2000 kg/m³) concrete.
1A. Floor Assembly (Optional, Not Shown) — The fire rated precast concrete and steel floor assembly shall be constructed of the materials listed below.
1B. Floor Assembly (Optional, Not Shown) — The fire rated precast concrete and steel floor assembly shall be constructed of the materials listed below.
2. Through Penetrations — One metallic pipe, conduit or tubing to be installed within the firestop device. Pipe, conduit or tubing to be rigidly supported on both sides of floor assembly. The following types of pipe, conduit or tubing may be used:
A. Steel Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
B. Iron Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
C. Conduit — Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.
D. Conduit — Nom 6 in. (152 mm) diam (or smaller) rigid non-metallic conduit.
E. Copper Tubing — Nom 2 in. (51 mm) diam (or smaller) Type L (or heavier) copper tubing.
F. Copper Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 10 (or heavier) copper pipe.
The firestop device and metallic penetrant shall be sized as follows:
** L Rating applies only to CP 680-P device and only when the room diam of pipe equals size of device (2 in. diam pipe in 2" device etc.) L Rating does not apply to CP 680N devices.

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F Rating — 4 Hr
T Rating — 1/2 Hr
L Rating At Ambient — 1 CFM/sq ft (See Item 2)
L Rating At 400 F — Less Than 1 CFM/sq ft (See Item 2)
W Rating — Class 1 (See Item 4)

3. Firestop Device* — Cast in place firestop device permanently embedded during concrete placement or grouted in concrete floor assembly in accordance with accompanying installation instructions. The device may extend a max of 2 in. (51 mm) above the top surface of the concrete.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI
INK — CP 680N-752.5', CP 680N-1104', CP 680N-1009', CP 680-P-2', CP 680-P-4', CP 680-P-6'
4. Firestop Device* — Water Barrier Module* (Optional, Not Shown) — Nom 2", 4" and 6" water barrier modules used in combination with the CP 680-P-2', CP 680-P-4' and CP 680-P-6' devices, respectively, and supplied by device manufacturer. Module is threaded onto top of device. For W Rating with Water Barrier Module, pipe shall be installed from bottom of device.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. — Water Barrier Module
4A. Firestop Device* — Water Barrier Module* (Optional, Not Shown) — Nom 2", 4" and 6" water barrier modules used in combination with the CP 680-P-2', CP 680-P-4' and CP 680-P-6' devices, respectively, and supplied by device manufacturer. Module is threaded onto top of device. For W Rating with Water Barrier Module, pipe shall be installed from bottom of device.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. — Water Barrier Module
5. Firestop Device* — Water Barrier Module* (Optional, Not Shown) — Nom 2", 4" and 6" water barrier modules used in combination with the CP 680-P-2', CP 680-P-4' and CP 680-P-6' devices, respectively, and supplied by device manufacturer. Module is threaded onto top of device. For W Rating with Water Barrier Module, pipe shall be installed from bottom of device.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. — Water Barrier Module
*Sizing the U.S. Classification Mark

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F Rating — 4 Hr
T Rating — 1/2 Hr
L Rating At Ambient — 1 CFM/sq ft (See Item 2)
L Rating At 400 F — Less Than 1 CFM/sq ft (See Item 2)
W Rating — Class 1 (See Item 4)

6. Firestop Device* — Cast in place firestop device permanently embedded during concrete placement or grouted in concrete floor assembly in accordance with accompanying installation instructions. The device may extend a max of 2 in. (51 mm) above the top surface of the concrete.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI
INK — CP 680N-752.5', CP 680N-1104', CP 680N-1009', CP 680-P-2', CP 680-P-4', CP 680-P-6'
7. Firestop Device* — Water Barrier Module* (Optional, Not Shown) — Nom 2", 4" and 6" water barrier modules used in combination with the CP 680-P-2', CP 680-P-4' and CP 680-P-6' devices, respectively, and supplied by device manufacturer. Module is threaded onto top of device. For W Rating with Water Barrier Module, pipe shall be installed from bottom of device.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. — Water Barrier Module
8. Firestop Device* — Water Barrier Module* (Optional, Not Shown) — Nom 2", 4" and 6" water barrier modules used in combination with the CP 680-P-2', CP 680-P-4' and CP 680-P-6' devices, respectively, and supplied by device manufacturer. Module is threaded onto top of device. For W Rating with Water Barrier Module, pipe shall be installed from bottom of device.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. — Water Barrier Module
9. Firestop Device* — Water Barrier Module* (Optional, Not Shown) — Nom 2", 4" and 6" water barrier modules used in combination with the CP 680-P-2', CP 680-P-4' and CP 680-P-6' devices, respectively, and supplied by device manufacturer. Module is threaded onto top of device. For W Rating with Water Barrier Module, pipe shall be installed from bottom of device.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. — Water Barrier Module
*Sizing the U.S. Classification Mark

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PLUMBING MATERIALS

- SANITARY PIPING:** (WHERE NOT OTHERWISE SPECIFIED THROUGHOUT THE DRAWING SET, WASTE, DRAIN AND VENT PIPING SHALL BE PER LOCAL CODE AND AUTHORITY HAVING JURISDICTION.)
1. UNDERDRAIN DOWN PIPING SHALL BE SCHEDULE 40 PVC. VENT PIPING ABOVE FLOOR 2" OR SMALLER MAY BE UNFINISHED SCHEDULE 40 PVC. VENT PIPING BELOW FLOOR 2" OR SMALLER MAY BE FINISHED SCHEDULE 40 PVC.
2. CONDENSATE PIPING SHALL BE TYPE "L" HARD DRAIN COPPER TUBE WITH 95-5 TIN-ANTIMONY SOLDERED JOINTS AND BRIGHT COPPER FITTINGS WITH DELECTRIC SEPARATION BETWEEN DISSIMILAR METALS. CONDENSATE PIPING BELOW ROOF DECK MAY BE PVC. PROVIDE SHARKBITE TRANSITION FROM PVC TO COPPER. ALL HORIZONTAL RUNS OF PIPING LOCATED IN CEILING SPACES OF TENANTS IN SPACES BELOW WHEN APPLICABLE. INSULATION TO BE AS SPECIFIED FOR WATER PIPING. PROVIDE LINE-ITEM 80 TO UTILIZE PVC. OBTAIN APPROVAL FROM INSPECTOR PRIOR TO INSTALLATION THAT PVC IS ALLOWED FOR THE SPECIFIC HVAC LAYOUT FOR THIS PROJECT.
3. POTABLE WATER PIPING
1. ALL HOT AND COLD WATER SUPPLY PIPING, WHERE ALLOWED BY A.H.J. AND OWNER SHALL BE CPVC OR PE.
2. WATER PIPING IN CEILING SPACE AND WITHIN WALLS MAY BE TYPE "L" COPPER OR PE, INSTALLED PER MANUFACTURER'S INSTRUCTIONS. PROVIDE SHARK-BITE TRANSITIONS, OR APPROVED EQUIVALENTS.
3. WATER PIPING IN WALLS AND FLOORS SHALL BE TYPE "L" ANNEALED TEMPERED COPPER TUBE FOR PIPE SIZES 2 INCHES AND SMALLER. FOR 1/2" AND 3/4" PIPE SIZES, PROVIDE SHARKBITE TRANSITION FROM PVC TO COPPER. PROVIDE SHARKBITE OR SIMILAR TRANSITIONS, RATED FOR USE WITH SUCH MATERIALS AS ARE BEING USED.
4. GAS PIPING
1. GAS LINES SHALL BE BLACK STEEL, SCHEDULE 40, ASTM A-120, WITH WALLEABLE THREADED FITTINGS FOR 2" AND SMALLER, AND WITH WELDED JOINTS FOR 2-1/2" AND LARGER.
2. GAS PIPING EXPOSED ON ROOF MUST BE PAINTED WITH RUST-INHIBITING PAINT.
*THIS MATERIALS LIST REPRESENTS THE MINIMUM SPECIFICATIONS SET FORTH BY THE MEP ENGINEER. CONTACT LANDLORD'S REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION TO VERIFY IF THERE ARE ANY ADDITIONAL OR MORE STRINGENT REQUIREMENTS BEYOND THESE.

WATER HEATER SCHEDULE (ELECTRIC, TANK-TYPE)

MARK	RECOVERY GROSS RISE	STORAGE GALLONS	LINING	FUEL	MAXIMUM INPUT CFH	HP	VOLTS/PHI	KW	DESCRIPTION
W.H.	SEE CALC.	40	GLASS	ELEC.	--	--	120/208V	6	A0 SMITH DEL-40, OR EQUAL, TWO 3.0 KW STAGES, 21.75" DIAMETER, 24" DRAIN PAN, 40 STORAGE GALLONS, GLASS LINING, 120/208 VOLTS 3 PHASE, 6 KW.

EXPANSION TANK SCHEDULE

MARK	TANK VOLUME	ACCEPTABLE VOLUME GALLON	HEIGHT	DIAMETER	ASTM CONST.	SERVES WATER HEATER	REMARKS
ET	5	2.3	14"	10"	NO	W.H.	WATTS NO. BETA-12

RECIRCULATION PUMP SCHEDULE

MARK	SERVICE	GPM	TOTAL HEAD FT.	MOTOR HP	ELECTRICAL VOLTS PHASE HERTZ	REMARKS
R.P.	36"-203"	2.2	3.9	115		GRUNDFOSS UPTO-16 BU SERIES, 20A/1P POWER, PROVIDE WITH AQUASTAT AND THERM.



Architecture / Development
14901 Quorum Drive
Suite 300
Dallas Texas 75254
Ph: (972) 239-8884
Fax: (972) 239-5054
REGISTERED PROFESSIONAL ENGINEER
PETER A. LEPTUCH
M 35700
10/26/17

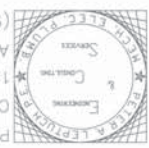
BISHOPS
BISHOPS - TENANT FINISHOUT
19540 VALLEJO PARKWAY
SUITE 100
CUPERTINO, CA 95014

DO NOT SCALE DRAWINGS
CONTRACTOR TO VERIFY
ALL EXISTING CONDITIONS AND
DIMENSIONS-WH/RY ARCHITECT
OF ANY DISCREPANCIES PRIOR
TO BEGINNING CONSTRUCTION



NO. REVISION

ISSUE FOR PERMIT 10/30/17
Peter A. Leptuch, P.E.
CA-M35700/CA-E19072
1236 Golden Eagle Ct.
Aubrey, TX 76227
(940) 735-5127



PROJECT NUMBER
C170339

SHEET NUMBER

MEP2.0
ADDITIONAL MEP
INFORMATION
DATE OF THIS PRINTING - 10/26/17

EXPANSION TANK SCHEDULE

MARK	TANK VOLUME	ACCEPTABLE VOLUME GALLON	HEIGHT	DIAMETER	ASTM CONST.	SERVES WATER HEATER	REMARKS
ET	5	2.3	14"	10"	NO	W.H.	WATTS NO. BETA-12

RECIRCULATION PUMP SCHEDULE

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WATER HEATER SCHEDULE (ELECTRIC, TANK-TYPE)

MARK	RECOVERY GROSS RISE	STORAGE GALLONS	LINING	FUEL	MAXIMUM INPUT CFH	HP	VOLTS/PHI	KW	DESCRIPTION
W.H.	SEE CALC.	40	GLASS	ELEC.	--	--	120/208V	6	A0 SMITH DEL-40, OR EQUAL, TWO 3.0 KW STAGES, 21.75" DIAMETER, 24" DRAIN PAN, 40 STORAGE GALLONS, GLASS LINING, 120/208 VOLTS 3 PHASE, 6 KW.

WATER HEATER SCHEDULE (ELECTRIC, TANK-TYPE)



SCALE: NOT TO SCALE
01 ELECTRIC WATER HEATER DETAIL

WATER SERVICE CALCULATION - RETAIL

Quantity	Waste F.U. (per fixture)	Total Waste F.U.	Water Supply F.U. (per fixture)	Total Water Supply F.U.
Water Closet (Flush Valve)	1	6	40	40
Water Closet (Flush Tank)	0	6	5	0
Urinals	0	3	20	0
Lavatory / Handwash Sink	2	2	4	4
Shampoo sink	2	2	2	4
Mop Sink	1	4	4	2
3-comp Sink	0	3	4	0
Pot Fill Sink	0	4	0	0
Showers	0	2	2	0
Pre-rinse Sink	0	4	2	0
Hose Bibb	0	0	2	0
Floor Drain	1	2	0	0
Floor Sink	1	1	0	0
Ice Machine	0	2	4	0
Dish Washer	0	10	10	0
Clothes Washer	1	10	10	10
Water Bar/Fountain	1	1	2	2
Total Fixture Units		32		62

Waste: USE 4" WASTE LINE
Supply: USE 1-1/2" DISTRIBUTION LINE FOR FLUSH VALVE - USE 2" DISTRIBUTION LINE

8/29/2017
Bishops - Cupertino, CA
2016 California Plumbing Code

F.U. = Fixture Units
Pipe Sizes based on UPC
MISC:
1-1/4" trap
1-1/2" trap
2" trap
3" trap
4" trap
Sizing Table:
Pipe Size: 1.25" 1.5" 2" 3" 4" 6"
Maximum Units (Waste): Horizontal 1 2 16 48 1380; Vertical 1 1 8 35 720
Water Sizing: 36"-203" 2.2 3.9
CUPERTINO, CA - 2" street service size, 1-1/2" building supply and branches.
2" building main, 1-1/2" valve & distribution branch services, up to 150' run to most remote fixture, 217 wdfu allowed.

Storage Tank Water Heater Sizing Calculator

Facility Name:	BISHOPS - CUPERTINO, CALIFORNIA			
Address:	BISHOPS - CUPERTINO, CALIFORNIA			
Equipment	Description	Number of compartments	Length (inches)	Width (inches)
Largest Sink #1				
Sink #2				
Sinks are calculated at 75% capacity				
Type of prep sink and number of compartments for each sink below	Number of compartments			
Prep sink #1	Total			
Prep sinks are calculated at 5 gallons per compartment				
Enter the quantity of equipment below	Quantity	Gallons Per Hour (GPH)		
Hand sinks	2	10		
Shampoo sink	2	10		
Mop sink	1	5		
Clothes washer	1	6.8		
Other Equipment		0		
Enter a description and estimated gallon per hour (GPH) usage for other equipment below	Description	Estimated gallons per hour (GPH) usage		
Other Equipment		0		
Head sinks and mop sinks are calculated at 5 GPH each, showers at 15 GPH each. Hoses reels are calculated at 5 GPH, clothes washers at 6.5 GPH, other equipment at the usage entered.	Total	31.8		
Enter the make, model and Final Rinse Usage in gallons per hour (GPH) for dishmachines (GPH) for dishmachines	Make	Model	Final Rinse Usage (GPH)	
Dishmachine #1			Gallons Per Hour (GPH)	
Enter the quantity of pre-rinse units	Quantity	Gallons Per Hour (GPH)		
Pre-rinse		0		
Dishmachines are calculated at 70% of the final rinse usage specified by the manufacturer. Pre-rinse are calculated at 45 GPH	Total	0		
Recovery Rate Needed (GPH): 32				

Developed by the Plan Review Unit of the Environmental Health Services Section
BISHOPS - CUPERTINO, CALIFORNIA

Page: 1 of 2

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KEY NOTES BY SYMBOL

1. MAINTAIN 10'-0" BETWEEN OUTSIDE AIR INTAKES AND ALL EXHAUST SOURCES (PLUMBING VENTS, EXHAUST FANS, COMBUSTION EXHAUST, ETC.). MECHANICAL CONTRACTOR SHALL PROVIDE OFFSETS AS NEEDED TO ENSURE EXHAUST FANS ARE 10'-0" AWAY FROM NEIGHBORING TENANT'S FRESH AIR INTAKES. PROVIDE OFFSETS AND ADJUST/RELOCATE EQUIPMENT AS NEEDED.

2. ROUTE 12" EXHAUST DUCT TO INLINE EXHAUST FAN THEN FROM FAN TO NEW EXTERIOR LOUVER (MATCH EXISTING LOUVER).

3. 4" DRYER VENT LINE ROUTED AS SHOWN TO EXTERIOR WALL LOUVER AS SHOWN. TERMINATE AT SECTIONED PORTION OF LOUVER. FURROUT WALL IF NECESSARY TO KEEP VENT WITHIN WALL.

4. AHU BY LANDLORD SUSPENDED FROM DECK. REMOTE CONDENSING AREA TO BE LOCATED IN ABOVE SPACE IN DESIGNATED AREA ON LOWER ROOF. REFER TO SHELL DRAWING FOR UNIT PLACEMENT. VERIFY WITH MECHANICAL ENGINEER FOR CONDENSING UNIT PLACEMENT. VERIFY WITH MECHANICAL ENGINEER FOR CONDENSING UNIT PLACEMENT. PROVIDE LINE ITEM BID VALUE FOR LONG LINE SET.

5. PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT, HONEYWELL PRACTICALLY PROGRAMMABLE THERMOSTAT, REMOTE WIRING TO CONTROL EACH UNIT. MOUNT 1'-5" AT 45° AFF. SENSOR AT 96" AFF.

6. NEW IN-LINE EXHAUST FAN SUSPENDED FROM DECK.

DRYER VENT CALCULATION

20'-0" HORIZONTAL LENGTH
15'-0" VERTICAL LENGTH
45 DEGREE ELBOWS (BUT EACH)
17'-0" VERTICAL LENGTH
10'-0" VERTICAL LENGTH

TOTAL DEVELOPED DUCT LENGTH

USE 4" GALVANIZED SHEET METAL VENT DUCT AND 4" MITERED ELBOWS. PROVIDE A DURABLE PLACARD AT LEAST 4" TALL AND 5" WIDE, AFFIRMED PERMANENTLY ON THE WALL, CLOSE TO THE DRYER. LOCATIONS, THE PLACARD SHALL LIST THE ACTUAL LENGTH OF THE INSTALLED DRYER DUCT EXHAUST VENT.

SAMPLE DRYER PLACARD

WARNING

CHECK THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR ANY DOMESTIC DRYER THAT WILL BE INSTALLED AT THIS LOCATION. THE INSTALLATION INSTRUCTION SHOULD ALLOW THE DRYER TO BE CONNECTED TO AN EXHAUST DUCT (VENT) THAT IS _____ FEET.

AHU LOCATION, MIXING BOX CONFIGURATIONS (ON SPLIT SYSTEMS), RETURN AIR CONFIGURATIONS, ECONOMIZER CONFIGURATIONS, ETC. WILL VARY DEPENDING ON FIELD CONDITIONS, JOISTS, BEAMS, SPRINKLER PIPING, ETC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL WORK AND MAKE MINOR ADJUSTMENTS TO BEST SUIT FIELD CONDITIONS.

CONTRACTOR NOTES:

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT, LANDLORD OR TENANT OF ANY DISCREPANCIES OR CONDITIONS ON THE PLANS OR IN EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK. COORDINATE ROOF ACCESS WITH LANDLORD.

BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES AS TO THE EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE ACCURACY OF THE WORK SHOWN AND SHOWN. REFLECT MODIFICATIONS TO SYSTEMS AND DEVICES AS NOTED ON THE PLANS AND LOCAL CODES WHETHER INDICATED OR NOT ON CONTRACT DOCUMENTS. THE SUBMISSIONS OF A BID WILL BE EVIDENCE THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES AND REQUIREMENTS HAS BEEN MADE. LATER CLAIMS FOR LABOR, MATERIAL, OR METHODS REQUIRED OR FOR DIFFICULTIES ENCOUNTERED WILL NOT BE ALLOWED. EXAMINATION AND CODE REVIEW BEEN MADE, WILL NOT BE ALLOWED.

ANY EXISTING HVAC EQUIPMENT THAT IS BEING REUSED SHALL HAVE ITS POWER (SERVICES, OUTLET, HVAC UNIT, POWER, DUCT, DETECTOR, ETC.) MIGRATED TO THE NEW ELECTRICAL PANEL(S). REUSE DISCONNECTS WHERE CODE COMPLIANT. REPLACE WHEN IN POOR SHAPE, UNDER-SIZED OR OTHERWISE NECESSARY. CIRCUIT TO OPEN BREAKERS IF CIRCUIT IS NOT CALLED OUT.

CONTRACTOR NOTES:

ALL SUPPLY DUCTWORK SHALL BE INTERNALLY INSULATED, DOUBLE-WALL METAL "SPIRAL" DUCT. METAL AND INTERNALLY INSULATED. SUPPLY REGISTERS AND TAPS SHALL BE INTERNALLY INSULATED WITH THERMAL BREAKS TO PREVENT CONDENSATION. FLEX DUCT AND DUCT BOARD WILL NOT BE USED TO CONNECT TO DIFFUSERS ABOVE A LAY-IN GRID CEILING, WHICH SHALL BE FULLY CONCEALED FROM VIEW.

CUPERTINO, CA NOTE: THIS IS A MULTI-STORY BUILDING. CONDENSING EQUIPMENT WILL BE PLACED ON THE LOWER FLOOR.

CUPERTINO, CA NOTE: NO GAS TO BE USED IN THIS CASE. ALL ELECTRICAL EQUIPMENT WILL BE ELECTRICAL.

WHEN SPLIT SYSTEMS ARE USED, AND ECONOMIZERS ARE REQUIRED, ECONOMIZERS SHALL BE USED WITH TWO CHASIS WIZARD15000A WITH TWO CHASIS SENSORS FOR DIFFERENTIAL ENTHALPY CONTROL (TO RUN ECONOMIZER).

CONTRACTOR NOTES:

ALL SUPPLY DUCTWORK SHALL BE INTERNALLY INSULATED, DOUBLE-WALL METAL "SPIRAL" DUCT. METAL AND INTERNALLY INSULATED. SUPPLY REGISTERS AND TAPS SHALL BE INTERNALLY INSULATED WITH THERMAL BREAKS TO PREVENT CONDENSATION. FLEX DUCT AND DUCT BOARD WILL NOT BE USED TO CONNECT TO DIFFUSERS ABOVE A LAY-IN GRID CEILING, WHICH SHALL BE FULLY CONCEALED FROM VIEW.

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CUPERTINO, CA NOTE: NO GAS TO BE USED IN THIS CASE. ALL ELECTRICAL EQUIPMENT WILL BE ELECTRICAL.

WHEN SPLIT SYSTEMS ARE USED, AND ECONOMIZERS ARE REQUIRED, ECONOMIZERS SHALL BE USED WITH TWO CHASIS WIZARD15000A WITH TWO CHASIS SENSORS FOR DIFFERENTIAL ENTHALPY CONTROL (TO RUN ECONOMIZER).

CONTRACTOR NOTES:

ALL SUPPLY DUCTWORK SHALL BE INTERNALLY INSULATED, DOUBLE-WALL METAL "SPIRAL" DUCT. METAL AND INTERNALLY INSULATED. SUPPLY REGISTERS AND TAPS SHALL BE INTERNALLY INSULATED WITH THERMAL BREAKS TO PREVENT CONDENSATION. FLEX DUCT AND DUCT BOARD WILL NOT BE USED TO CONNECT TO DIFFUSERS ABOVE A LAY-IN GRID CEILING, WHICH SHALL BE FULLY CONCEALED FROM VIEW.

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SPLIT SYSTEM SCHEDULE (HEAT PUMP)

UNIT MARK	MANUFACTURER	TONNAGE	COOL. (BTU/H)	SEER	HEAT (BTU/H)	HSPF	CFM	OUTSIDE AIR (CFM)	SP. HP.	VOLT/PHASE	HCA	MCCP	WEIGHT (LBS)	NOTES
AHU-1	LENNOX	4.0	-	-	-	-	4.0	1600	1.0	208/1	28	30	159	1-6
CH-1	LENNOX	4.0	48,000	15.0	47,500	3.62	-	-	-	208/3	18.92	30/3	202	1,2,3,6

NOTES:

- PROVIDE WITH FACTORY TXV EXPANSION DEVICE.
- SUSPEND AHU FROM STRUCTURE AND INSTALL CONDENSING UNITS ON LOWER ROOF ABOVE SPACE (LEVEL 5).
- ROOF MOUNTED EQUIPMENT WILL NEED TO BE SECURED TO STRUCTURE PER LOCAL REQUIREMENTS.
- 4.0 KW ELECTRIC HEATER MODEL# EC829-8. CONFIRM O.C.P. WITH NAMEPLATE ON AHU AND ADJUST BREAKER/WIRE AS NEEDED, PRIOR TO INSTALL.
- PROVIDE WITH ECONOMIZER WHERE REQUIRED PER LOCAL CODE.
- AHRI REFERENCE # IS 9032383
- DEFROST KICKS IN AT 42°F. ELECTRIC HEAT ONLY NEEDED DURING DEFROST CYCLE.

CONTRACTOR NOTES:

ALL SUPPLY DUCTWORK SHALL BE INTERNALLY INSULATED, DOUBLE-WALL METAL "SPIRAL" DUCT. METAL AND INTERNALLY INSULATED. SUPPLY REGISTERS AND TAPS SHALL BE INTERNALLY INSULATED WITH THERMAL BREAKS TO PREVENT CONDENSATION. FLEX DUCT AND DUCT BOARD WILL NOT BE USED TO CONNECT TO DIFFUSERS ABOVE A LAY-IN GRID CEILING, WHICH SHALL BE FULLY CONCEALED FROM VIEW.

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CUPERTINO, CA NOTE: NO GAS TO BE USED IN THIS CASE. ALL ELECTRICAL EQUIPMENT WILL BE ELECTRICAL.

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AIR DEVICE SCHEDULE

SIZE	TYPE	CFM	Wt. (LBS)	Notes
8"	0	0	180	CFM
10"	0	185	350	CFM
12"	0	355	550	CFM
14"	0	555	850	CFM
16"	0	855	1350	CFM
18"	0	1360	1750	CFM

**USE ABOVE SIZES UNLESS OTHERWISE INDICATED.

CONDENSATE LINE SIZES:

3/4" UP TO 2 TONS CONNECTED.
1" UP TO 5 TONS CONNECTED.
1-1/4" UP TO 25 TONS CONNECTED.
1-1/2" UP TO 50 TONS CONNECTED.
2" UP TO 170 TONS CONNECTED.

HVAC SUMMARY:

960 SQ. FT.
4.0 TONS
240 SF/TON

CONDENSATE LINE SIZES:

3/4" UP TO 2 TONS CONNECTED.
1" UP TO 5 TONS CONNECTED.
1-1/4" UP TO 25 TONS CONNECTED.
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HVAC SUMMARY:

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240 SF/TON

GHA
Architecture / Development
14901 Quorum Drive
Suite 300
Dallas, Texas 75254
Ph: (972) 239-8884
Fax: (972) 239-5064

BISHOPS - TENANT FINISHOUT
MAIN STREET CUPERTINO
19540 VALLEJO PARKWAY
SUITE 100
CUPERTINO, CA 95014

PETER A. LEPTUCH, P.E.
REGISTERED PROFESSIONAL ENGINEER
NO. 00053639
10/24/17

BISHOPS

DO NOT SCALE DRAWINGS
CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS-NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION

NO REVISION

MECHANICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
1	THERMOSTAT @ 48" AFF
2	DUCT MOUNTED SMOKE DETECTOR
3	REMOTE ROOM TEMPERATURE SENSOR AT 96" AFF
4	VOLUME DAMPER
5	MOTORIZED DAMPER WITH ACTUATOR
6	AHU
7	AIR HANDLING UNIT
8	EXHAUST FAN
9	FIRE SMOKE DAMPER
10	BIOMETRIC FLAP DAMPER

EXHAUST FAN SCHEDULE (INLINE)

MARK	MANUFACTURER	MODEL	DRIVE	CFM	DIRECT	EXT. SP. (IN W.C.)	V. PH. HZ	MOTOR SIZE (HP)	SERVICE	NOTES
EF 1	GREENHECK	50-95-VG	DIRECT	480	0.50"	115/1/60	1/8	RR, BARBER & UTILITY RM.	50	PLENUM 1,2

1. CONTROL TO BE INTERLOCKED WITH AHU/CH-1
2. PROVIDE WITH GRAVITY BACK DRAFT DAMPER.

ASHRAE 62.1 Ventilation Comparison (CALIFORNIA)

Standard Case: ASHRAE 62.1 - Table 403.3 Verification Rate Procedure

Zone	Occupancy Category	Area (sf)	People (P)	Outdoor Air (cfm)	Population Density (P/1000sf)	Zone Air Distribution (Ez)	Zone Air Flow (cfm)	Zone Fraction (Vz)	Zone Factor (Zp)	Zone Primary Air Flow (cfm)	Zone Secondary Air Flow (cfm)	Total Outdoor Air (cfm)	Design % by Total Airflow
Salon	Salon	960	7.5	0.06	237.6	0.8	237.6	1	297.0	297.0	0	297.0	61.6%
Total	Total	960	7.5	0.06	237.6	0.8	237.6	1	297.0	297.0	0	297.0	61.6%

V_z = P_z / N_z * A_z
V_z = Total airflow provided by the HVAC equipment (Outdoor + Recirculated).
V_z = V_{out} / E_z
Z_p = V_z / N_z

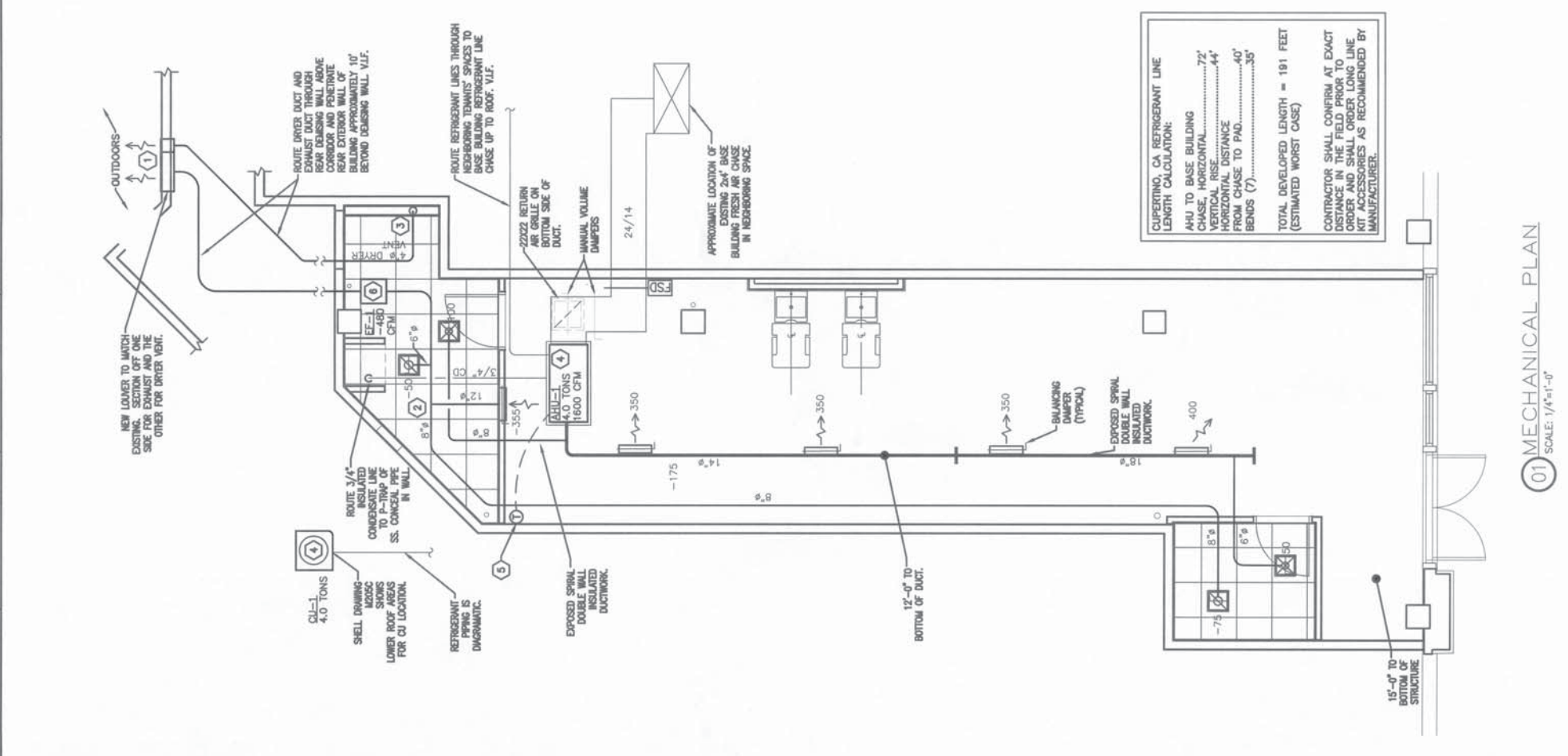
Barber Shop requires 0.5 cfm exh. psf.
Required Exhaust = 0.5 * 960 = 480

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

PROJECT NUMBER: C170339
SHEET NUMBER: 01

ISSUE FOR PERMIT 10/30/17
Peter A. Leptuch, P.E.
CA-M35700/CA-E19022
1236 Golden Eagle Ct.
Aubrey, TX 76227
(940) 735-5127

M10 MECHANICAL PLANS
DATE OF THIS PRINTING: 10/26/17



DO NOT SCALE DRAWINGS
 CONTRACTOR TO VERIFY
 ALL EXISTING CONDITIONS AND
 DIMENSIONS-NOTIFY ARCHITECT
 OF ANY DISCREPANCIES PRIOR
 TO BEGINNING CONSTRUCTION

NO REVISION

ISSUE FOR PERMIT 10/30/17

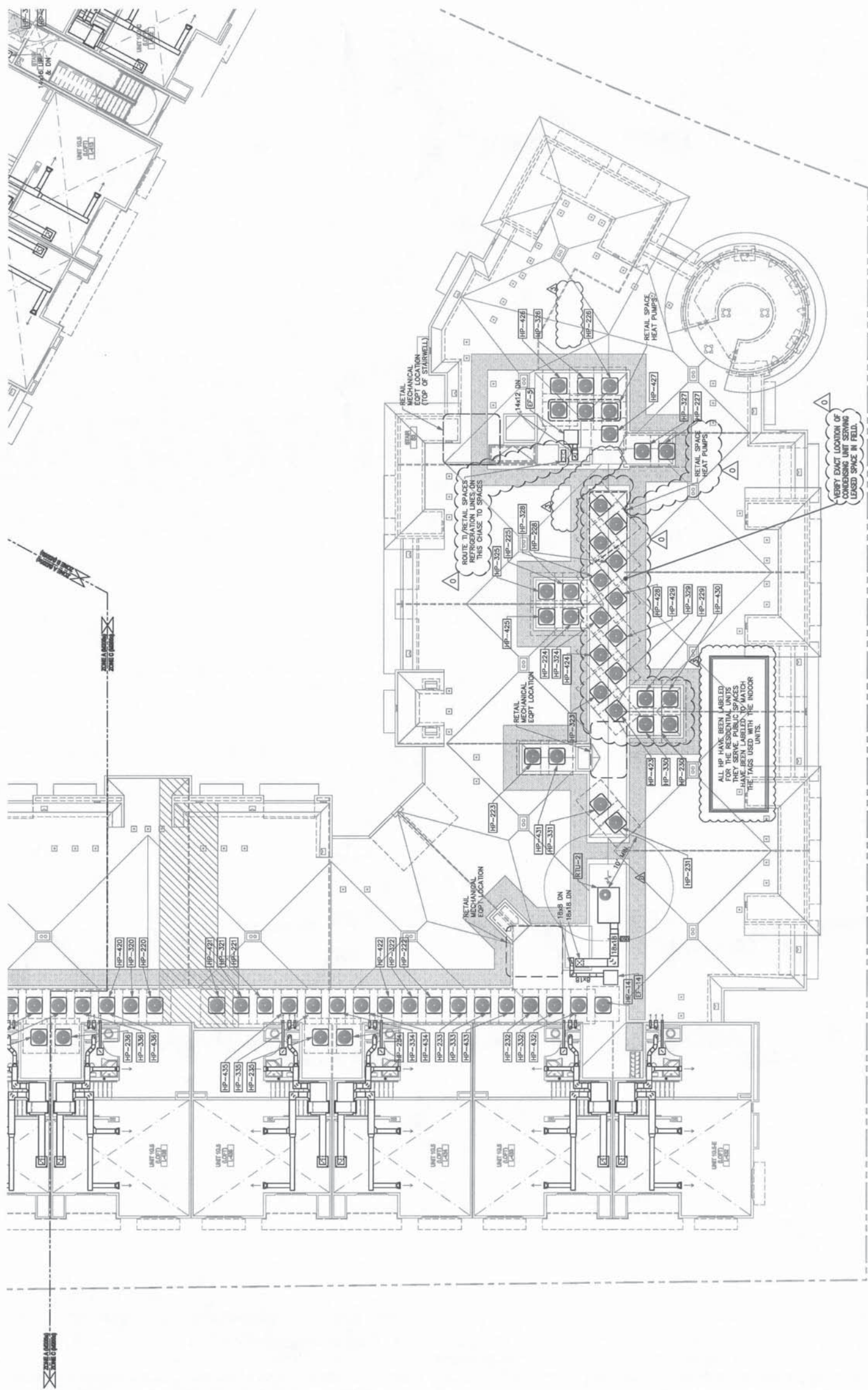
Peter A. Leptuch, P.E.
 CA-M35700/CA-E19072
 1236 Golden Eagle Ct.
 Aubrey, TX 76227
 (940) 735-5127

PROJECT NUMBER
C1703339

SHEET NUMBER
M1.1

MEP SITE PLAN

DATE OF THIS PRINTING - 10/26/17



CUPERTINO, CA NOTE
 REV 0 INDICATES THE AREA
 IMPACTED BY THE TENANT
 FINISHOUT WORK. THIS SHEET IS
 REFERENCED FROM SHELL
 DRAWING SC-408.17 ISSUED
 REF-1, 2016.

CUPERTINO, CA NOTE
 NO INFORMATION AVAILABLE AT
 TIME OF DESIGN AND/OR
 EXISTING CU BAYS WERE BEING
 USED BY OTHER TENANTS.

ALL HP HAVE BEEN LABELED
 FOR THE RESIDENTIAL UNITS
 THEY SERVE. PUBLIC SPACES
 HAVE BEEN LABELED TO MATCH
 THE PMS USED FOR THE INDOOR
 UNITS.

ROUTE TO RETAIL SPACES
 REFRIGERATION LINES ON
 THIS CHASE TO SPACES

VERIFY EXACT LOCATION OF
 CONDENSING UNIT SERVING
 LOADED SPACE IN FIELD.

01 LEVEL 5 MECHANICAL ROOF PLAN
 SCALE: N/A

TABLE 6-5. DUCT SUPPORT
PART 1 - VERTICAL DUCTS

MAXIMUM SIDE OF RECTANGULAR DUCT	METAL STRAP OR ANGLE BRACKET	MAXIMUM DIAMETER OF ROUND DUCTS	STRAPS
ON ROOF ON EXTERIOR OF BUILDING	C, V ¹ AND W	I	A AND W
ATTICS, GARAGES AND CRAWL SPACES	A AND V ¹	II	B AND W
IN WALLS, WITHIN FLOOR-CEILING SPACES ¹	A AND V ¹	III	C AND W
WITH THE CONDITIONED SPACE OR IN BESEMENTS; RETURN DUCTS IN AIR PLENUMS	A AND V ¹	I	A
CEMENT SLAB OR WITHIN GROUND	A AND V ¹	II	A
CEMENT SLAB OR WITHIN GROUND	A AND V ¹	III	B

NOTE: WHERE DUCTS ARE USED FOR BOTH HEATING AND COOLING, THE MINIMUM INSULATION SHALL BE AS REQUIRED FOR THE MOST RESTRICTIVE CONDITION.

- HEATING DEGREE DAYS:
ZONE I BELOW 4500 D.D.
ZONE II 4501 TO 8000 D.D.
ZONE III OVER 8000 D.D.
- VAPOR RETARDERS SHALL BE INSTALLED ON SUPPLY DUCTS IN SPACES VENTED TO THE OUTSIDE IN GEOGRAPHIC AREAS WHERE THE SUMMER DEW POINT TEMPERATURE BASED ON THE 2-1/2% COLUMN OF DRY-BULB AND MEAN CONCURRENT WET-BULB TEMPERATURE EXCEEDS 60 DEG. F.
INSULATION MAY BE OMITTED ON THAT PORTION OF A DUCT WHICH IS LOCATED WITHIN A WALL OR FLOOR CEILING SPACE WHERE:
a. BOTH SIDES OF THE SPACE ARE EXPOSED TO CONDITIONED AIR.
b. THE SPACE IS NOT VENTILATED.
c. THE SPACE IS NOT USED AS A RETURN PLENUM.
d. THE SPACE IS NOT EXPOSED TO UNCONDITIONED AIR.
CEILING WHICH FORM PLENUMS NEED NOT BE INSULATED.
- INSULATION TYPES:
A. A MATERIAL WITH AN INSTALLED CONDUCTANCE OF 0.48 OR THE EQUIVALENT THERMAL RESISTANCE OF 2.1.
EXAMPLE OF MATERIALS CAPABLE OF MEETING THE ABOVE REQUIREMENTS:
1 INCH 60 LB./CU. FT. MINERAL FIBER, ROCK, SLAG OR GLASS BLANKETS.
1/2 INCH, 1.5 TO 3 LB./CU. FT. MINERAL FIBER BLANKET DUCT LINER.
1/2 INCH, 3 TO 10 LB./CU. FT. MINERAL FIBER BOARD.
B. A MATERIAL WITH AN INSTALLED CONDUCTANCE OF 0.24 OR THE EQUIVALENT THERMAL RESISTANCE OF 4.2.
EXAMPLE OF MATERIALS CAPABLE OF MEETING THE ABOVE REQUIREMENTS:
1/2 INCH, 1.5 TO 3 LB./CU. FT. MINERAL FIBER BLANKET DUCT LINER.
1/2 INCH, 3 TO 10 LB./CU. FT. MINERAL FIBER BOARD.
C. A MATERIAL WITH AN INSTALLED CONDUCTANCE OF 0.16 OR THE EQUIVALENT THERMAL RESISTANCE OF 6.3.
EXAMPLE OF MATERIALS CAPABLE OF MEETING THE ABOVE REQUIREMENTS:
3 INCH 0.60 LB./CU. FT. MINERAL FIBER BLANKETS.
1/2 INCH, 1.5 TO 3 LB./CU. FT. MINERAL FIBER BLANKET DUCT LINER.
1/2 INCH, 3 TO 10 LB./CU. FT. MINERAL FIBER BOARD
D. VAPOR RETARDERS: MATERIAL WITH A PERM RATING NOT EXCEEDING 0.5 PERM. ALL JOINTS TO BE SEALED.
E. APPROVED WEATHER PROOF BARRIER.

THE EXAMPLE OF MATERIALS LISTED UNDER EACH TYPE IS NOT MEANT TO LIMIT OTHER AVAILABLE THICKNESS AND DENSITY COMBINATIONS WITH THE EQUIVALENT INSTALLED CONDUCTANCE OR RESISTANCE BASED ON THE INSULATION ONLY.

HVAC Load Calculation - Barber Shop

ASHRAE DESIGN: Design Temp	DB =	35.7
H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-17781.1 (dt = 57f)
H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-11113.2 (dt = 57f)
H_sensible_walls = A * U * dt	H_sensible_walls =	-688.347 (dt = 57f)
H_sensible_floor = A * U * dt	H_sensible_floor =	2880 (dt = 3f)
H_sensible_roof = A * U * dt	H_sensible_roof =	-329.28 (dt = 57f)
H_sensible_window_transmittance = A_glass * U * dt	H_sensible_window_transmittance =	-3112.73

ASHRAE DESIGN: Design Temp

H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-17781.1 (dt = 57f)
H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-11113.2 (dt = 57f)
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H_sensible_window_transmittance = A_glass * U * dt	H_sensible_window_transmittance =	-3112.73

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H_sensible_roof = A * U * dt	H_sensible_roof =	-329.28 (dt = 57f)
H_sensible_window_transmittance = A_glass * U * dt	H_sensible_window_transmittance =	-3112.73

TABLE 6-6. DUCT INSULATION SCHEDULE
2016 CALIFORNIA MECHANICAL CODE

DUCT LOCATION	INSULATION TYPES MECHANICALLY CODED	HEATING ZONE ?	INSULATION TYPES HEATING ONLY
ON ROOF ON EXTERIOR OF BUILDING	C, V ¹ AND W	I	A AND W
ATTICS, GARAGES AND CRAWL SPACES	A AND V ¹	II	B AND W
IN WALLS, WITHIN FLOOR-CEILING SPACES ¹	A AND V ¹	III	C AND W
WITH THE CONDITIONED SPACE OR IN BESEMENTS; RETURN DUCTS IN AIR PLENUMS	A AND V ¹	I	A
CEMENT SLAB OR WITHIN GROUND	A AND V ¹	II	A
CEMENT SLAB OR WITHIN GROUND	A AND V ¹	III	B

NOTE: WHERE DUCTS ARE USED FOR BOTH HEATING AND COOLING, THE MINIMUM INSULATION SHALL BE AS REQUIRED FOR THE MOST RESTRICTIVE CONDITION.

- HEATING DEGREE DAYS:
ZONE I BELOW 4500 D.D.
ZONE II 4501 TO 8000 D.D.
ZONE III OVER 8000 D.D.
- VAPOR RETARDERS SHALL BE INSTALLED ON SUPPLY DUCTS IN SPACES VENTED TO THE OUTSIDE IN GEOGRAPHIC AREAS WHERE THE SUMMER DEW POINT TEMPERATURE BASED ON THE 2-1/2% COLUMN OF DRY-BULB AND MEAN CONCURRENT WET-BULB TEMPERATURE EXCEEDS 60 DEG. F.
INSULATION MAY BE OMITTED ON THAT PORTION OF A DUCT WHICH IS LOCATED WITHIN A WALL OR FLOOR CEILING SPACE WHERE:
a. BOTH SIDES OF THE SPACE ARE EXPOSED TO CONDITIONED AIR.
b. THE SPACE IS NOT VENTILATED.
c. THE SPACE IS NOT USED AS A RETURN PLENUM.
d. THE SPACE IS NOT EXPOSED TO UNCONDITIONED AIR.
CEILING WHICH FORM PLENUMS NEED NOT BE INSULATED.
- INSULATION TYPES:
A. A MATERIAL WITH AN INSTALLED CONDUCTANCE OF 0.48 OR THE EQUIVALENT THERMAL RESISTANCE OF 2.1.
EXAMPLE OF MATERIALS CAPABLE OF MEETING THE ABOVE REQUIREMENTS:
1 INCH 60 LB./CU. FT. MINERAL FIBER, ROCK, SLAG OR GLASS BLANKETS.
1/2 INCH, 1.5 TO 3 LB./CU. FT. MINERAL FIBER BLANKET DUCT LINER.
1/2 INCH, 3 TO 10 LB./CU. FT. MINERAL FIBER BOARD.
B. A MATERIAL WITH AN INSTALLED CONDUCTANCE OF 0.24 OR THE EQUIVALENT THERMAL RESISTANCE OF 4.2.
EXAMPLE OF MATERIALS CAPABLE OF MEETING THE ABOVE REQUIREMENTS:
1/2 INCH, 1.5 TO 3 LB./CU. FT. MINERAL FIBER BLANKET DUCT LINER.
1/2 INCH, 3 TO 10 LB./CU. FT. MINERAL FIBER BOARD.
C. A MATERIAL WITH AN INSTALLED CONDUCTANCE OF 0.16 OR THE EQUIVALENT THERMAL RESISTANCE OF 6.3.
EXAMPLE OF MATERIALS CAPABLE OF MEETING THE ABOVE REQUIREMENTS:
3 INCH 0.60 LB./CU. FT. MINERAL FIBER BLANKETS.
1/2 INCH, 1.5 TO 3 LB./CU. FT. MINERAL FIBER BLANKET DUCT LINER.
1/2 INCH, 3 TO 10 LB./CU. FT. MINERAL FIBER BOARD
D. VAPOR RETARDERS: MATERIAL WITH A PERM RATING NOT EXCEEDING 0.5 PERM. ALL JOINTS TO BE SEALED.
E. APPROVED WEATHER PROOF BARRIER.

THE EXAMPLE OF MATERIALS LISTED UNDER EACH TYPE IS NOT MEANT TO LIMIT OTHER AVAILABLE THICKNESS AND DENSITY COMBINATIONS WITH THE EQUIVALENT INSTALLED CONDUCTANCE OR RESISTANCE BASED ON THE INSULATION ONLY.

ASHRAE DESIGN: Design Temp

H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-17781.1 (dt = 57f)
H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-11113.2 (dt = 57f)
H_sensible_walls = A * U * dt	H_sensible_walls =	-688.347 (dt = 57f)
H_sensible_floor = A * U * dt	H_sensible_floor =	2880 (dt = 3f)
H_sensible_roof = A * U * dt	H_sensible_roof =	-329.28 (dt = 57f)
H_sensible_window_transmittance = A_glass * U * dt	H_sensible_window_transmittance =	-3112.73

ASHRAE DESIGN: Design Temp

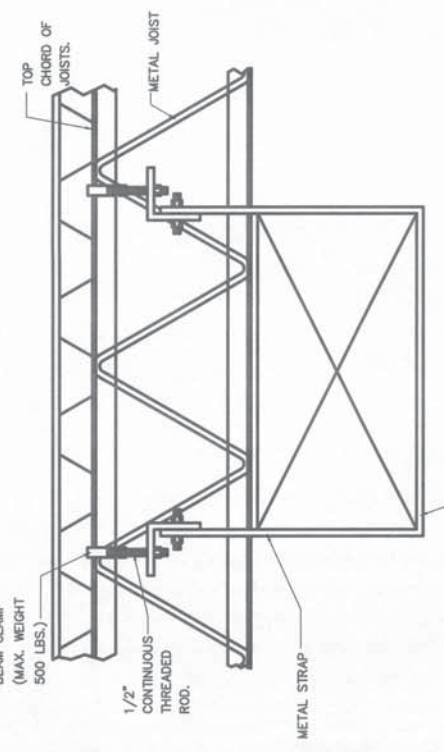
H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-17781.1 (dt = 57f)
H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-11113.2 (dt = 57f)
H_sensible_walls = A * U * dt	H_sensible_walls =	-688.347 (dt = 57f)
H_sensible_floor = A * U * dt	H_sensible_floor =	2880 (dt = 3f)
H_sensible_roof = A * U * dt	H_sensible_roof =	-329.28 (dt = 57f)
H_sensible_window_transmittance = A_glass * U * dt	H_sensible_window_transmittance =	-3112.73

ASHRAE DESIGN: Design Temp

H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-17781.1 (dt = 57f)
H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-11113.2 (dt = 57f)
H_sensible_walls = A * U * dt	H_sensible_walls =	-688.347 (dt = 57f)
H_sensible_floor = A * U * dt	H_sensible_floor =	2880 (dt = 3f)
H_sensible_roof = A * U * dt	H_sensible_roof =	-329.28 (dt = 57f)
H_sensible_window_transmittance = A_glass * U * dt	H_sensible_window_transmittance =	-3112.73

ASHRAE DESIGN: Design Temp

H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-17781.1 (dt = 57f)
H_sensible_OA = 1.08 * cfm * delta T	H_sensible_OA =	-11113.2 (dt = 57f)
H_sensible_walls = A * U * dt	H_sensible_walls =	-688.347 (dt = 57f)
H_sensible_floor = A * U * dt	H_sensible_floor =	2880 (dt = 3f)
H_sensible_roof = A * U * dt	H_sensible_roof =	-329.28 (dt = 57f)
H_sensible_window_transmittance = A_glass * U * dt	H_sensible_window_transmittance =	-3112.73



01 DUCTWORK SUPPORT DETAIL
SCALE: 1/4"=1'-0"

NOT TO SCALE

MAX. SIDE INCHES	ALUMINUM MIN. B & S GAUGE
THROUGH 12	24 (0.020 IN.)
THROUGH 30	22 (0.025 IN.)
31 THROUGH 54	20 (0.032 IN.)
55 THROUGH 84	18 (0.040 IN.)
OVER 84	16 (0.051 IN.)



02 DUCT INSULATION AND SUPPORT
SCALE: 1/4"=1'-0"

NOT TO SCALE

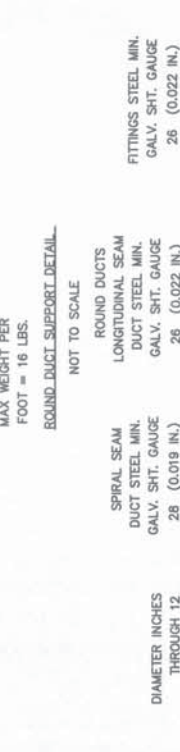
MAX. SIDE INCHES	ALUMINUM MIN. B & S GAUGE
THROUGH 12	24 (0.020 IN.)
THROUGH 30	22 (0.025 IN.)
31 THROUGH 54	20 (0.032 IN.)
55 THROUGH 84	18 (0.040 IN.)
OVER 84	16 (0.051 IN.)



03 ROUND DUCT SUPPORT DETAIL
SCALE: 1/4"=1'-0"

NOT TO SCALE

DIAMETER INCHES	SPRALL SEAM DUCT STEEL MIN. GALV. SHT. GAUGE	ROUND DUCTS LONGITUDINAL SEAM DUCT STEEL MIN. GALV. SHT. GAUGE
13 THROUGH 18	26 (0.022 IN.)	26 (0.022 IN.)
19 THROUGH 26	24 (0.028 IN.)	24 (0.028 IN.)
29 THROUGH 36	22 (0.034 IN.)	22 (0.034 IN.)
37 THROUGH 52	20 (0.040 IN.)	18 (0.052 IN.)



04 DUCTWORK SUPPORT DETAIL
SCALE: 1/4"=1'-0"

NOT TO SCALE

MAX. SIDE INCHES	ALUMINUM MIN. B & S GAUGE
THROUGH 12	24 (0.020 IN.)
THROUGH 30	22 (0.025 IN.)
31 THROUGH 54	20 (0.032 IN.)
55 THROUGH 84	18 (0.040 IN.)
OVER 84	16 (0.051 IN.)



05 DUCTWORK SUPPORT DETAIL
SCALE: 1/4"=1'-0"

NOT TO SCALE

MAX. SIDE INCHES	ALUMINUM MIN. B & S GAUGE
THROUGH 12	24 (0.020 IN.)
THROUGH 30	22 (0.025 IN.)
31 THROUGH 54	20 (0.032 IN.)
55 THROUGH 84	18 (0.040 IN.)
OVER 84	16 (0.051 IN.)



DO NOT SCALE DRAWINGS CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS-NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION

ISSUE FOR PERMIT 10/30/17 Peter A. Leptuch, P.E. CA-M35700/CA-E19072 1236 Golden Eagle Ct. Aubrey, TX 76222 (940) 735-5127

MECHANICAL HVAC ACCEPTANCE FORMS (Check box for required compliance documents) This compliance document is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for HVAC systems. The designer is required to check the applicable boxes for all acceptance tests that apply and list all equipment that requires an acceptance test. All equipment of the same type that requires a test, list the equipment description and the number of units.

Table with columns for Test Description, MCH-12-A, MCH-13-A, MCH-14-A, MCH-15-A, MCH-16-A, MCH-17-A, MCH-18-A, MCH-19-A, and MCH-20-A. Rows include equipment requiring testing, fan leakage, and various control systems.

MECHANICAL HVAC ACCEPTANCE FORMS (Check box for required compliance documents) This compliance document is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for HVAC systems. The designer is required to check the applicable boxes for all acceptance tests that apply and list all equipment that requires an acceptance test. All equipment of the same type that requires a test, list the equipment description and the number of units.

Table with columns for Test Description, MCH-21-A, MCH-22-A, MCH-23-A, MCH-24-A, MCH-25-A, MCH-26-A, MCH-27-A, MCH-28-A, MCH-29-A, and MCH-30-A. Rows include heating equipment efficiency, cooling equipment efficiency, and various control systems.

MECHANICAL COMPLIANCE DOCUMENTS & NONRESIDENTIAL FORMS (Check box for required compliance documents) This compliance document is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for HVAC systems. The designer is required to check the applicable boxes for all acceptance tests that apply and list all equipment that requires an acceptance test. All equipment of the same type that requires a test, list the equipment description and the number of units.

Table with columns for Test Description, MCH-31-A, MCH-32-A, MCH-33-A, MCH-34-A, MCH-35-A, MCH-36-A, MCH-37-A, MCH-38-A, MCH-39-A, and MCH-40-A. Rows include duct leakage, fan coil units, and various control systems.

Table with columns for Test Description, MCH-41-A, MCH-42-A, MCH-43-A, MCH-44-A, MCH-45-A, MCH-46-A, MCH-47-A, MCH-48-A, MCH-49-A, and MCH-50-A. Rows include heating equipment efficiency, cooling equipment efficiency, and various control systems.

Table with columns for Test Description, MCH-51-A, MCH-52-A, MCH-53-A, MCH-54-A, MCH-55-A, MCH-56-A, MCH-57-A, MCH-58-A, MCH-59-A, and MCH-60-A. Rows include heating equipment efficiency, cooling equipment efficiency, and various control systems.

MECHANICAL COMPLIANCE DOCUMENTS & NONRESIDENTIAL FORMS (Check box for required compliance documents) This compliance document is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for HVAC systems. The designer is required to check the applicable boxes for all acceptance tests that apply and list all equipment that requires an acceptance test. All equipment of the same type that requires a test, list the equipment description and the number of units.

Documentation and Declaration Statement form including fields for Designer, Designer Signature, Date, Title, and Project Name. Includes a section for Responsible Person's Declaration Statement.



DO NOT SCALE DRAWINGS
 CONTRACTOR TO VERIFY
 ALL EXISTING CONDITIONS AND
 DIMENSIONS-NOTIFY ARCHITECT
 OF ANY DISCREPANCIES PRIOR
 TO BEGINNING CONSTRUCTION

ISSUE

ISSUE FOR PERMIT 10/30/17
 Peter A. Leptuch, P.E.
 CA-M35700/CA-E19072
 1236 Golden Eagle Ct.
 Aubrey, TX 76227
 (940) 735-5127



STATE OF CALIFORNIA
WATER HEATING SYSTEM GENERAL INFORMATION
 CERTIFICATE OF COMPLIANCE
 Project Name: **Bishops**
 Date Issued: **10/23/2017**
 (Page 2 of 2)

DOCUMENTATION AGENCIES DECLARATION STATEMENT
 I, the undersigned, hereby certify that the information provided in this Declaration is true and complete. I understand that I am responsible for the building design or system design identified on this Certificate of Compliance (responsible designer).
 1. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
 2. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
 3. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, understood that a completed Certificate of Compliance is required to be included with the documentation that is submitted to the building department at occupancy.

Responsible Designer Name: **Peter A. Leptuch**
 Address: **1236 Golden Eagle Court, Aubrey, TX 76227**
 Phone: **(940) 735-5127**

Responsible Designer's Signature: *[Signature]*
 Date Signed: **10/23/2017**
 License No: **M35700**
 City/State: **Aubrey, TX 76227**
 Phone: **(940) 735-5127**

STATE OF CALIFORNIA
WATER HEATING SYSTEM GENERAL INFORMATION
 CERTIFICATE OF COMPLIANCE
 Project Name: **Bishops**
 Date Issued: **10/23/2017**
 (Page 1 of 2)

A. GENERAL INFORMATION/SYSTEM INFORMATION

01. Water Heater System Name: **A.O. Smith Water Products DEL 40**
 02. Water Heater System Configuration: **Non-Central**
 03. Water Heater System Type:
 04. Building Type:
 05. Total Number of Water Heaters in Systems: **1**
 06. Central DHW Distribution Type: **R/R**
 07. Dwelling Unit DHW Distribution Type: **All Pipes Ins**

B. WATER HEATER INFORMATION
 Each water heater type requires a separate compliance document.

01. Water Heater Type: **Small Storage Electric**
 02. Fuel Type: **Electric Pkg**
 03. Manufacturer Name: **A.O. Smith Water Products DEL 40**
 04. Model Number:
 05. Number of Identical Water Heaters: **1**
 06. Installed Water Heater System Efficiency: **1.00**
 07. Required Minimum Efficiency: **1.00**
 08. Standby Loss Percent or Standby Loss Total: **0.750**
 09. Rated Input:
 10. Pilot Energy: **20.478**
 11. Water Heater Tank Storage Volume: **40**
 12. Exterior Insulation on Water Heater:
 13. Volume of Supplemental Storage:
 14. Internal Insulation on Supplemental Storage:
 15. Exterior Insulation on Supplemental Storage:

C. PLUMBING COMPLIANCE FORMS & WORKSHEETS
 Check box if worksheet is included.
 For detailed instructions on the use of this end of Energy Standards compliance documents, refer to the 2016 Approved Manual. Note: The Enforcement Agency may require all compliance documents to be incorporated into the building plans.

YES	NO	Doc/Worksheet #	Title
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRCC-PUB-01-E	Certificate of Compliance, Declaration. Required on plans for all submittals.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRCC-PUB-01-E	Certificate of Installation. Required on plans for all submittals.
<input type="checkbox"/>	<input type="checkbox"/>	NRCC-PUB-01-E	Certificate of Installation, required on central systems in high-rise residential, hotels/motel application.
<input type="checkbox"/>	<input type="checkbox"/>	NRCC-PUB-01-E	Certificate of Installation, required on single dwelling unit systems in high-rise residential, hotels/motel application.
<input type="checkbox"/>	<input type="checkbox"/>	NRCC-PUB-21-H	Certificate of Installation, required on HERS verified central systems in high-rise residential, hotels/motel application.
<input type="checkbox"/>	<input type="checkbox"/>	NRCC-PUB-22-H	Certificate of Installation, required on HERS verified single dwelling unit systems in high-rise residential, hotels/motel application.
<input type="checkbox"/>	<input type="checkbox"/>	NRCC-UST-01-E	Certificate of Installation, required on any solar water heating.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	CW	HW	W	V	ADA	DESCRIPTION
WC-ADA	WATER CLOSET	1"	---	4"	2"	YES	FIXTURES: SEAM WETS 2020.1001-1.28 MANUAL SLOAN ROYAL 111-1.28 HET FLUSHMETER AND ADA COMPLIANT HOT WATER CLOSET (SUPPLY LINES 1") COLOR: TBD SEAT: CHAMPION 6328.010 (DISTRIBUTION LINES: 1-1/2")
LAV	LAVATORY	1/2"	1/2"	2"	1-1/2"	YES	FIXTURE: AMERICAN STANDARD "LUCRINE" WALL-HUNG LAVATORY, WITH VITREOUS CHINA FAUCET, AMERICAN STANDARD "LUCRINE" WALL-HUNG LAVATORY, WITH VITREOUS CHINA FAUCET, CAST BRASS BODY, LESS POP-UP DRAIN, RED AND HOLLEMAN, HOLEMAN, HOLEMAN, VANDAL-RESISTANT, PRESSURE COMPENSATING MULTI-LAMINAR SPRAY, MIXING VALVES SHALL BE POWERS, #JM465; ASSE 1070.
SS	SERVICE SINK	1/2"	1/2"	3"	1-1/2"	YES	FIXTURES: FLOOR MOUNTED MOP SINK 24"x24", MODEL #8232 W/ ADA LEVER HANDLES, SS DOME STRAINER AND LINT BASKET, FAUCET: MOEN #9232 W/ ADA LEVER HANDLES, SS DOME STRAINER AND LINT BASKET.
FD	FLOOR DRAIN	---	---	3"	1-1/2"	---	3" CAST IRON FLOOR DRAIN WITH POLISHED NICKEL BRONZE TOP, ZURN Z-415-4 (SQUARE) J.R. SMITH NO 20059-JA, JCSJM0000-5 OR APPROVED EQUAL, ADJUSTABLE STRAINER WITH PLUSHING CLAMP DEVICE, PROVIDE TRAP PRIMER CONNECTION PER U.L. REQUIREMENTS.
LB	WASHING MACHINE BOX	VARIES	VARIES	2"	1-1/2"	---	FIXTURE: OATEY #38747 WITH INTEGRAL SHOCK ARRESTERS OR EQUAL.
TP	TRAP PRIMER	---	---	---	---	---	FIXTURE: MCGUIRE #6809 / SUPPLIES: MCGUIRE #21055CC. COLOR: WHITE, TRAP PRIMER LINES SHALL BE PIPED THRU DRAIN COPPER, NO EXCEPTIONS.
WHA	WATER HAMMER ARRESTOR	1/2"	---	---	---	---	PROVIDE AND INSTALL AT ALL FAST CLOSING VALVES, INCLUDING FLUSH VALVES, AND AT ENDS OF FIXTURE RUNS.
SB	SHAMPOO BOWL	3/4"	3/4"	2"	1-1/2"	YES	COLLINS SQUARE PORCELAIN BOWL, CB80, WHITE, WITH JEFFCO 570 SINGLE HANDLE FAUCET, SPRAY HOSE, VACUUM BREAKER, DRAIN ASSEMBLY, AND MOUNTING BRACKET, 19" W x 20" D x 10" H, TRADITIONAL SIDEWASH BOWL, HAIR TRAP (MARBLE 1701) TO BE FURNISHED AND INSTALLED BY G.C. COLLINS AND COMPANY, CONTRACTOR: COSMO-PROF - GREG MCLELLAN, SALON DESIGNS AND SALES, (425) 457-2944, gcollins@cosmoprof.com
HS	DROP-IN SINK	1/2"	1/2"	2"	1-1/2"	YES	PROVIDED BY OWNER, INSTALLED BY G.C. HAIR TRAP (MARBLE 1701) AND MIXING VALVE (POMERS #JM465-1; ASSE 1070) TO BE FURNISHED AND INSTALLED BY G.C.
RP	RECIRCULATION PUMP	---	1"	---	---	---	GRUNDFOG LP10-16 BU SERIES, 20A/1P POWER, PROVIDE WITH AQUASTAT AND THERM, 35"-203" SERVICE, 2.2 GPM, 3.9 TOTAL HEAD FT, 115 VOLTS.
WH	WATER HEATER (ELECTRIC)	1"	1"	---	---	---	AO SMITH DEL-40, OR EQUAL, TWO 3.0 KW STAGES, 21.75" DIAMETER, 24" DRAIN PAN, 40 STORAGE GALLONS, GLASS LINING, 120/208 VOLTS 3 PHASE, 6 KW, SEE WH, SCHEDULE, SHEET MEP2.0.
DF	DRINKING FOUNTAIN	1/2"	---	2"	1-1/2"	YES	ELKAY - ETJLBC BARRIER FREE HI-LOW DRINKING FOUNTAIN, REFER TO ELKAY TEMPLATE FOR WATER ROUGH-IN HEIGHT, CANE APRON, APPROX. 19" AFF, PROVIDE APRON LÖAPREZL, INSTALL PER ADA.
FS	FLOOR SINK	---	---	4"	2"	YES	JOSAM 49320-PVC 3" 12X12X8 PVC SQUARE, WITH DOME STRAINER AND HALF-GRATE.

NOTES:
1. ALL FIXTURES MAY BE SUBSTITUTED FOR APPROVED EQUALS.
2. NOT ALL FIXTURES USED ON ALL JOBS.
3. ALL FIXTURES - PROVIDE TRAP PRIMERS WHERE REQUIRED BY LOCAL CODES AND/OR A.H.J.

PLUMBING GENERAL NOTES

- CONTRACTORS AND SUB CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCING THE COMPLETE DOCUMENT SET.
- COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY THE OWNER AND CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.
- ALL ROOFING WORK (GUTS, REPAIRS, SPUD WORK, ETC.) SHALL BE PERFORMED BY THE LANDLORD'S APPROVED DRAWING CONTRACTOR.
- CONTRACTORS SHALL PROVIDE DIAGNOSTIC DRAWINGS SHOWING THE GENERAL LOCATION, EQUIPMENT TYPE AND INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE PLUMBING CONNECTIONS, OFFSETS, ACCESSORIES AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
- ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE AUTHORITY HAVING JURISDICTION INCLUDING APPLICABLE LOCAL, STATE AND NATIONAL CODES THE TIME OF THE WASTE PIPING SHALL BE ALLEYS ASSOCIATED WITH THE WORK AND OBTAIN ALL INSPECTIONS REQUIRED BY CODE. ELEMENTS AND ALLOW FOR REPAIRS WITHOUT TEARING OUT A FINISHING WALL, ETC.
- TRENCHING OF EXISTING REINFORCED CONCRETE FLOOR SLAB IS TO BE KEPT TO A MINIMUM QUANTITY AND WIDTH. WHERE CODES PERMIT, GROUP UNDER FLOOR UTILITIES IN SINGLE TRENCHES. THE MINIMUM TRENCH WIDTH IS TO BE TWELVE INCHES (12"). DOWEL NEW SLAB INFILLS INTO EXISTING SLAB EDGES. PROVIDE SLAB INFILL STEEL REINFORCING TO MATCH EXISTING. COAT SAWCUT SLAB EDGES WITH HIGH-STRENGTH BONDING AGENT. LAY IN NEW UNDERSLAB VAPOR BARRIER, LAP AND SEAL TO EXISTING VAPOR BARRIER.
- ITEMS FROM THE BOTTOM ROOF, JUST OR MOST GREYER CHORDS, WITHIN THE FOOT PRINT OF THE ROOF STRUCTURE, SHALL BE SUSPENDED FROM THE ROOF STRUCTURE, FOR REVIEW BY SHELL STRUCTURAL ENGINEER.
- IN GENERAL, NO DUCTWORK, PIPES, BANNERS, SIGNAGE, OR CURTAIN/SUSPENDED FURR-DOWNS OR WALL ARE TO BE SUSPENDED FROM THE BOTTOM OF THE ROOF STRUCTURE, WITHOUT APPROVAL. NO TENANT FINISHOUT WORK IS TO BE SUSPENDED FROM ANY WORK BY ANOTHER TRADE, FROM JOIST BRACING OR FROM X-BRACING OR FROM THE BOTTOM OF THE ROOF DECK, SUSPENDED TEE GRID CEILINGS AND LIGHT FIXTURES MAY BE SUSPENDED FROM THE BOTTOM CHORDS, JUST OR MOST GREYER CHORDS, WITHIN THE FOOT PRINT OF THE ROOF STRUCTURE. SUSPENDED CEILINGS AND LIGHT FIXTURES ARE NOT TO BE SUSPENDED FROM THE BOTTOM OF THE ROOF DECK.
- SET MAXIMUM TEMPERATURE AT HAND SINKS AT 110°F.
- PROVIDE HEAT TRACE ON ALL PIPES INSTALLED IN AREAS SUBJECT TO FREEZING. INSTALL PIPING ON CONDITIONED SIDE OF BUILDING INSULATION.
- IN ADDITION TO AT FIXTURES WHERE REQUIRED BY A.H.J., PROVIDE HEAT TRACE ON ALL PIPING, IN ADDITION TO AT FIXTURES WHERE REQUIRED BY A.H.J.
- LABEL ALL ABOVE CEILING VALVES, AND/OR EQUIPMENT, ON A BAR GRID, ON ACCESS PANELS SERVING SUCH EQUIPMENT. USE 1/2" TEXT ON WHITE PEEI AND STICK LABELS.

Thermostatic mixing valve note:
ALL TEMPERING VALVES TO BE ASSE1070 OR CSAB125.3

CALIFORNIA NOTE:
ALL PLUMBING FIXTURES AND FITTINGS SHALL MEET THE STANDARDS REFERENCED IN TABLE 401.1 OF THE 2016 CPC AND CGSBC CHAPTER 6, CGSBC SECTION 5.303.6

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT, LANDLORD OR TENANT OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK. BIDDERS ARE TO VISIT THE PROJECT SITE TO VERIFY THE EXISTING CONDITIONS AND SANITARY THEMES AS TO THE NATURE AND SCOPE OF WORK. THE BASE BID SHALL REFLECT MODIFICATIONS TO SYSTEMS AND DEVICES AS REQUIRED BY STATE AND LOCAL CODES WHICH ARE INDICATED OR NOT ON CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE EVIDENCE THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES/REQUIREMENTS HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN ANTICIPATED BY THE CONTRACTOR WILL NOT BE ALLOWED.

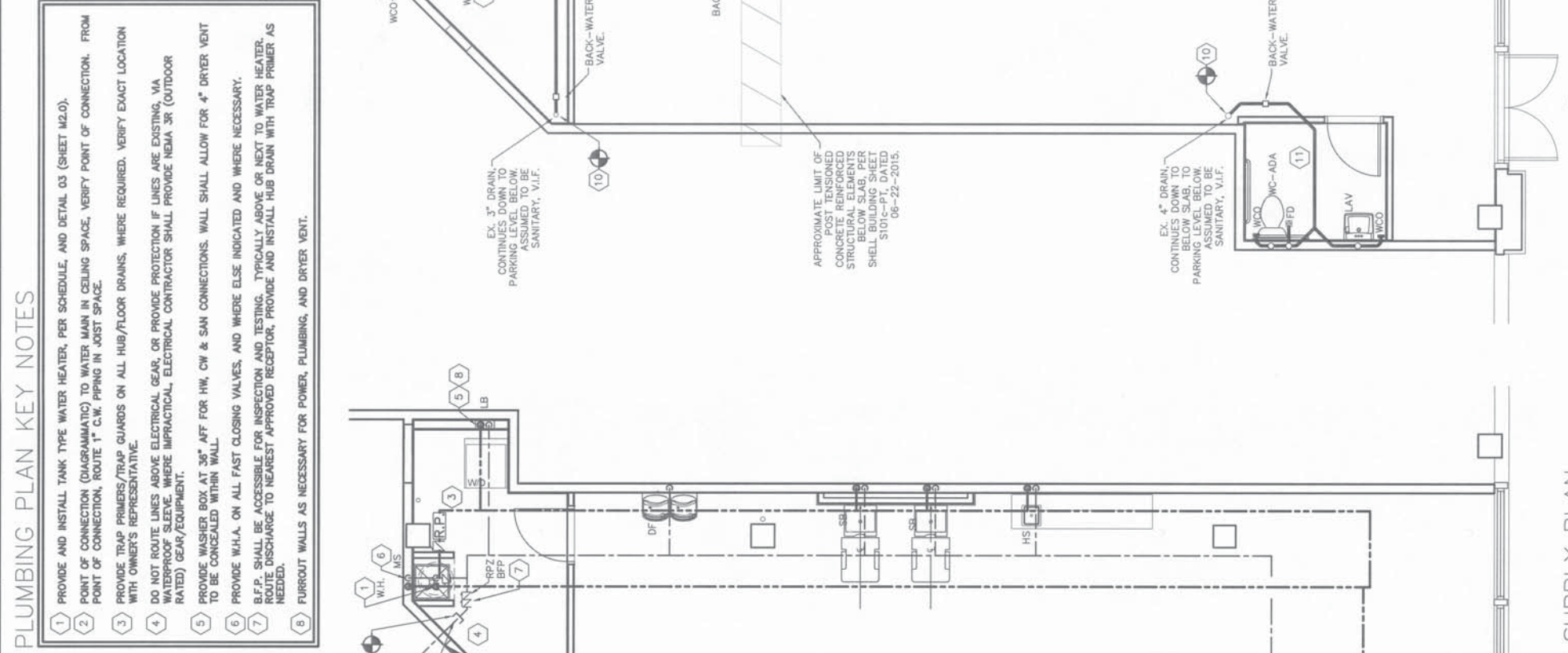
BISHOPS TYPICAL:
MINIMUM WATER SIZE WITH FLUSH VALVE TOILETS SHALL BE 1-1/4" MINIMUM WATER LINE SIZE WITH FLUSH TANK. TOILETS MAY BE 3/4" OR 1" DEPENDING ON SITE CONDITIONS.

PLUMBING PLAN KEY NOTES

- PROVIDE AND INSTALL TANK TYPE WATER HEATER, PER SCHEDULE, AND DETAIL 03 (SHEET M2.0).
- POINT OF CONNECTION (DIAGRAMMATIC) TO WATER MAIN IN CEILING SPACE, VERIFY POINT OF CONNECTION. FROM POINT OF CONNECTION, ROUTE 1" C.W. PIPING IN JOIST SPACE.
- PROVIDE TRAP PRIMERS/TRAP GUARDS ON ALL HUB/FLOOR DRAINS, WHERE REQUIRED. VERIFY EXACT LOCATION WITH OWNER'S REPRESENTATIVE.
- DO NOT ROUTE LINES ABOVE ELECTRICAL GEAR, OR PROVIDE PROTECTION IF LINES ARE EXISTING, VIA WATERPROOF SLEEVE. WHERE IMPRACTICAL, ELECTRICAL CONTRACTOR SHALL PROVIDE NEMA 3R (OUTDOOR RATED) GEAR/EQUIPMENT.
- PROVIDE WASHER BOX AT 35" AFF FOR HW, CW & SAN CONNECTIONS. WALL SHALL ALLOW FOR 4" DRYER VENT TO BE CONCEALED WITHIN WALL.
- PROVIDE W.A.H. ON ALL FAST CLOSING VALVES, AND WHERE ELSE INDICATED AND WHERE NECESSARY.
- B.F.P. SHALL BE ACCESSIBLE FOR INSPECTION AND TESTING. TYPICALLY ABOVE OR NEXT TO WATER HEATER. ROUTE DISCHARGE TO NEAREST APPROVED RECEPTOR, PROVIDE AND INSTALL HUB DRAIN WITH TRAP PRIMER AS NEEDED.
- FURROUT WALLS AS NECESSARY FOR POWER, PLUMBING, AND DRYER VENT.

CALIFORNIA NOTE:
ALL FIXTURES SHALL BE THE MINIMUM WATER EFFICIENCY RATES OF THE FOLLOWING FIXTURES PER CGSBC TABLE 5.303.2.2
BLAVATORS - 2.0 GPM @ 80 PSI
BLAVATORS - 0.5 GPM @ 80 PSI
DUALS (FLOOR MOUNTED) - 0.5 GALLONS/FLUSH
EURNALS (WALL MOUNTED) - 0.125 GALLONS/FLUSH
CONFIRM AT TIME OF ORDER AND IF THESE EFFICIENCIES ARE NOT MET, ORDER THE NEAREST EQUAL FIXTURE AVAILABLE FROM THE PLUMBING SUPPLY HOUSE THAT MEETS THE ABOVE FLOW REQUIREMENTS.

- CUPERTINO, CA - EACH RETAIL SUITE HAS ITS OWN INDIVIDUAL 2" METER AT LANDLORD'S METERING ROOM, PER SITE INVESTIGATION REPORT.
- CONNECTION TO EXISTING SANITARY SEWER MAIN LOCATION SHOWN IS DIAGRAMMATIC, AT APPROXIMATELY THE LOCATION INDICATED. COORDINATE EXACT LOCATION IN FIELD. MINIMIZE NUMBER OF TIE IN POINTS. VERIFY LOCATION, INVERT, AND DIRECTION OF FLOW PRIOR TO CONNECTING.
- SLOPE UNDERSLAB 4" SANITARY LINE AT 1/8" PER FOOT. VERIFY EXACT POINT OF CONNECTION IN FIELD.
- COORDINATE ROUTING OF UNDERSLAB WASTE LINES IN FIELD WITH STRUCTURAL ELEMENTS.



PLUMBING LEGEND:
HW HOT WATER SUPPLY LINE
CW COLD WATER SUPPLY LINE
X SW SANITARY WASTE LINE
PIPE DROP
RISER VENT (DASHED)
TRAP PRIMER
CONTINUATION
END CAP
ISOLATION / SHUT-OFF VALVE
EXTENT OF SAWCUTTING/ TRENCHING
WATER SUBMETER, BETWEEN VALVE AND 1ST FIXTURE
REMOTE READOUT FOR SUBMETER, +54" VERIFY LOCATION WITH OWNER'S REP.
CONNECTION OF NEW TO EXISTING.
REDUCED PRESSURE ZONE BACK FLOW ASSEMBLY
CHECK VALVE
RECIRCULATION PUMP
WALL CLEAN OUT
FLOOR CLEAN OUT
VENT THRU ROOF
EXISTING PIPING
VENT

CUPERTINO, CA NOTE:
THE CONTRACTOR SHALL CONFIRM THAT ALL POINTS OF CONNECTION TO SANITARY LINES ARE IN FACT SANITARY AND NOT ROOF DRAIN LEADERS OR GREASE WASTE LINES.

CUPERTINO, CA NOTE:
BASE BID TO ASSUME THAT THE JURISDICTION REQUIRES CONTAINMENT BACK FLOW PREVENTION, INCLUDING PLUMBING INSPECTOR IF BUILDING HAS MAIN RPZEP AND REQUIRE ADDITIONAL BFP IN SPACE. THE PLUMBER MAY OMIT BFP, IF JURISDICTION REQUIRES ISOLATION BFP. THE PLUMBING CONTRACTOR SHALL OMIT THE RPZ BFP NEAR THE MOP SINK INSTALLED IN WATER BAR. THE DRAINING AND FOUNTAIN, AS APPLICABLE/AS REQUIRED AND ELSEWHERE AS DETERMINED BY THE PLUMBING INSPECTOR.

CONNECT NEW TO EXISTING
2" AND 3" SANITARY LINES SHALL HAVE 1-1/2" VENT RISERS, 4" SANITARY LINES SHALL HAVE 2" VENT RISERS. PROVIDE THROUGH ROOF OR THROUGH WALL. PROVIDE THROUGH WALL UNLESS OTHERWISE ALLOWED/ REQUIRED BY A.H.J.
VERIFY ALL CONDITIONS IN FIELD.

ALL PLUMBING AND ELECTRICAL SHALL BE CONCEALED WITHIN WALLS OR ABOVE CEILING. SOME LINES MAY BE OFFSET TO SHOW DIAGRAMMATIC CONNECTIONS.

BISHOPS - TENANT FINISHOUT
19540 VALLEJO PARKWAY
SUITE 100
CUPERTINO, CA 95014

REGISTERED PROFESSIONAL ENGINEER
PE #17470
M 35700
10/24/17

DO NOT SCALE DRAWINGS
CONTRACTOR TO VERIFY
ALL EXISTING CONDITIONS AND
DIMENSIONS-NOTIFY ARCHITECT
OF ANY DISCREPANCIES PRIOR
TO BEGINNING CONSTRUCTION

NO REVISION

ISSUE FOR PERMIT 10/30/17
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PROJECT NUMBER
C170339

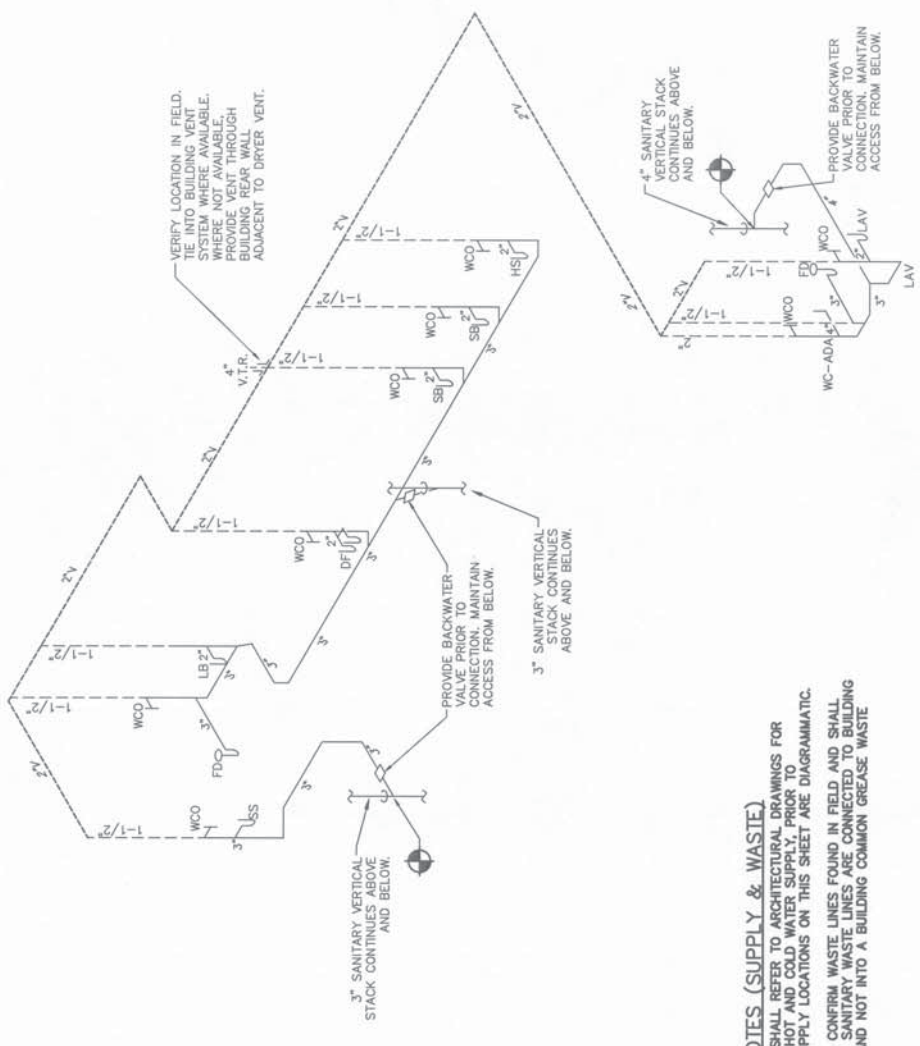
SHEET NUMBER
P1.0

GH/A
Architecture / Development
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FIELD VERIFY LOCATION OF PLUMBING VTR, INSTALL AFTER ALL HVAC UNITS ARE IN PLACE TO ENSURE NO VENT IS WITHIN 10'-0" OF ANY FRESH AIR INTAKE OR EXHAUST UNITS. UNNECESSARY ROOF PENETRATIONS ARE MADE.

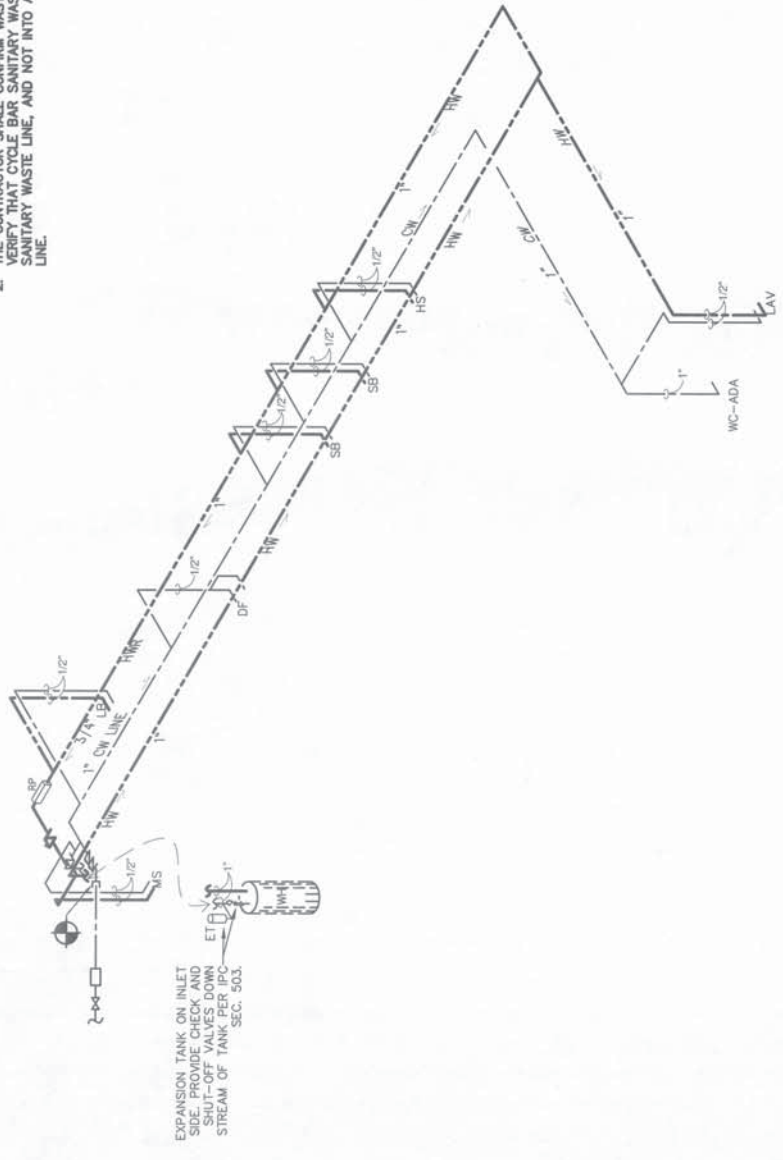
PLUMBING CONTRACTOR SHALL MAKE ADJUSTMENTS WHERE NECESSARY TO KEEP PLUMBING VENTS A MINIMUM OF 10'-0" AWAY FROM ALL FRESH AIR INTAKE OR EXHAUST UNITS. UNNECESSARY ROOF PENETRATIONS ARE MADE.

VERIFY LOCATION IN FIELD. VERIFY VENT IS NOT IN SYSTEM WHERE AVAILABLE. WHERE NOT AVAILABLE, PROVIDE VENT THROUGH BUILDING REAR WALL ADJACENT TO DIRTY VENT.



PLUMBING RISER NOTES (SUPPLY & WASTE)

1. PLUMBING CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR PLACEMENT OF SHOWER HOT AND COLD WATER SUPPLY PRIOR TO INSTALLATION. WATER SUPPLY LOCATIONS ON THIS SHEET ARE DIAGRAMATIC.
2. THE CONTRACTOR SHALL CONFIRM WASTE LINES FOUND IN FIELD AND SHALL VERIFY THAT CYCLE BAR SANITARY WASTE LINES ARE CONNECTED TO BUILDING SANITARY WASTE LINE, AND NOT INTO A BUILDING COMMON GREASE WASTE LINE.



ALL PLUMBING SUPPLY LINES SHALL BE 1/2" UNLESS INDICATED OTHERWISE.
 PROVIDE TRAP PRIMERS ON ALL FIXTURES WHOSE TRAP SEALS ARE SUBJECT TO DRYING OUT.

01 PLUMBING SUPPLY RISER
 SCALE: NOT TO SCALE

02 PLUMBING WASTE RISER
 SCALE: NOT TO SCALE

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Project Name: Mainstreet Lofts
 Project Number: 2045-001
 Edited By: BK
 Edit Date: 3/21/14

WATER SUPPLY PIPE SIZING CALCULATION FORM
AVAILABLE PRESSURE IS > 80 PSI.

SIZING IS PER CPC & APPENDIX A.

SUPPLY WATER PRESSURE AFTER SUBMETER: 36 PSI STATIC PRESSURE

STATIC LIFT: 5 FEET = 2.2 PSI

REQUIRED MINIMUM PRESSURE AT FURTHEST PLUMBING FIXTURE: 30 PSI

PRESSURE AVAILABLE TO OFFSET FRICTION LOSSES: 3.8 PSI

PIPING SYSTEM LENGTH FROM SERVICE TO FURTHEST FIXTURE: 30 FEET

FITTING ALLOWANCE: 15 FEET

MAXIMUM FRICTION LOSS FACTOR: 8.5 PSI/100 FT

SELECTED FRICTION LOSS FACTOR: 8.5 PSI/100 FT
MAX CW VELOCITY 8FPS, MAX HW VELOCITY 5 FPS.

SUPPLY TANK CW				HOT WATER				COPPER TYPE PEX FLUSH VALVE CW			
PIPE SIZE	FLOW, GPM	FIXTURE UNITS	VEL, FPS	FLOW, GPM	FIXTURE UNITS	VEL, FPS	FLOW, GPM	FIXTURE UNITS	VEL, FPS	FLOW, GPM	FIXTURE UNITS
1/2"	3.0	4.5	3.5	3.0	4.5	3.5	3.0	4.5	3.5	3.0	4.5
3/4"	8.5	5.5	10.5	7.0	4.9	4.5	17.5	7.0	25.0	12.2	5.0
1"	17.5	7.0	25.0	12.2	5.0	15.0	30.3	8.0	50.0	18.5	30.0
1-1/4"	43.3	8.0	100.0	26.0	5.0	41.0	75.3	8.0	230.0	45.0	50
2"	116.0	8.0	440.0	72.0	5.0	265.0	160.0	8.0	750.0	100.0	50
2-1/2"	280.0	8.0	1600.0	175.0	5.0	800.0	280.0	8.0	1600.0	175.0	50
4"	690.0	8.0	5250.0	400.0	5.0	2750.0	690.0	8.0	5250.0	400.0	50

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	ENERGY (U.M.A.)
\$	SINGLE POLE SINGLE THROW SWITCH (NOTE L-1)	44"
\$ ₂ /S ₄	THREE-POLE SINGLE THROW-TWO POLE SWITCH (NOTE L-1)	44"
\$ ₃	MOTOR RATED SWITCH	
Q/P	DUPLEX / QUAD RECEPTACLE OUTLET (NOTE L-1)	24" TO CENTERLINE (U.L.O.)
Q/P	DUPLEX / QUAD RECEPTACLE OUTLET, CEILING MOUNTED	
Q/P	DUPLEX / QUAD RECEPTACLE OUTLET, FLOOR MOUNTED	
Q/P	FUNCTION BOX, CEILING / FLOOR MOUNTED	
Q/P	TELEPHONE OUTLET, WALL MOUNTED / FLOOR MOUNTED	
Q/P	DATA OUTLET, WALL MOUNTED / FLOOR MOUNTED	
Q/P	POWER TRANSFORMER	
Q/P	CURRENT METER AND SOCKET	
Q/P	APPROXIMATE HANGING, X-1, X-2 INDICATES HANGING TO PANEL, X CIRCUIT NUMBERS 1, 2, AND 3.	
Q/P	PANELBOARD - WALL MOUNTED (RECESSED/SURFACE MOUNTED)	
Q/P	NON-FUSIBLE DISCONNECT SWITCH, PULL/POLE/REAR ENCLOSURE	
Q/P	TERMINAL, WALL MOUNTED	
Q/P	NOT IN CONTRACT	
Q/P	INDICATES 24-HOUR NIGHT LIGHT ON THE UNSWITCHED LEG OF LIGHT CIRCUIT.	
L-1	MOUNTING HOOKS USED TO THE CEILING OF ROUGH FRAME FLOOR, UNLESS NOTED OTHERWISE (U.L.O.)	
L-2	FREE ALARM VISUAL BELLERS SHALL BE WALL-MOUNTED 80" AFF OR 4" BELOW CEILING. BELLERS SHALL BE LOWER, UNLESS NOTED OTHERWISE.	

* NOT ALL SYMBOLS USED ON ALL JOBS

T-24 CONTROLLABLE OUTLET (LEVITON 5362-S27) REQUIREMENT:

IN ALL BUILDINGS, BOTH CONTROLLED AND UNCONTROLLED 120V RECEPTACLES SHALL BE PROVIDED IN EACH PRIVATE OFFICE, OPEN OFFICE AREA, RECEPTION LOBBY, CONFERENCE ROOM, KITCHENETTE IN OFFICE SPACES, AND COPY ROOM, ADDITIONALLY, HOTEL/MOTEL RECEPTION AREAS SHALL HAVE CONTROLLED RECEPTACLES. CONTROLLED RECEPTACLES SHALL MEET THE FOLLOWING REQUIREMENTS, AS APPLICABLE:

- ELECTRIC CIRCUITS SERVING CONTROLLED RECEPTACLES SHALL BE EQUIPPED WITH AUTOMATIC SHUT-OFF CONTROLS FOLLOWING THE REQUIREMENTS PRESCRIBED IN SECTION 130.1(C)(1)-(3).
- CONTROLLED RECEPTACLES SHALL BE INSTALLED WITHIN 6 FEET FROM EACH CONTROLLED RECEPTACLE OR A SPILTUBLE DUPLEX RECEPTACLE WITH ONE CONTROLLED AND ONE UNCONTROLLED RECEPTACLE SHALL BE INSTALLED.
- CONTROLLED RECEPTACLES SHALL HAVE A PERMANENT MARKING TO DIFFERENTIATE THEM FROM UNCONTROLLED RECEPTACLES.
- TO SUPPLY FREELINES, CONTROLLED CIRCUITS SHALL BE PROVIDED AND MARKED RECEPTACLES THAT COMPLY WITH SECTION 130.5(A).
- FOR HOTEL AND MOTEL GUEST ROOMS SHALL BE AT LEAST ONE-HALF OF THE 120V RECEPTACLES IN EACH GUEST ROOM SHALL BE CONTROLLED RECEPTACLES THAT COMPLY WITH SECTION 130.5(A)(1), 2, AND 3. ELECTRIC CIRCUITS SERVING CONTROLLED RECEPTACLES SHALL HAVE CAPTIVE CARD KEY CONTROLS, OCCUPANCY SENSING CIRCUITS, OR OTHER MEANS OF CONTROLLING THE CIRCUIT. THE SWITCHING ELEMENT AFTER THE GUEST ROOM HAS BEEN VACATED SHALL BE SENSITIVE TO 30 MINUTES.
- PLUG-IN STRIPS AND OTHER PLUG-IN DEVICES THAT INCORPORATE AN OCCUPANCY SENSOR SHALL NOT BE USED TO COMPLY WITH THIS REQUIREMENT.

RCP LEGEND

⊙	CEILING FLUSH MOUNT LIGHT: WAVE: INC. LIGHTING MODEL: F14-409-30-24, 10W AT20V
⊙ _B	WALL MOUNT LIGHT: WAVE: CROWN LIGHT FIXTURE, 22W LED 120V, DIMP LABEL, MOUNT 8" O 3'-6" AFF
⊙ _{BL}	WAVE: GEORGE KINKS MODEL: JFSM-90-L, 10W AT20V MOUNT ABOVE WINDOW AT 8" AFF
⊙ _D	RECESSED CAN LIGHT (DIMP LABEL COMBATED) WAVE: JANO, 5" X 8" 900 LUMEN LED DOWNLIGHT MODEL: J224203-274-4-1
⊙ _{COM}	LED EMERGENCY EXCESS LIGHTING/SPACE COMBO WITH 90 MINUTE BATTERY BACKUP WAVE: BRONX EXTERIOR, - LED-EL50 SERIES, MODEL: J414-94-BL
⊙ _{E1}	LED EMERGENCY EXIT SIGN WITH 90 MINUTE BATTERY BACKUP WAVE: HARBEL LIGHTING, - COMPASS SERIES, MODEL: JER
⊙ _{E2}	LED EMERGENCY EXTERIOR EXCESS LIGHTING - CONNECTED TO EXIT SIGN BATTERY GROUP WAVE: HARBEL LIGHTING, - COMPASS SERIES, MODEL: J414-94-BL
⊙ _{E3}	24 RECESSED LED LUMINAIRE FIXTURE WAVE: HARBEL LIGHTING, - COMPASS SERIES, MODEL: J2448-30-30-U-84-3
⊙ _{E4}	REARWARD FAN/LIGHT WAVE: CUSTOM AIRPOINT CABLE SUSPENDED, 22W LED, 120/277V, DIMP LABEL, MOUNT 50 8" O FIXTURE 5 AT 8'-0" AFF.
⊙ _{E5}	TRACK LIGHT SYSTEM: WAVE: JANO, TRAC-MASTER TRACK & TRACK-FIXTURES MODEL: J14-40 8 FT TRACKS BL, SPAN-5-35-4-4-BL FIXTURE HEADS, PHOTO LED 8W-10W AT20V, BIT OF TRACK AT 10" AFF, 3 HEADS PER SECTION AND AS SHOWN

* NOT ALL FIXTURES USED ON ALL JOBS

KEY NOTES BY SYMBOL

- PANEL 'LA' PANEL SHALL BE FLUSH-MOUNTED, AND FACE OPEN INTO ROOM, FURROUT WALLS AS NECESSARY.
- ONE EXISTING 2" CONDUIT TO EXISTING ELECTRICAL SERVICE/METERING EQUIPMENT, T.G.C. SHALL PROVIDE AND PULL CONDUCTORS.
- ONE 1" PHONE LINE AND ONE DATA LINE TO THE PHONE BORDS. VERIFY EXACT PLACEMENT WITH THE ARCHITECT. VERIFY POINT OF CONNECTION TO LANDLORD'S MARK.
- ELECTRIC DRYER. PROVIDE (2) #10/#10c, 3/4", 30/2 RECEPTACLE
- CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS AS NECESSARY FOR ELECTRICAL AND PLUMBING. PROVIDE 15-MINUTE DELAY TIMEOUT.
- 42" X 16" X 1/4" "AC" GRADE PLYWOOD TELEPHONE BOARD. PROVIDE GROUND PER NEC. RUN 3/4" CONDUIT TO LANDLORD'S TELEPHONE CONNECTION POINT.
- PROVIDE A REMOTE ANNUNCIATOR FOR DUCT SMOKE ANNUNCIATOR SHALL BE EQUAL TO SYSTEM. ANNUNCIATOR, LABEL EACH ANNUNCIATOR ACCORDING TO UNIT BEING MONITORED.
- CIRCUIT RESTROOM/UTILITY ROOM EXHAUST FAN(S) TO LOCAL LIGHT SWITCH. PROVIDE 15-MINUTE DELAY TIMEOUT.
- IF EXISTING WATER LINES ARE LOCATED ABOVE ELECTRICAL PANEL LOCATIONS SHOWN HERE, FABRICATE SLEEVE THROUGH WALLS TO DIVERT FLOW AWAY FROM RECEPTACLE PLACES TO BE INSTALLED. THAT STICKS OUT BEYOND EDGE OF ELECTRICAL GEAR, OR SIMILAR, SLEEVE SHALL BE SEALED LONGITUDINALLY TO PREVENT PRESSURIZED SPRAY FROM REACHING EQUIPMENT BELOW AND OPEN ONLY ON THE TWO ENDS.
- NOT USED.
- FURROUT WALLS FOR POWER AND PLUMBING (SUPPLY, WASTE, AND VENT) LINES AS NECESSARY.
- E.C. TO PROVIDE WIP AT 120" AFF FOR QUAD OUTLET BOX SET INSIDE RECEPTION DESK. REQUIRE WIP TO NEAREST WALL UP AND OVER TO PANEL. G.C. TO VERIFY OUTLET LOCATIONS AFTER MILLWORK INSTALL.
- PLACE RECIRCULATION PUMP OUTLET/A-BOX ABOVE WATER HEATER IN UTILITY ROOM WHERE SPACE ALLOWS.
- PROVIDE OCCUPANCY SENSOR PER SCHEDULE.
- EXIT LIGHT SHALL BE CIRCUITED TO UNSWITCHED LEG LOCAL LIGHT CIRCUIT. PROVIDE CHEVRONS AS NEEDED.
- UNSWITCHED LEG OF LOCAL LIGHT CIRCUIT.
- EMERGENCY EGRESS LIGHT SHALL BE CIRCUITED TO T-24 COMPLIANT LIGHTING CONTROL PANEL (LEVITON EZ-MAX ROBBED-000 8-SPACE) TO BE ORDERED AS PART OF LIGHTING PACKAGE. WHERE EXTERIOR SIGNAGE IS ON LANDLORD'S LIGHTING CONTROL PANEL, INSTALL A 4-POLE LIGHTING CONTROL PANEL (RE-480-104).
- TV QUAD RECEPTACLE AND DATA. VERIFY LOCATION AND MOUNTING HEIGHT WITH OWNER'S REPRESENTATIVE.
- PROVIDE (2) EMPTY CONDUIT WITH PULL STRING FOR USE FOR FUTURE WIRE AND CAT 5 TO NEAREST WALL FROM RECEPTION DESK. CONDUIT AS REQUIRED.
- THIS OUTLET SHALL BE CONTROLLED THROUGH L.C.P.

GENERAL NOTES

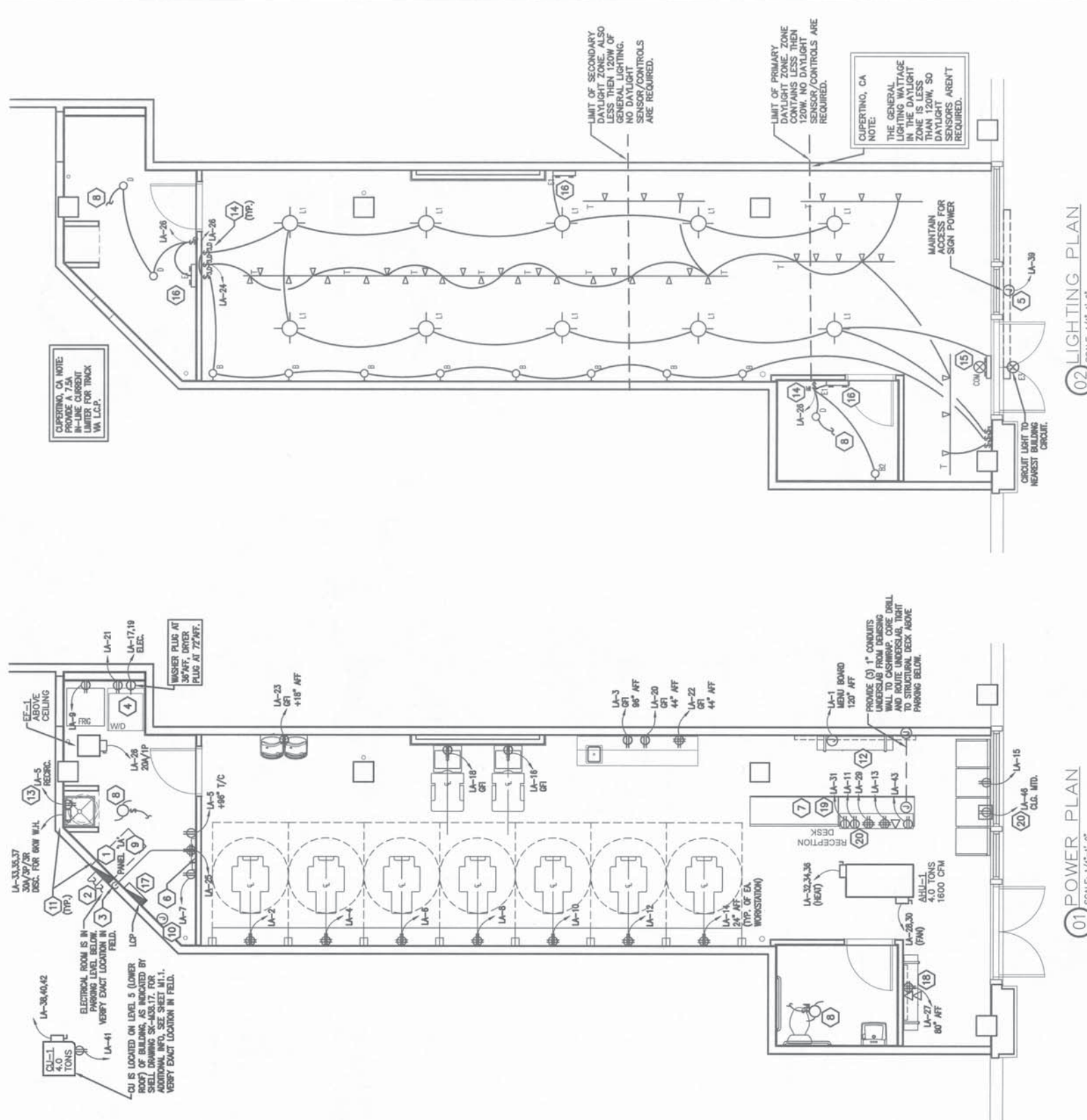
- LIGHTING SHALL BE CIRCUITED EXACTLY AS SHOWN ON PLANS.
- SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION AND QUANTITY OF LIGHTING FIXTURES.
- EMERGENCY AND EXIT LIGHTS SHALL BE INSTALLED AND CIRCUITED PER THE LATEST NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES. ALL EMERGENCY AND EXIT LIGHTS SHALL BE DUAL VOLTAGE (120/277 VOLT INPUT) WITH 90-MINUTE BATTERY BACKUP.
- ELECTRICAL SUB-CONTRACTOR IS RESPONSIBLE FOR ALL REFLECTED CEILING PLAN NOTES ON ARCHITECTURAL DRAWINGS.
- ALL FLUORESCENT LIGHTING SHALL BE PROVIDED WITH INTEGRAL DISCONNECTING MEANS PER NEC.
- EXTERIOR LIGHTS ARE EXISTING BY LANDLORD. TO REMAIN.
- THE DIRECTION OF THE BUILDING OFFICIAL/QUANTITY, LOCATION AND TYPE OF EXIT/EGRESS LIGHTS REQUIRED SHALL TAKE PRECEDENCE OVER WHAT IS SHOWN IN THIS DOCUMENT SET.
- ALL LIGHTS PROVIDED AND INSTALLED BY G.C. WITH THE EXCEPTION OF B, L1, AND T FIXTURES, WHICH ARE TO BE OWNER PROVIDED AND G.C. INSTALLED.
- EMERGENCY/EGRESS AND EXIT LIGHTS SHALL BE ON A NON-SWITCHED LEG OF CIRCUIT.
- EMERGENCY CURRENT LIMITERS (IN-LINE) FOR TRACK LIGHTING AS NEEDED WHERE REQUIRED BY INSPECTOR TO ACHIEVE ENERGY CODE COMPLIANCE.
- TRACK AND SCENES DO NOT PROVIDE GENERAL LIGHTING AND THEREFORE ARE NOT REQUIRED TO BE CONTROLLED BY DAYLIGHT SENSORS. (T-24/CALIFORNIA)
- DAYLIGHTING IS NOT REQUIRED WHEN A ZONE HAS LESS THAN 120 WATTS OF GENERAL LIGHTING, OR LESS THAN 24 SQ. FT. OF GLAZING. (T-24/CALIFORNIA)

CONTRACTOR NOTES:

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT, LANDLORD OR TENANT OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
- BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES AS TO THE NATURE AND SCOPE OF WORK. THE BASE BID SHALL REFLECT MODIFICATIONS TO SYSTEMS WHETHER INDICATED OR NOT ON CONTRACT DOCUMENTS. THE SUBMISSIONS OF A BID WILL BE EVIDENCE THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES / REQUIREMENTS HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED OR FOR DISCREPANCIES ENCOUNTERED IN THE FIELD SHALL BE DISREGARDED. NO CHANGES OR MODIFICATIONS SHALL BE MADE. WILL NOT BE ALLOWED.
- GENERAL RECEPTACLES INSTALLED AT +15" TO BOTTOM OF BOX A.F.F.
- VERIFY GFI REQUIREMENTS PRIOR TO BID. ALL RECEPTACLES WITHIN 6'-0" OF A SINK OR WASH BASIN SHALL BE GFI RATED.
- ALL COVER PLATES, OUTLETS AND SWITCHES IN THE PUBLIC AREAS SHALL BE FACTORY BLACK. ALL OTHERS TO BE FACTORY BRASS.
- SMOKE DETECTORS, FIRE ALARM SYSTEM, STROBES, HORNS, SPRINKLERS, ETC. SHALL BE DESIGNED AND INSTALLED WHERE REQUIRED BY A LICENSED FIRE SPRINKLER/FIRE PROTECTION CONTRACTOR (DESIGN-BUILD) UNDER A SEPARATE PERMIT. HVAC CONVECTION OUTLET(S) AND DISCONNECT(S) SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. SIZE SHALL BE AS SHOWN AND/OR NAMEPLATE INFORMATION. DISCONNECT SHALL BE RATED FOR VOLTAGE OF ORIGINATING PANEL.

GENERAL NOTES:

- ALL ELECTRICAL OUTLET SWITCHES IN THIS BUILDING SHALL BE INSTALLED WITH FIRE RATED PUTTY, PER ARCHITECTURAL SHEETS. PUTTY SHALL BE MET OF EQUAL.
- THIS FIRST GENERATION TENANT SPACE IS ON THE FIRST FLOOR OF A MULTI-STORY MIXED USE BUILDING.
- SUBROCTIONS VARY AS TO WHO CAN MAKE FINAL CONNECTION OF SIGN TO BUILDING POWER. SOME JURISDICTIONS REQUIRE SPECIAL SIGN PERMITS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AN ACCESSIBLE J-BOX AT BUILDING PERIMETER FOR EACH SIGN LOCATION ON ALL JOBS WITH MEANS OF DISCONNECT AND CONDUCTOR BACK TO THE PANEL, PER NEC. THE SIGN CONTRACTOR SHALL PROVIDE ALL SIGNS WITH A SINGLE WIRE PULLING THROUGH THE BACK OF THE SIGN OR SIGN RACEWAY FOR EACH SIGN LOCATION. FINAL CONNECTION (INCLUDING ANY CONDUIT ABOVE METAL RACING) STRUCTURE OR OTHER SPECIAL CONNECTIONS (INCLUDING ANY CONDUIT ABOVE METAL RACING) STRUCTURE OR OTHER SPECIAL CONNECTIONS TO BE BY THE SIGN CONTRACTOR.



02 LIGHTING PLAN
SCALE: 1/4"=1'-0"

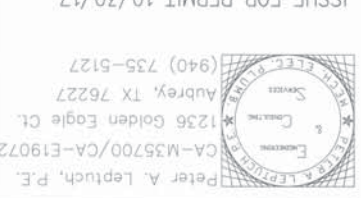
01 POWER PLAN
SCALE: 1/4"=1'-0"



BISHOPS - TENANT FINISHOUT
MAIN STREET CUPERTINO
19540 WALCO PARKWAY
SUITE 100
CUPERTINO, CA 95014

DO NOT SCALE DRAWINGS
CONTRACTOR TO VERIFY
ALL EXISTING CONDITIONS AND
DIMENSIONS-NOTIFY ARCHITECT
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PLANS
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