E Dove Valley Rd

QS Number: 56-45 MCR Number: 651-44

SCOPE OF WORK:

Add 5 sinks, 1 washer and 1 dryer.

C-2 ESL

LOT SPLIT OF THE SLIMMIT AT SCOTTSDALE

A new partition wall added to separate salon chairs from backend functions.

Client will install flooring and choose paint colors on existing walls.

- ALL SIGNS REQUIRE SEPARATE APPROVALS.

- NO EXTERIOR VENDING OR DISPLAY SHALL BE ALLOWED

SHALL BE ALLOWED

- ALL EXTERIOR MECHANICAL, UTILITY, AND COMMUNICATION EQUIPMENT SHALL BE SCREENED, TO THE HEIGHT OF THE TALLEST UNIT BY PARAPET OR SCREEN WALL THAT MATCHES THE ARCHITECTURAL COLOR AND ARCHITECTURAL FINISH OF THE BUILDING, GROUND-MOUNTED MECHANICAL FINISH OF THE SUILDING, AND AND SCREEN WALL THAT MATCHES THE ARCHITECTURAL COLOR AND ARCHITECTURAL FINISH OF THE BUILDING, WHICH IS A MINIMUM OF 1-0" HIGHER THAN THE HIGHEST POINT OF THE TALLEST UNIT (A DETAIL IS ALSO REQUIRED)

- ALL EQUIPMENT, UTILITIES, OR OTHER APPURTENANCES ATTACHED TO THE BUILDING SHALL BE AN INTEGRAL PART OF THE BUILDING DESIGN IN TERMS OF FORM, COLOR, AND TEXTURE.

An existing shopping center. Suite is vacant and empty, and has fire sprinklers installed. A new

Execution of the contract by the contractor is a representation the contactor has visited the site and become familiar with local conditions under which the work is to be performed and correlated personal observations with requirements of the contract documents.

Inspect portions of work already performed under this contract to determine that such portions are in proper condition to receive subsequent work. Where assembly involving several trades is called for on drawings, submit shop drawings showing the proposed interaction of related elements for architect's review. Contractor responsible for proper operation of all systems.

Do not scale the printed version of drawings, calculate dimensions from the dimension strings indicated; use in conjunction with the details. Notify architect immediately in the event the drawings do not contain

use in conjunction win the Details. Young a clinics immediately in the event in the dawn, go on to construct the substitution of the calculate necessary dimensions. Carefully review site conditions as well as dimensions indicated on drawings prior to constructing the work.

Prior to ordering materials for of each portion of the work, investigate and verify site conditions and dimensions to ascertain that work is feasible as shown. Immediately notify architect and owner of

Horizontal dimensions are to building grid lines or face of concrete/cmu or face of gypsum board unless Heights are dimensioned from ton of slab in concrete unless noted otherwise. Verify slab conditions

Heights are dimensioned from top of stab in concrete unless noted otherwise. Ventry stab conditions. "Allign" means to accurately located finished faces in same plane. The contract documents are complementary documents used by the architect to describe the building project and by the contractor to develop an undestranding of the architect's intent and what is required by one shall be as binding as if required by all. The contract documents include, but are not limited to these drawings. Before starting each portion of the work, carefully study and compare various drawings and other contract documents relative to that portion of the work, as well as information furnished by the owner. Take site measurements of existing conditions related to that portion of the work and observe owner. Take site measurements of existing conditions related to that portion of the work and observe conditions at the site affecting it. These obligations are for the purpose of facilitating construction by contractor and not for the purpose of discrepancies, errors, omissions, or inconsistencies in the contract documents. However, report discrepancies, errors, omissions, or inconsistencies discovered by the contractor promptly to architect as a request for interpretation (rfi). During bidding phase, contractor's failure to report discrepancies or omissions in contract documents, or contractor- or subcontractor-penerated assumptions, in absence of architect-issued interpretations or clarifications regarding intent of the contract documents, shall not be used a basis for future claims once the apparent discrepancies or consistence have been exceeded by a reponsition shall be not exceeded by the properties to the contract documents. discrepancies or omissions have been reconciled by appropriate interpretation issued by the architect in

case of conflict, the contract documents shall be governed by the following hierarchy of authority, from

to lowest:
the agreement between the owner and the contractor.
drawings
the definitions
the supplemental conditions

MPE Review By:

Jim Pappas - 480-312-7942

jpappas@scottsdaleaz.gov

2 GENERAL NOTES 12" = 1'-0"

division 01 of the specifications

divisions 02 through 48 of the specifications materials and finish schedules

materials and finish schedules
 Drawings of large scale shall govern over those of smaller scale of the same date.
 Dimensions shown in drawings shall govern over dimensions scaled from drawings.
 Later dated documents shall govern over earlier documents of the same type.
 Structural drawings govern over architectural in matters of structural design.
 Manufacturer's specifications and installation requirements govern over the specifications.

Coordinate sizes and locations of floor and wall openings, penetrations and sleeve locations for work prior to construction, including but not limited to plumbing, mechanical and electrical work.

Provide a weather-tight and waterproofed building envelope complete with required water-resistive Provide a weather-tight and waterproofed building envelope complete with required water-resistive barriers, flashings, sealants, waterproof membranes, roofing membrane and exterior cladding in accordance with building code, industry standards, manufacturer specifications and the requirements of the owner's building envelope consultant. Install sealants, materials and systems in strict conformance with manufacturer's printed specifications and installation requirements. Install sheet metal flashings and trims in strict conformance with national roofing contractor's association (nrca), smacna, or as directed by

the architect's drawings. The architect's drawings.

Install fire exhipushers at locations indicated unless otherwise required by local building inspection jurisdiction or fire department. Promptly notify the architect and owner in writing in the event indicated locations are unacceptable to the local building inspection jurisdiction or fire department.

locations are unacceptable to the local building inspection jurisdiction or fire department. The architect will not have control over or charge of, and will not be responsible for construction means, methods, techniques, sequences or procedures or for safety precautions and programs in connection with the work. These duties belong exclusively to the contractor. When construction details are not shown or noted for parts of the work, details shall be the same as for other similar work. If questions cannot be resolved in this manner, contact the architect prior to

Repetitive features not shown in drawings shall be completely provided as if drawn in full. Trade contractors and delegated design-build contractors are responsible for the layout their own work, and to see that it's work comes together with that of others. Report discrepancies on drawings to the

and to see that it is done to decisions.

Trade contractors and delegated design-build contractors must assure themselves that they have the later drawings issued for construction in the contractor's site offices.

Employ original journeyman tradesmen or installers of new work to perform cutting and patching in new

23.

Take precautions to maintain and protect new work as well as existing systems and elements which are to I ake precautions to maintain and protocet new work as well as existing systems and elements winch are to be immediately repaired in a manner acceptable to the architect. If satisfactory repairs cannot be made replace systems and elements with "like new" quality acceptable to architect. All repairs and replacement costs are the financial responsibility of the contractor, coordinate previously issued permit submittals with additional information issued in this submittal. The multiple permit packages constitute a complete project.

Coordinate and provide all block-outs, sleeves, inserts, bolts, plates, etc. for all trades prior to placing concrete or macroy.

# PERSPECTIVE VIEW OF EXISTING EXTERIOR:

ABS AFF ACI AHJ AWG	acrylonitrile butadiene styrene (plumbing pipe) above finish floor american concrete institute authority having jurisdiction american wire gauge standard
BFF	below finish floor
CMU CO CONC	concrete masonry unit carbon monoxide concrete
DL DN DWG	dead load down drawing
ELEC ESR	electrical icc evaluation service
H HB HC HDWD HP HW HT HORIZ HR HM HMI HSS HVAC	high hose bib hollow core hardwood horse power hot water height horizontal hour hollow metal insulated hollow structural steel heating ventilation & air conditioning
LAM LH	laminate left hand

MAN MAX MDF MECH NFPA NTS not to scale PT PVC polyvinyl chloride QTY RCP RD/O RECEPT REINF receptacle REQ'D RM RO required

south solid core schedule similar sheet specifications square foot/fe STOR STRUCT STL T.O.B.
T&B
TG
T&G
THK
T.O.
T.O.C.
T.O.P.
T.O.STL.
TOW
TPTN
TEL
TYP top and bottor tongue and groove thickness top of . . . . . . . top of concrete or c toilet partition VAR VEN VERT VEST VIF verify in field window water closet

yard

YD

LLH LLV LAV LBS LVL

# **AUTHORITY HAVING JURISDICTION:**

CITY OF SCOTTSDALE - PLANNING & DEVELOPMENT PHONE: 480-312-2500 Email: Planninginfo@scottsdaleaz.gov Planning and Development Services 7447 F. INDIAN SCHOOL RD. SUITE 105 SCOTTSDALE AZ 85251

# ADOPTED CODES:

2021 INTERNATIONAL BUILDING CODE (IBC) AMENDMENTS (PDF)
2021 INTERNATIONAL FIRE CODE (IFC) AMENDMENTS (PDF)
2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC) (PDF)
2021 INTERNATIONAL PLUMBING CODE (IPC) AMENDMENTS (PDF)
2021 INTERNATIONAL MECHANICAL CODE (INC) AMENDMENTS (PDF)
2021 INTERNATIONAL TUEL GAS CODE (IFGC) AMENDMENTS (PDF)
2021 INTERNATIONAL TUEL GAS CODE (IFGC) AMENDMENTS (PDF)
2021 INTERNATIONAL FIESTING. CORE (INFC) AMENDMENTS (PDF)

2020 NATIONAL ELECTRICAL CODE (NEC) AMENDMENTS (PDF) 2021 INTERNATIONAL SWIMMING POOL AND SPA CODE (ISPSC) AMENDMENTS (PDF) THE FOLLOWING CODES WERE ADOPTED DEC. 6, 2022 AND WILL BECOME EFFECTIVE AS

2021 International Residential Code (IRC) Amendments (PDF) - Effective Jan. 7, 2023 2021 International Energy Conservation Code (IECC) Amendments (PDF) - Effective Jan. 7, 2023

2021 International Green Construction Code (IGCC) Amendments (PDF) - Effective JULY 1, 2023 (MANDATORY)

# **DEFERRED SUBMITTALS:**

# **SPECIAL INSPECTIONS:**

- NONE

# STRUCTURAL DESIGN CRITERIA:

BASIC WIND SPEED: 90 MPH (3 SECOND GUST) - SEISMIC DESIGN CATEGORY: .... B - ROOF LIVE LOAD: ..... 20 LB

# **CONSTRUCTION TYPE:**

# PROJECT TEAM:

Mr. Eduard Ustay (602) 703-1347 Anthony U, LLC ustayeve@gmail.com 32531 N Scottsdale Road, Suite 103, Scottsdale, AZ 85266

ARCHITECT:

Trevor Pan, Principal Scottsdale, AZ 85251

SHEET LIST SHEET NUMBER

NEW REFLECTED CEILING PLAN

ECTRICAL SITE PLAN. PANEL SCHEDULE AND

TREVOR PAN ARCHITECTS

arbershop  $\mathbf{\Omega}$ Eduard

32531 N So Scottsdale, A

REVISION SCHEDULE

# Description

# **APPROVED**

FINAL PLANS PLANNING

03/19/2024

DATE

DATE

**GREEN** BUILDING PLAN **APPROVED** 

# BY CITY OF SCOTTSDALE PLAN REVIEW

03/19/2024

497-24 PLAN CHECK NO. REVIEWER

CONSTRUCTION AND INSTALLATION SHALL BE IN DEVIATIONS WILL REQUIRE REAPPROVAL

**AS NOTED** 

CITY OF SCOTTSDALE BUILDING PLANS
THESE PLANS HAVE BEEN REVIEWED AND ARE READY FOR A PERMIT. THIS DOES NOT AUTHORIZE VIOLATIONS OF CODE OR ORDINANCE.

# SCOTTSDALE FIRE DEPARTMENT

PLANS HAVE BEEN REVIEWED AND APPROVED



03/19/2024

Review and approval by the Fire Code Official shall not relieve the applicant of the responsibility of compliance with all adopted Codes and Standards

COVER SHEET

JOB#

DATE

SCALE

497-24

CHECK#

PLAN

60475 TREVOR PAN

Expires: 9/30/2024

23035

1-15-24

AS INDICATED

# Section 011000 Project Requirements Section 012300 Alternates

**DIVISION 02 - EXISTING CONDITIONS** 

### DIVISION 05 - METALS

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

Section 061100 Framing and Sheathing

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

DIVISION 08 - OPENINGS

Section 087100 Door Hardware Section 088000 Glazing

### DIVISION 09 - FINISHES

Section 093000 Tilling Section 099000 Painting and Coating

### DIVISION 22 - PLUMBING

DIVISION 23 - HEATING, VENTILATING AND AIR CONDITIONING

DIVISION 26 - ELECTRICAL

### SECTION 011000 - PROJECT REQUIREMENTS

The Project consists of an existing slump block home with wood roof trusses, and clay tiles. Minor demolition will be required inside to remove cabinets, old fixtures, small portions of walls.

### Contracting Requirements:

er's Instructions For Bidding: General contractor will provide bids for demolition, heating, cooling, plumbing and electrical modifications and new cabinetry flooring, finishes as shown on the drawings.

Drawings and specifications are intended to provide the basis for the proper npletion of the Project suitable for the intended use of the Owner Items not expressly set forth but which are reasonably implied or necessary for the proper performance of this work shall be included.

1. Coordinate the work of all trades.
2. Verify location of utilities and existing conditions. Notify Architect of condition differing from those indicated on the Drawings.
3. Verify dimensions on Drawings with dimensions at the Project. Do not scale

# Cutting and Patching:

- Trovide cutting and patching work to properly complete the Project.

  Do not remove or alter structural components without written approval.

  Cut with tools appropriate for materials to be cut.

  Patch with materials and methods to produce patch which is not visible from a

- Do not cut and patch in a manner that would result in a failure of the work to perform as intended, decrease fire performance, decrease acoustical performance, decrease energy performance, decrease operational life, or decrease safety factors.

Field Engineering:

1. Verify and locate utilities, existing facilities, and equipment.

2. Survey and layout improvements, utilities, structures, and compo

# Project Meetings:

shall be attended by Owner, Architect, Contractor, and major subcontractors Arrange for progress updates once a week via email or telephone via email or

Include details of construction and adjacent construction in shop drawings.
 Clearly indicate any deviations from requirements of the contract documents.
 Fabricate materials from approved shop drawings only.

### Request For Interpretation (RFIs):

ly on discovery of the need for interpretation of the Procedure: Immediately on discovery of the need for interpretation of the act Documents, and if not possible to request interpretation at Project ng, prepare and submit an RFI in the form specified. RFIs shall originate with Contractor. RFIs submitted by entities other than actor will be returned with no response. Content of the RFI shall include a detailed, legible description of item

Architect will review each RFI, determine action required, and return it.

Illow 2 working days for Architect's response for each RFI. RFIs received after 1:00 .m. will be considered as received the following working day.

The following RFIs will be returned without action: Requests for approval of submittals. Requests for approval of substitutions.

Requests for adjustments in the Contract Time or the Contract Sum. Requests for interpretation of Architect's actions on submittals Incomplete RFIs or RFIs with numerous errors.

ties having jurisdiction, including accessibility guidelines where applicable, copies of inspection reports, notices and similar documents to Architect. Provide products of acceptable manufacturers which have been in ory use in similar service for three years.

Use experienced installers. Furnish evidence of experience if requested.

Deliver, handle, and store materials in strict accordance with

Use of any supplier or subcontractor is subject to Owner's approval. Engage and pay for testing agencies as required. Refer to individual stor additional requirements.

### emporary Provisions

Meter and nay for utility service. Do not waste

Provide suitable waste disposal units and empty regularly. Do not permit ation of trash and waste materials.

Provide temporary sanitary facilities if use of existing is infeasible.

Maintain egress within and around construction areas. Maintain fire alarm systems in operation during construction.

Provide fire extinguishers in work areas during construction.

Provide fire extinguishers in work areas during construction.

Provide temporary protection for adjacent construction. Promptly repainage at no additional cost to the Owner.

### **Products and Substitutions**

and accessories in sufficient time to avoid delaying progress of the Work. Submit requests for substitutions shall be in writing, including reasons sufficient information for Architect to evaluate proposed substitution

Inspect substrates and report unsatisfactory conditions in writing. Do not proceed until unsatisfactory conditions have been correcte Take field measurements prior to fabrication where practical. Form to apes and sizes with true edges, lines and angles. Provide inserts and lates as needed for work of other trades.

Install materials in exact accordance with manufacturer's instructions and

Restore units damaged during installation. Replace units which cannot be d at no additional expense to the Owner.

Refer to additional installation requirements and tolerances specified under

repare punchlist for remaining work for review by the Architec Complete punchlist items promptly at no additional expense to the Owner Submit accurate record documents of building and site. Submit operating manuals, maintenance manuals, and warranty

Obtain and submit copy of occupancy permits

Crain Owner's personnel in use of building systems.

Remove temporary facilities and provide final cleaning and touch up.

Restore portions of building, site improvements, landscaping and other

amaged by construction operations to the satisfaction of the Architect at no

### SECTION 012300 - ALTERNATES

Submit price for each alternate. Include cost of modifications to other work commodate alternate. Include statement of impact on schedule, if any. tect and Owner will determine which alternates are accepted.

Alternate No. 1: ((describe alternate in sufficient detail for pricing))
Alternate No. 2: ((describe alternate in sufficient detail for pricing))

# SECTION 024100 - DEMOLITION

Provide selective demolition of components designated to be removed Protect portions of building, site and adjacent structures affected by

Remove hollow items or items which could collapse

Remove hollow items or items which could collapse. Remove abandoned utilities and wiring systems. Provide temporary protection for the owner from demolition operations. Provide pollution control during demolition operations. Provide removal and legal disposal of materials. Refer to Construction Documents for additional demolition requirements. Notify Owner in writing of schedule of shut off of utilities which serve the proper if arm.

occupied spaces, if any. Notify Owner in writing if hazardous materials are encountered or

ected and ston work in that area until determination is made

existing conditions and correlate with Drawings and specifications to lemolition required. Provide videotape of existing conditions if larification of existing damage may be construed as damage done by construction

Verify conditions at site to determine whether demolition methods proposed for will not endanger existing structures by overloading, failure, or unplanned collapse Perform demolition operations by methods which do not endanger adjacent

Perform demolition operations by methods which do not endanger adjacent zes, structures, or the public.

Perform demolition operations to prevent dust and pollutant hazards. Provide tes as required to control dust and debris.

Historic items, relics, and other objects of interest or value found during solition remain the property of the Owner.

### Items to be Salvaged for Reinstallation; refer to the Drawings SECTION 055000 - METAL FABRICATIONS (if applicable for repairs or addition

nary: Provide metal fabrications:

Rough hardware. Loose bearing and leveling plates Miscellaneous aluminum trim.

Remodel existing metal fabrications as required for new construction Tolerances: Fabrication tolerance 1/8 inch in 10 feet; erection tolerance, 1/16 inch.

Steel Plates, Shapes and Bars: ASTM A 36. Steel Tubing: ASTM A 500 or A 501. Steel Pipe, Black Finish: ASTM A 53.

Aluminum Extruded Bars and Shappes: ASTM B 221 aluminum alloy.

Fasteners: non corrosive, suitable for service intended.

Zinc Coating: Hot dip galvanized coating for materials in exterior assemblies or

r walls. Steel Finish: Primed.

irements of Section 011000 - Project Rea Comply with AISC codes and specifications and with AWS Structural Welding

# SECTION 061000 - ROUGH CARPENTRY

Provide Rough Carpentry:

Framing with dimension lumber, use preservative treatment lumber where noted

ngs.
Framing with engineered wood products.
Wood grounds, nailers, and blocking.
Wood furring, use preservative treatment

# Lumber Standards and Grade Stamps: PS 20, American Softwood Lumber

rd and inspection agency grade stamps.

Construction Panel Standards: PS 1, U.S. Product Standard for Construction and Construction Panel Standards: PS 1, U.S. Product Standard for Construction a I Plywood; APA PRP 108. Wood Framing Standards: NFPA House Framing Manual. Preservative Treatment: AWPA C2 for lumber and AWPA C9 for plywood;

ne pressure treatment.

sion Lumber:
Light Framing: Stud, No. 3 or Standard grade.
Structural Framing: No. 1 grade.
Species: Any species of grade indicated.
Exposed Framing: Appearance grade.
laneous Lumber, Blocking and Nailers:
Moisture Content: 19 percent.
Grade: Standard grade light framing.

Sill Sealer Gaskets: FoamSeaIRTM Sill Gasket by Owens Framing Anchors and Fasteners: Non corrosive, suitable for load and

Comply with requirements of Section 011000 - Project Requirements Comply with NFPA Manual for House Framing, NFPA Recommended Nailing edule, and NFPA National Design Specifications for Wood Construction Comply with APA Design and Construction Guide, Residential and Comme

Provide nailers, blocking and grounds where required. Set work plumb, level and

ely cut.

Comply with manufacturer's requirements for treated materials

# END OF SECTION

# SECTION 061100 FRAMING AND SHEATHING - (Roof-if applicable relating to roof

# PART 1 GENERAL

SUMMARY

Section Include Roof and wall sheathing

Division 01: Administrative, procedural, and temporary work

ASTM International (ASTM) (HYPERLINK "http://www.astm.org" www.astm.org):

1. A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on

d Steel Hardware. A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Proc.

E84 - Standard Test Method for Surface Burning Characteristics of

Building Materials.
4. F593 - Standard Specification for Stainless Steel Bolts, Hex Cap Screws F1554 - Standard Specification for Anchor Bolts, Steel, 36, 55 and 105 KSI Yield Strength.

B. Forest Stewardship Council (FSC) (HYPERLINK "http://www.fscus.org" <u>www.fscus.org</u>) STD-40-004 - Chain of Custody Standard.
C. National Institute of Standards and Technology (NIST) (HYPERLINK 
"http://www.nist.gov" <u>www.nist.gov</u>) - Product Standard PS 20 - American Softwood

National Lumber Grades Authority (NLGA) (HYPERLINK "http://www.nlga.org "www.niga.org" - Standard Grading Rules for Canadian Lumber.
E. West Coast Lumber Inspection Bureau (WCLIB) (HYPERLINK
"http://www.wclib.org "www.wclib.org)" - Standard Grading Rules for West Coast

### Western Wood Products Association (WWPA) (HYPERLINK wwpa.org" www.wwpa.org) G-5 - Western Lumber Grading Rules.

r. Provide hardware for swinging doors. Remodel existing hardware.

ducts: As selected by Owner complying with the following.

# Handicapped Accessibility: ANSI A117.1, ADAAG, and local

Materials and Application: ANSI A156 series standards

d. Quality Level: Commercial. Locksets and Latchsets: Cylinder type. Locksets and Latchsets: Mortise type.

Silencers: At all frames. Accessory Hardware

END OF SECTION

END OF SECTION

SECTION 088000 - GLAZING

Provide plass that is factory plazed

glass, ÁSTM C 1036.

SECTION 092110 - GYPSUM BOARD ASSEMBLIES

Material: Metal.

Exterior Units: 1/2 inch insulat Mirrors: 1/4 inch mirror glass.

uous hinges at entrance

Wall and roof sheathing: APA Structural I Rated Sheathing. Lock Cylinders: Integral type. Exterior applications: Exterior Keying: Match existing keying and key control syster Hinges and Butts: Full mortise type with nonremovable pins at security doors;

Interior applications: Interior

ACCESSORIES

QUALITY ASSURANCE

PART 2 PRODUCTS

Lumber Grading Agency: Certified to NIST PS 20.

DELIVERY, STORAGE AND HANDLING

Identify lumber and sheet products by official grade mark

Type and size: As required by conditions of use. 2. Exterior locations and treated products: Hot-dip galvanized steel, ASTM A153/A153M, G90 coating class – for non treated conditions. Stainless steel, ASTM F593, Type 304 - for treated conditions. Other interior locations: Plain steel

Type: APA Oriented Strand Board, 3/8" thick at walls, 3/" thick at

Metal Connectors: Joist Hangers, Clips:
1. Galvanized steel, ASTM A653/A653M, G90 – at non treated, G185

### PART 2 EXECUTION 2.1 INSTALLATION

Set members level, plumb, and rigid.

Make provisions for erection loads, and for temporary bracing to maintain re is safe, plumb, and in true alignment until completion of erection and instr

Place beams, joists, and rafters with crown edge up. Place panels perpendicular to framing members with ends staggered

and sheet ends over firm bearing.

2. Leave 1/8 inch expansion space at panel ends and edges.

3. Secure to supports with nails spaced per details.

Leave 1/8 inch expansion space at panel ends and edges. Secure to supports with nails spaced per details. Provide blocking, nailers, grounds, furring, and other similar items required to receive and support work Treat field cuts and holes in preservative treated members providing structura

2.2 TOLERANCES

Framing Members: 1/4 inch from true position, maximum.

### SECTION 072100 - BUILDING INSULATION PART 1 GENERAL

Thermal insulation over heated spaces and over soffits, blanket type Thermal insulation over unheated areas, blanket type

Blanket/Batt Insulation: Glass fiber or mineral slag fiber, ASTM C 665, Type

a).

Loose Fill Insulation: Loose granular perlite, ASTM C 549, Type II.

Accessories:

Adhesives and mechanical anchors. Crack sealers and tapes.

with requirements of Section 011000 - Project Requirement Comply with requirements of Section 011000 - Project Requirements.

Install insulation and vapor barriers with continuous coverage to provide op: Unfaced blanket insulation: R-38 at attic spaces, R-19 at 2 x 6 stud walls and

### R-13 at 2 x 4 stud walls. SECTION 081400 - FLUSH WOOD DOORS

ry: Provide interior solid core flush wood doors

Submit product data, samples, shop drawings, warranty. Products: As selected by Architect complying with the following

AWI Quality Standards: NWWDA I.S. 1 A. and AWI Architectural Quality Standards.
Fire Rated Wood Doors: Meeting ASTM E 152 requirements

Interior Solid Core Doors: a. Grade: Premium. Construction: 5 ply. Species, Grain Matching and Transparent Finish: As selected by

Species, Grain Matching and Transparent Finish: Match existing

# Fitting: Factory prefit and premachine doors. Fitting: Remodel existing doors as required.

Comply with requirements of Section 011000 - Project Requirements. Comply with NWMA IS 1 and AWI Quality Standards.

Install with not more than 1/8 inch clearance at top and sides, 1/4 inch at botton unless undercut is required.

Comply with NFPA 80 for rated assemblies.

### SECTION 087100 - DOOR HARDWARE SECTION 09 28 16 - GLASS-MAT FACED GYPSUM BACKING BOARDS

Comply with code and accessibility requirements.

Hardware for Fire Rated Openings: NFPA 80, and local requirements.

Consers: High frequency type.
Exit Devices: High frequency type.
Hardware Finishes: Satin chrome and satin stainless steel.
Door Trim Units: Kickplates, pulls.

Stops: For each door; overhead door stops surface mo

Flush bolts with dustproof strikes, automatic door bottoms

Comply with requirements of Section 011000 - Project Requirements.

Comply with DHI "Recommended Locations for Builder's Hardware" and

Products: As selected by Owner complying with the following.

blocks, spacers, and compressible filler rods

lating glass, U-factor 0.65, SHGC 0.30.

Primary Glass Products: Clear float, tinted float, patterned, and wire

Heat Treated Glass Products: Heat strengthened, tempered, coated, and spandrel glass, ASTM C 1048.

Laminated Glass Units: Polyvinyl butyral interlayer.

Sealed Insulating Glass Units: ASTM E 774, Class A.

Mirrors: Silvering and protective coatings.

High Performance Coatings: Low e (low emissivity) type.

Glazing: Elastomeric glazing sealant glazing or preformed glazing tape; setting

with requirements of Section 011000 - Project Requirements

Comply with GANA Glazing Manual and manufacturer's recommendate mirrors on stainless steel channels and adhere to wall with mastic.

Interior walls, partitions, and ceilings for tape and joint compound finish Insulation and vapor barrier systems in gypsum drywall systems.

Products: As selected by Architect complying with the following.

Gypsum Wallboard: ASTM C 36, regular, 1/2 inch typical thickness at walls, ceilings with 24" o.c. supports use 5/8 inch typical thickness. ASTM C 1396,

et, 1/2 inch typical thickness in all areas other than shower stall. iypsum Backer Units: ½" DensShield Tile Backer, OR WEDI.

Types: Cornerhead, edge trim, and control joints

Comply with requirements of Section 011000 - Project Requirements

Install joints only over framing members. Do not allow butt to butt in

Provide blocking for items such as railings, grab bars, casework, toilet accessories, and similar items.

Install gypsum board assemblies true, plumb, level and in proper relation to

Provide 3 coat joint treatment such that, after finishing, joints are not visible.

a. Sand and leave ready for finish painting and wall treatment.

Where new partitions meet existing construction, remove existing cornerbeads to

Comply with standards referenced above and ASTM C 840 and GA 216

lypes: Cornerbead, edge trim, and contri ixiliary Materials: Gypsum board screws, ASTM C 1002. Fastening adhesive. Concealed acoustical sealant. Mineral fiber sound attenuation blankets.

Remodeling gypsum drywall systems at areas of new constructio

ASTM C840 Standard Specification for Application and Finishing of Gypsum Board.

ASTM C1002 Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs.

ASTM C1178 Standard Specification for Glass Mat Water-Resistant

PART 1 GENERAL

1.01 SUMMARY

Gypsum Backing Panel. ASTM D3273 Standard Test Method for Resistance to Growth of Mold

A. Section Includes: Fiberglass-mat faced, moisture resistant gypsum backer board

ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile

Installation Systems Using the Robinson-Type Floor Tester.
ASTM C840 Standard Specification for Application and Finishing of

Related Sections:
1. Section 09 21 16 Gypsum Board Assemblies

ASTM D32/T3 Statutard 1est Methods for Resistance to Common Mode on the Surface of Interior Coatings in an Environmental Chamber. ASTM D6329 Standard Guide for Developing Methodology for Evaluating the Ability of Indoor Materials to Support Microbial Growth Using Static Environmental Chambers.

ASTM E96 Standard Test Methods for Water Vapor Transmission of

Tile Council of North America, Inc. (TCNA): TCA Handbook for Ceramic Tile

1.03 SUBMITTALS

Product Data: Manufacturer's specifications and installation instructions for each

PART 2 PRODUCTS 2.01 MANUEACTURERS

Georgia-Pacific Gypsum LLC:
1. Fiberglass-Mat Faced Gypsum Backing Board: 1/4 inch DensShield Tile

Fiberglass-Mat Faced Gypsum Backing Board: 1/2 inch DensShield Tile Fiberglass-Mat Faced Gypsum Backing Board: 5/8 inch DensShield Firequard Tile Backer

2.02 MATERIALS

Fiberglass-Mat Faced Gypsum Backing Board: ASTM C1178:

Thickness: 1/4 inch. Width: 4 feet. Length: 4 feet. Weight: 1.6 lb/sq. ft.

cuges: square. Surfacing: Coated fiberglass mat on face, back, and long edge: Mold Resistance (ASTM D3273): 10, in a test as manufacture Microbial Resistance (ASTM D6329): Will not support microb

Permeance (ASTM E96): Not more than 1.0 perms when tiled. Robinson Floor Test Rating (ASTM C627): Light commercial

1/4 inch DensShield Tile Backer, Georgia-Pacific Gypsun

rolass-Mat Faced Gynsum Backing Board: ASTM C1178:

Thickness: 1/2 inch. Width: [4 feet] [32 inche: Length: [5 feet] [8 feet]. Weight: 2.0 lb/sq. ft.

Edges: Square. Mold Resistance (ASTM D3273): 10, in a test as manufacturer Microbial Resistance (ASTM D6329): Will not support microb

grown.

Permeance (ASTM E96): Not more than 1.0 perms when tiled
Robinson Floor Test Rating (ASTM C627): Light commercial.
Acceptable Products:

1/2 inch DensShield Tile Backer, Georgia-Pacific Gypsum C. Fiberglass-Mat Faced Gypsum Backing Board: ASTM C1178, Type X: Thickness: 5/8 inch

Width: 4 feet. Length: 8 feet. Weight: 2.5 lb/sq. ft. Edges: Square. Surfacing: Coated fiberglass mat on face, back, and long edges. Mold Resistance (ASTM D3273): Not less than 10, in a test as

Microbial Resistance (ASTM D6329): Will not support microbial

grown:
Permeance (ASTM E96): Not more than 1.0 perms when tiled.
Robinson Floor Test Rating (ASTM C627): Light commercial.
Acceptable Products:
a. 5/8 inch DensShield Fireguard Tile Backer, Georgia-Pacific

2.03 ACCESSORIES

A. Screws: ASTM C1002, with corrosion resistant treatment accessories, and similar iterris.
Provide acoustical sealant at runner tracks, wall perimeters, openings, expansion, PART 3 EXECUTION

3.01 EXAMINATION CITY OF SCOTTSDALE BUILDING PLANS
Verification THE SET IP ANS HAVE BEEN REVIEWED

1. Inspection of the BEEN REVIEWED TO THE SET IN THE ACCESS TO THE ACCESS TO THE SET IN THE ACCESS TO THE ACCESS TO THE SET IN THE ACCESS TO THE SET IN THE ACCESS TO THE ACCESS TO

THIS DOES NOT AUTHORIZE VIOLATIONS OF

3.02 INSTALLATION ANY ANY CODE OR ORDINANCE.

General: In accordance with ASTM C840, manufacturers rec TCA Handbook for Ceramic Tile Installation.

Manufacturer's Recommendations: Current "Product Catalog", Georgia-Pacific Gypsum 3.03 PROTECTION

Protect gypsum board installations from damage and deterioration until the date

END OF SECTION 09 28 16

TREVOR PAN ARCHITECTS

ershop arb  $\mathbf{\Omega}$ uard

Ed REVISION SCHEDULE

> 60475 TREVOR PAN Expires: 9/30/2024

497-24

CHECK#

PLAN

JOB# 23035 DATE 1-15-24 SCALE SPECIFICATIONS

G100

Floor tile over concrete slab

Submit product data, samples, 4 foot by 4 foot mockup.

Tile Materials: ANSI A 118 series standard specifications. Floor Tiles Type 1 (CT-1): 12 in. by 12 in. and 6 in. by 6 in., matte finish.

Mull Tiles Type 2 (CT-2): 4 in. by 4 in. by 5/15 inch, gloss finish. Provide three color random base color and 30% accent color.

Marble thresholds (owner selected).

Setting Materials: Latex Portland cement mortar, ANSI A118.4.

Setting Materials: Latex Portland cement mortar, ANSI A118.4.

Grout: Latex Portland cement grout, ANSI A118.7.

Setting Accessories:
a. Membrane waterproofing under file.
b. Cementilious file backer board.

Elastomeric Sealants:
a. One part mildew resistant silicone sealant for non traffic areas.
b. Multi part pourable urethane sealant for traffic areas.

Chemical resistant sealant at chemical resistant flooring.

Comply with requirements of section UTIQUO - Project Requirements.

Comply with ANSI 108 series standard specifications and Tile Council
of North America, Handbook for Ceramic Tile Installation.

Layout tile in grid pattern with alignment of grids, to provide uniform

Grout, cure, clean and protect tile surfaces.

### END OF SECTION

### SECTION 099000 - PAINTING AND COATING

Provide painting and surface preparation for interior and exterior unfinished

surfaces as scheduled. Provide painting and surface preparation of exposed mechanical and electrical

piping, conduit, ductwork, and equipment. Provide repainting and surface preparation at areas of remodeling Provide painting of entire surface where patch painting is required

consisting of 1 unopened gallon of each type of paint used.

Products: As selected by Owner complying with the following

reducts: As selected by Owner complying with the following Regulations: Compliance with VOC and environmental regul First line commercial quality products for all coating systems. Schedule:

ard and plaster walls, eggshell finish, 1 coat latex primer and 2 coats latex finish.

Gypsum board and plaster ceilings, flat finish, 1 coat latex primer and 2 Gypsum board in bathrooms, kitchens and wet areas, semigloss finish, 1

nat latev primer 2 coats alkyd finish

coat latex primer, 2 coats alkyd trinish. Ferrous metals, semigloss finish, 1 coat primer, 2 coats alkyd enamel. Galvanized metal, semigloss finish, 1 coat galvanized metal primer, 2 coats alkyd enamel. Wood for transparent finish, site refinishing, match existing gloss, 2

Wood for opaque finish, site refinishing, match existing gloss, 1 coat

Comply with requirements of Section 011000 - Project Requirements. Provide field applied mock ups of each color and finish selected on actual surfaces to be painted.

Test sample area for adhesion for each type of paint.

Remove cover plates and protect hardware and adjacent surfaces

Sand before painting until smooth and flat and sand between coats Apply paint to achieve manufacturer's recommended dry film

Paint entire surface where patch painting is required.

Recoat areas which show bleed through or defects.

Clean paint spatter from adjacent surfaces and glass.

Touch up damaged surfaces at completion of construction.

# END OF SECTION

### SECTION 230000 - HEATING, VENTILATING AND AIR CONDITIONING

Retier to prain.

Provide equipment, systems, and controls for heating, cooling.

Modify, relocate and extend existing service to accommodate new work.

Coordinate location of existing ductwork to avoid interference with location of designated lighting fixture locations. Do not cut structural elements without prior written approval.

Design Conditions:

1. Refer to submittal data at end of specifications.

a. Systems: GOODMAN: Packaged Heat Pump, 3 Tons, 14.5

SEER / 11.0 HSPF, Cooling Capacity: 36,000 BTU/h, Heating Capacity:

Utility Service: match existing

Provide new materials suitable for service intended complying with approved shop drawings. Provide accessory items such as controls,

Submit product data, warranties, operating and maintenance data,

Comply with requirements of Section 011000 - Project Requirements.

Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction and SMACNA

requirements of authorities having jurisdiction and SMACNA recommendations.

Conceal piping and ductwork to the greatest extent practical.

Maintain indicated fire ratings of walls, partitions, ceilings, and floors at penetrations. Seal with firestopping to maintain fire rating.

Insulate piping and ductwork. Provide vapor barrier on insulated piping operating

anchors and insulation.

Test all systems for proper operation.

Instruct Owner's personnel in proper operation of systems.

# END OF SECTION

### SECTION 260000 - ELECTRICAL

Submit signed and sealed shop drawings for review and as required for building

Comply with requirements of Section 011000 - Project Requirements.

Comply with applicable codes, regulations, ordinances and requirements of

Comply with applicable codes, regulations, ordinances and re authorities having jurisdiction and National Electrical Code. Provide core drilling as required for new work. Conceal conduit to the greatest extent practical Install light switches at uniform height above finished floor. I within rooms at strike side of door unless noted otherwise.

Install thermostats centered above light switches where applicable.

Gang mount multiple switching locations. Mount multiple types of controls as close together as possible and in line with each other at uniform height above

Group multiple junction boxes, telephone and electrical outlets together on walls

Refer to Electrical Drawings for electrical requirements. Provide electrical systems for the following:

Power.

Lighting, interior and exterior.

Power, telephone, cable TV and data outlets and wiring if required by owner.

Modify, relocate and extend existing service to accommodate new work.

Relamp existing fixtures consistent with building standards.

Maintain fire alarm system in operation during construction.

Coordinate location of piping and fire protection systems to avoid interference with braction of release that delibering fixtures leastly and the protection of the p with location of designated lighting fixture locations.

Coordinate schedule of telephone and data outlet completion with Owner's

Do not cut structural elements without prior written approval

Refer to Electrical Drawings for electrical requirements.
 Provide new materials suitable for service intended complying with approved submittals. Provide accessories such as controls, cover plates, and connections to equipment. Finish as selected by Owner.

Avoid back to back box locations.

Mount electrical, data, and telephone outlets vertically, at uniform height above

finished floor unless noted otherwise.

Maintain indicated fire ratings of walls, partitions, ceilings, and floors at

penetrations. Seal with firestopping to maintain fire rating. Test all systems for proper operation.

Newly installed interior wall, ceiling, and floor finish materials, including new carpeting and ceiling tiles shall comply with low-VOC limits of Scottsdale amended Section 801.4.2 of the International Green Construction Code (IgCC).

IgCC LOW-VOC FINISH MATERIALS

801.4.2.1 Adhesives and sealants.

801.4.2.2 Paints and coatings.

801.4.2.3 Floor covering materials.

801.4.2.4 Composite woods, agrifiber and laminated products.

801.4.2.6 Ceiling tile and wall systems (excluding office furniture systems).

Floor covering materials, ceiling tiles, and wall system products certified under nationally recognized third-party low-emission certification programs such as Carpet and Rug Institute Green Label Plus, Resilient Floor Covering Institute FloorScore and UL GreenGuard, are deemed to comply with IgCC emission

# IgCC TABLE 801.4.2.1 VOC CONTENT LIMITS FOR ADHESIVES AND SEALANTS

ADHESIVES	VOC LIMIT grams per liter (g/L) a,b
Building envelope membrane adhesive	250
Carpet and carpet pad adhesives	50
Ceramic tile adhesives	65
Cove base adhesives	50
Drywall and panel adhesives	50
Multipurpose construction adhesives	70
Rubber floor adhesive	60
Structural glazing adhesives	100
Subfloor Adhesive	50
VCT and asphalt tile adhesives	50
Wood flooring adhesives	100
SEALANTS	
Architectural sealants including foam and grout	250

A. Values in this table are derived from those specified by SCAQMD Rule 1168, October 2017.
 b. For low-solid adhesives and sealants, the VOC limit is expressed in grams per liter of material as specified in SCAQMD Rule 1168. For all other adhesives and sealants, the VOC limits are expressed in grams of VOC per liter of adhesive or sealant less water and less exempt compounds as specified in SCAQMD Rule 1168.

CATEGORY	VOC LIMIT grams per liter (g/L) a,b	
Flat paints	50	
Nonflat paints	50	
Nonflat High-gloss paints	150	
Specialty coatings:		
Concrete/masonry sealers	100	
Floor coatings	50	
Primers, sealers, and undercoats	100	
Stains	250	
Wood coatings	275	

Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to lint bases.
 Values in this table are derived from those specified by the California Air Resources Board Suggested Control Measure for Architectural Coatings dated May 2020.

**AS NOTED** 

TREVOR PAN ARCHITECTS

Barbershop Eduard

REVISION SCHEDULE

CITY OF SCOTTSDALE BUILDING PLANS
THESE PLANS HAVE BEEN REVIEWED AND ARE READY FOR A PERMIT. THIS DOES NOT AUTHORIZE VIOLATIONS OF CODE OR ORDINANCE.



Expi	1163. 3/30/2024
JOB#	23035
DATE	1-15-24
SCALE	
DRAWN BY	JD
CHECKED BY	TP
Specification	ONS

SHEET G101

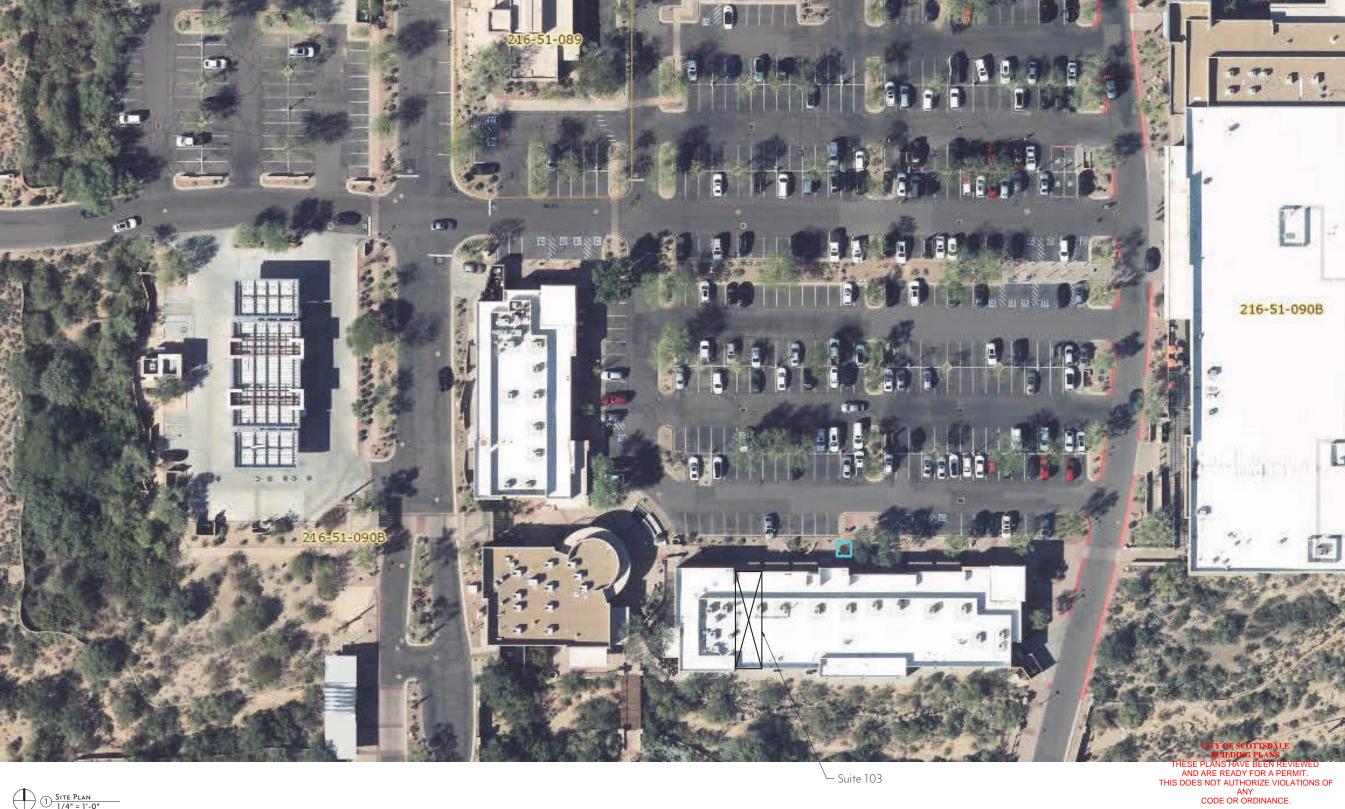
CHECK#

PLAN

Expi	res: 9/30/2024
JOB#	23035
DATE	1-15-24
SCALE	1/4" = 1'-0"
DRAWN BY	JD
CHECKED BY	TP

SHEET A100

**PLAN CHECK# 497-24** 



SITE PLAN

Eduard Barbershop TI

REVISION SCHEDULE

REAR

EXISTING ROOM SCHEDULE

4 43 SF

Existing Room 2

3

54 SF

ENTRANCE

EXISTING FLOOR PLAN
3/8" = 1'-0"

Existing Empty Suite

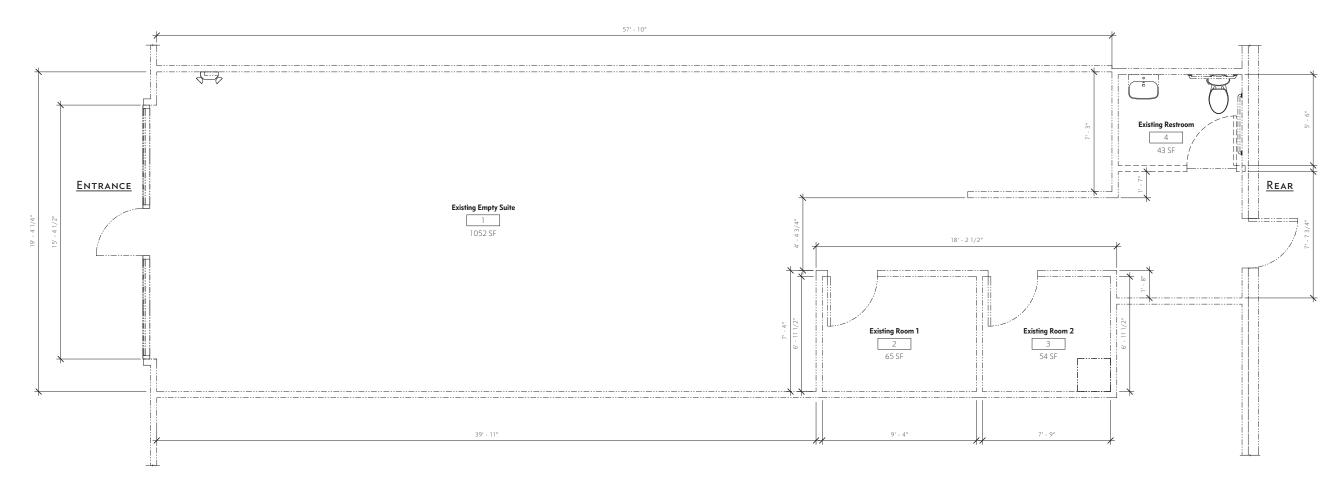
1
1052 SF

Name	Area
EXISTING RESTROOM	43 SF
Existing Room 2	54 SF
Existing Room 1	65 SF
EXISTING EMPTY SUITE	1052 SF
GRAND TOTAL	1214 SF

CITY OF SCOTTSDALE
BUILDING PLANS
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TREVOR PAN - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -

JOB#	23035
DATE	1-15-24
SCALE	3/8" = 1'-0"
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CHECKED BY	TP



Eduard Barbershop TI

REVISION SCHEDULE

EXISTING DIMENSION PLAN
3/8" = 1'-0"

CITY OF SCOTTSDALE
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Expires: 9/30/2024		
JOB#	23035	
DATE	1-15-24	
SCALE	3/8" = 1'-0"	
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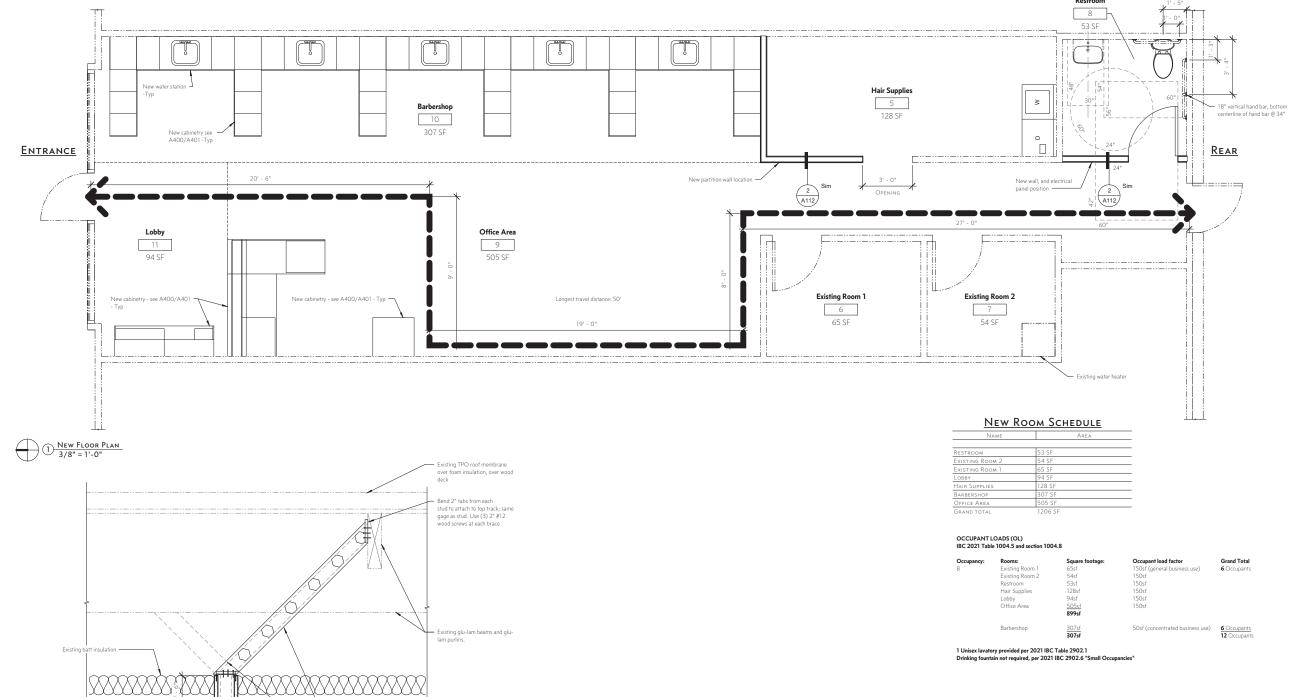
**PLAN CHECK# 497-24** 

SHEET A111

REVISION SCHEDULE

32531 N Scottsdale Ros Scottsdale, AZ 85266

TREVOR PAN ARCHITECTS Eduard Barbershop TI



"Clark Detriech ProStud" 362PDS-125-30 steel studs, fasten with (3) #12 Tek screws as required. Braces 48" o.c., alternate braces and attach to structure as

(2) 2x4 steel studs at header,
"Clark Detriech ProStud" 362PDS-125-30
steel studs, fasten with #12 Tek screws as required
Provide jack studs
Bend 2" tabs from each header stud to attach to
jack studs, same gage as stud. Use (3) #12 Tek screws
each tab.

Bend 2" tabs from each stud to attach to top track; same gage as stud.

required, 16" o.c. See chart, Sheet A500

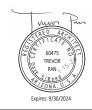
(2) "Clark Detriech ProStud" 362PDS-125-30 steel stud header, fasten with #12 Tek screws as required, 16" o.c.

4" Black vinyl base - typical -

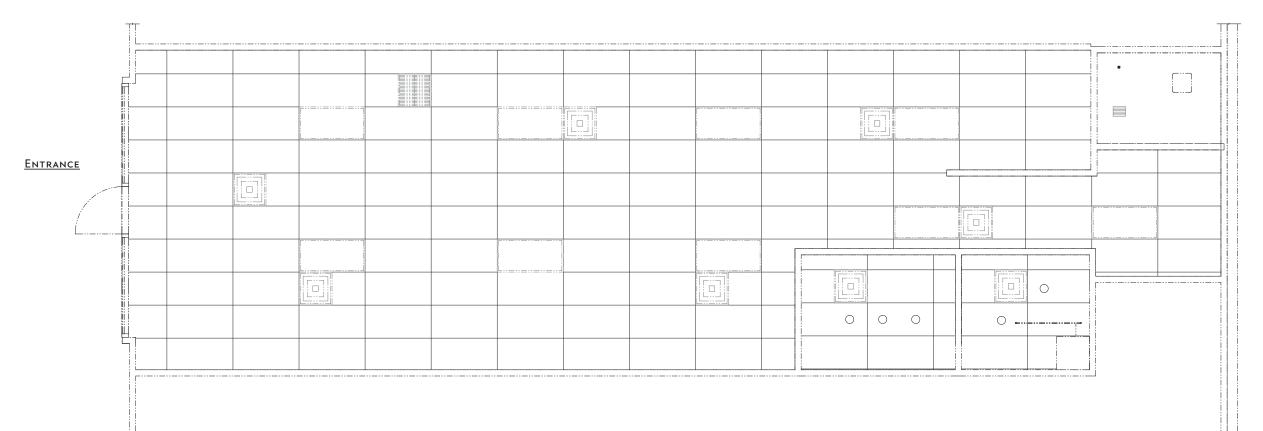
Match bottom track with same gage as studs and use 3/16" Ø x 1" galvanized shot pins at 24" o.c. - typical

2 PARTITION WALL
1 1/2" = 1'-0"

CITY OF SCOTTSDALE CITY OF SCOTTSDALE
BUILDING PLANS
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JOB#	23035
DATE	1-15-24
SCALE	AS INDICATED
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REAR

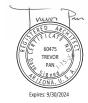
Eduard Barbershop TI

REVISION SCHEDULE

# Description Date

1) EXISTING REFLECTED CEILING PLAN
3/8" = 1'-0"

CITY OF SCOTTSDALE
BUILDING PLANS
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Expires: 9/30/2024		
23035		
1-15-24		
3/8" = 1'-0"		
JD		
TP		

Eduard Barbershop TI

REVISION SCHEDULE

Entrance  $\circ$  $\circ$ 0 0 O ...

New wall, cut as required -

New Reflected Ceiling Plan
3/8" = 1'-0"

CITY OF SCOTTSDALE
BUILDING PLANS
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TREVOR AND

Expi	res: 9/30/2024
JOB#	23035
DATE	1-15-24
SCALE	3/8" = 1'-0"
DRAWN BY	JD
CHECKED BY	TP





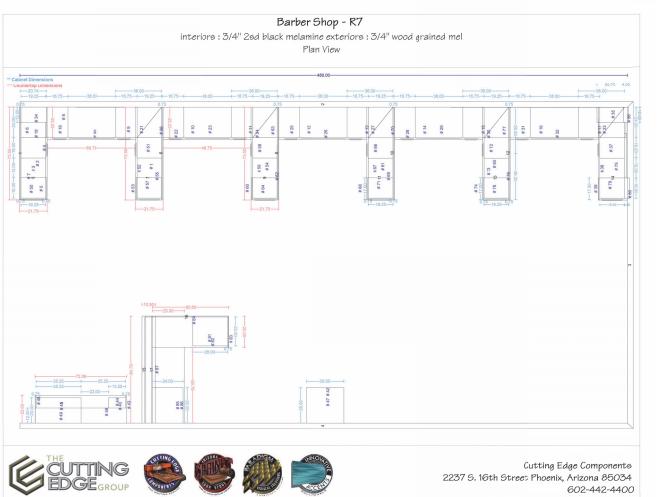


Project Name: Barber Shop - R7

Case Material: Black Door Material: MEL-Wood Grained Drawer Box Material: 5/8 Black Edge Banding Material: wood grained matching PVC Boring: CEC Dowel Construction Dowel:8mm case / 6mm drawer boxes Drawer Slides: CEC Standard Side Mount Soft Close Hinges: CEC Standard Euro Soft Close Y N Assembling: N Packing: N N Shipping: Delivering: Requested Due Date: Shop File Location:

Cutting Edge Components | 2237 S. 16th Street Phoenix, Arizona 85034 | 602-442-4400





TREVOR PAN ARCHITECTS

Eduard Barbershop TI

REVISION SCHEDULE

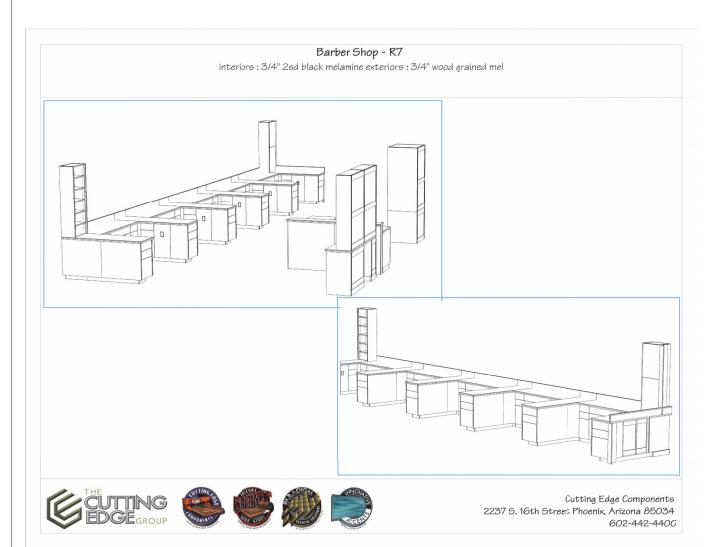
CITY OF SCOTTSDALE THY OF SCOTTSDALE
BUILDING PLANS
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Expi	165. 5/30/2024
JOB#	23035
DATE	1-15-24
SCALE	
DRAWN BY	JD
CHECKED BY	TP

REVISION SCHEDULE

Barber Shop - R7 interiors: 3/4" 2sd black melamine exteriors: 3/4" wood grained mel Too Assumbly
Too Complete Too
Too Assumbly
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Too Compl CUTTING EDGEGROUP Cutting Edge Components



CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN REVIEWED
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THIS DOES NOT AUTHORIZE VIOLATIONS OF
ANY
CODE OR ORDINANCE.

2237 S. 16th Street Phoenix, Arizona 85034

602-442-4400



Expi	res: 9/30/2024
JOB#	23035
DATE	1-15-24
SCALE	
DRAWN BY	JD
CHECKED BY	TP

A401

	EXHAUST FAN SCHEDULE												
EQUIPMENT NUMBER	SERVICE LOCATION	AIR VOLUME CFM	STATIC PRESSURE inWG	VOLTAGE/ PHASE	HORSE POWER	AMPS	MANUFACTURER MODEL	FAN SPEED RPM	REMARKS	WEIGHT LBS			
EF-1	RESTROOM	70	0.5	120/1	FRACC	0.1	BROAN 80	1750	CONTROLLED BY TAGGLE SWITCH	8			

		L	OAD S	SUMM	IARY (N	ИВН)					
ZONE	SYST. NAME	SYST. EQU.	CALC. EQUIPMENT CAPACITY	CALC. COOLING TOTAL BTU/H	CALC. COOLING SENSIBLE COOLING BTU/H	PROVIDED TOTAL COOLING BTU/H	PROVIDED COOLING SENSIBLE BTU/H	PROVIDED EQUIPMENT CAPACITY (TONS)	EQUIPMENT CAPACITY AS % OF DESIGN	CALC. HEATING BTU/H	PROVIDED HEATING BTU/H
ENTIRE SPACE	HP-1	PACKAGE	4.5	53,700	42,500	58,000	52,000	5	105%	20,300	31,400

# THERMAL LOAD NOTES

- BUILDING LOAD CALCULATIONS WERE PERFORMED USING CARRIER HOURLY ANALYSIS PROGRAM VERSION 4.2 WHICH UTILIZES THE PROCEDURES DESCRIBED IN THE ASHRAE FUNDAMENTALS HANDBOOK.
- 2. THE MINIMUM EFFICIENCY ALLOWED IS 14 SEER

	OUTSIDE AIR CALCULATION																	
2018 IMC TABLE 403.3																		
ZONE	AZ	Occ. Density	Pz	Rp	RpPz	Ra	RaAz	EXHAUST	Vbz	Ez	Voz	Vpz	Zp	Ev	Ps	D	Vou	Vot
		Tab. 403.3		CFMPERSO		CFM/SF Tab		CFMSF Tab		Tab				Tab	Max.			
	SF		PEOPLE	N tab 403.3	CFM	403.3	CFM	403.3	Eq 4-1 CFM	403.3.1.2	Eq 4-2 CFM	CFM	Eq 4-5	403.3.2.3.2	Occupants	Eq 4-7	Eq 4-6	Eq 4-8
BARBER SHOP	1037	25	26	7.5	194	0.06	62	0	257	0.8	321	1860	0.17	0.9	26	1.00	257	286
LAUNDRY	128	10	1	5	6	0.12	15	70	92	0.8	115	70	1.64	0.4	1	0.78	20	51
RESTROOM	41	0	0	0	0	0	0	70	0	1	70	70	1.00				4	70
TOTAL	1206		27					140				2000			27			407

	REGISTERS AND GRILLES SCHEDULE											
ID	DESCRIPTION	MANUFACTUER / MODEL	SIZE (IN.)	MATERIAL	COLOR	OBD	REMARKS					
(A)	SUPPLY REGISTER	HART & COOLEY / SRE & SR7 OR EQ.	24x24	STEEL	WHITE	YES	_					
B		HART & COOLEY / 673TPI R6 OR EQ.	24×24	STEEL	WHITE	-	-					

# **MECHANICAL SPECIFICATIONS**

- THE MECHANICAL CONTRACTOR SHALL COORDINATE T-STAT (SENSOR) LOCATIONS WITH THE ARCHITECT & OWNER.
- PROVIDE ALL NECESSARY MATERIALS, EQUIPMENT, FEES, PERMITS ETC. NEEDED FOR A COMPLETE INSTALLATION.
- THIS CONTRACT SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS BY WHICH IT HAS BEEN PERMITTED.
- COORDINATE ALL MECHANICAL WORK WITH ARCHITECT AND OTHER TRADES PRIOR TO ANY CONSTRUCTION
- TERMINATE EXHAUST DUCTS AND PLUMBING VENTS MINIMUM 10 FEET HORIZONTALLY FROM OR 3 FEET ABOVE ALL AIR INTAKES. COORDINATE WITH PLUMBING CONTRACTOR.
- EQUIPMENT AND APPLIANCES SHALL BE INSTALLED AS REQUIRED BY THE TERMS OF THEIR APPROVAL, IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING, THE MANUFACTURER'S INSTALLATION INSTRUCTION AND THE 2018 IMC. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION.
- MECHANICAL CONTRACTOR SHALL VERIFY AND COORDINATE SIZE AND LOCATION OF ALL EXISTING HVAC EQUIPMENT. EXISTING EQUIPMENT AND DUCTWORK SHALL BE CLEANED AND SERVICED. CONTRACTOR SHALL REPLACE ALL WORN OR DEFECTIVE PARTS AND RETURN ALL EXISTING EQUIPMENT AND REUSED DUCTS TO GOOD WORKING CONDITION. INFORM OWNER/LANDLORD OF MAJOR REPAIRS REQUIRED TO MAKE EXITING UNITS OPERATIONAL. EXISTING CONDITIONS SHALL BE VERIFIED PRIOR TO SUBMITTING BID.

- LOCATE ALL MECHANICAL EQUIPMENT IN COMPLIANCE WITH THE 2018 I.M.C.
- OUTSIDE AIR (OSA) QUANTITIES FOR A/C UNITS SHALL BE SET ACCORDING TO THE MECHANICAL FLOOR PLAN.
- ALL NEW HVAC EQUIPMENT SHALL BE U.L., E.T.L., AND /OR AGA LISTED. PROVIDE FARR 24X24 DISPOSABLE FILTERS, FRAMES, HARDWARE AND ACCESSORIES FOR USE DURING CONSTRUCTION. PROVIDE NEW DISPOSABLE FILTERS PRIOR TO
- MECHANICAL CONTRACTOR TO VERIFY AND COORDINATE AVAILABLE VOLTAGE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.

### DUCTWORK

BALANCING THE SYSTEM.

- 1 PROVIDE MANUAL SPIN-IN DAMPER AT EACH NEW (& EXISTING IF NOT EXISTING) BRANCH CONNECTION FOR DIFFUSERS IN LAY-IN CEILINGS AND OPPOSED BLADE DAMPER IN HARD LID MOUNTED DIFFUSERS
- BRANCH DUCTS SHALL BE RIGID ROUND. THE FINAL CONNECTION TO THE DIFFUSER MAY BE MADE WITH FLEX DUCT. FLEX DUCT LENGTH SHALL NOT EXCEED 8'0".
- USE GALVANIZED SHEET METAL FOR ALL NEW DUCTWORK, CONSTRUCT AND INSTALL IN ACCORDANCE WITH ASHRAE GUIDELINES, CHAPTER 6 OF THE 2006 IMC AND THE LATEST SMACNA STANDARDS FOR LOW PRESSURE DESIGN.
- USE THERMAFLEX TYPE KM OR APPROVED EQUAL FLEX DUCT CONFORMING TO UL 181, NFBA 90A AND 90B.
- MECHANICAL CONTRACTOR TO VERIEY THAT ALL DUCTWORK WILL FIT AS DESIGNED. DUCTS SHALL BE OF SIZES SHOWN ON THE DRAWINGS UNLESS LOCATION OF
- STRUCTURAL MEMBERS PROHIBIT. THE AREA OF THE DUCT SHALL BE MAINTAINED IF A CHANGE IS NEEDED. THE DUCT SIZES SHOWN ARE CLEAR INSIDE INCLUDING ANY DUCT LINERS.
- SUPPORT ALL NEW & EXISTING DUCTS WITH HANGERS TO THE STRUCTURE. PLACE SUPPORTS NOT OVER 8 FEET APART ALONG THE LENGTH OF THE DUCT. SHEET METAL SHALL BE:

UP TO 12" WIDTH 26 GAUGE STEEL 13" TO 30" WIDTH 24 GAUGE STEEL 31" TO 60" WIDTH 22 GAUGE STEEL

FLEX DUCT SHALL BE SUPPORTED BY 1 1/2" 26 GAUGE STEEL STRAP NOT MORE

THAN FOUR FEET ON CENTER.

- EXHAUST DUCTS SHALL BE 26 GAUGE GALVANIZED STEEL
- USE CLASS "O" OR CLASS "1" FOR ALL "FACTORY MADE" DUCT.
- 10 INSTALL RADIUS ELBOWS, TURNING VANES, EXTRACTORS AND SPLITTER DAMPERS IN DUCTWORK WHERE APPLICABLE.
- 11 ALL JOINTS LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS, MASTIC+EMBEDDED-FABRIC SYSTEMS OR TAPES. TAPES AND MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A AND SHALL BE MARKED 181A-P FOR PRESSURE-SENSITIVE TAPE. TAPES AND MASTICS USED TO SEAL FLEXIBLE AIR DUCT AND FLEXIBLE CONNECTORS SHALL COMPLY WITH UL 181B AND SHALL BE MARKED 181B-FX FOR PRESSURE-SENSITIVE TAPE OR 181M FOR MASTIC. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEM FOUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED. UNLISTED DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS.
- 12 MECHANICAL CONTRACTOR SHALL CAP UN-USED OPENINGS IN EXISTING DUCTWORK
- 13 CLOTHES DRYER EXHAUST DUCTS SHALL BE OF A SMOOTH APPROVED MATERIAL. DO NOT USE SHEET METAL SCREWS OR OTHER FASTENING MEANS WHICH EXTEND INTO THE AIR STREAM. VENTS SHALL DISCHARGE OUTSIDE TO A HOOD OR VENT CAP WITH A BACK-
- 14 FOR UNCONDITIONED SPACE DUCT PROVIDE MINIMUM R=8 INSULATION.

# MECHANICAL SYMBOLS (NOT ALL USED)

 $\boxtimes$ SUPPLY AIR DIFFUSER/REGISTER RETURN AIR GRILLE

EXHAUST AIR RELIEF VENT

THERMOSTAT

INDICATES SIZE OF DUCT

 $\langle A \rangle$ INDICATES REGISTER, DIFFUSER OR GRILLE TYPE

₹ Ø } METAL ROUND DUCT.

METAL RECTANGULAR DUCT

ADJUSTABLE VOLUME DAMPER

FLEXIBLE ROUND DUCT (SD) DUCT SMOKE DETECTOR

0 VENT THRU ROOF

EQUIPMENT IDENTIFICATION TAG, SEE SCHEDULE AND KEYNOTES (XX-X)E) FXISITNG

RELOCATED

REMOVE

(MD) DUCT MOTORIZED DAMPER

# MECHANICAL SPECIFICATIONS

- THE MECHANICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF ALL AIR DISTRIBUTION DEVICES WITH ALL TRADES PRIOR TO ANY CONSTRUCTION.
- 2 THE MECHANICAL CONTRACTOR SHALL COORDINATE SPACE AVAILABILITY FOR DUCTWORK WITH STRUCTURAL AND ELECTRICAL CONTRACTORS PRIOR TO ANY CONSTRUCTION TO AVOID RELOCATING DUCTWORK AT THE MECHANICAL CONTRACTOR'S EXPENSE.
- DIFFUSERS SHALL MATCH EXISTING OR APPROVED EQUAL, NECK SIZE AS INDICATED.
- RETURN AIR GRILLES SHALL MATCH EXISTING OR APPROVED EQUAL.
- 1 APPROVED SMOKE DETECTOR DEVICES SHALL BE INSTALLED WITH ALL AIR MOVING SYSTEMS (FITHER INDEPENDENT OR COMBINED IN A COMMON PLENUM OR SERVING A COMMON ROOM) OVER 2000 CFM, LOCATE IN THE RETURN AIR DUCTWORK. THE SMOKE DETECTOR SHALL AUTOMATICALLY SHUT DOWN THE MECHANICAL UNIT WHEN PARTICLES OF COMBUSTION ARE DETECTED WITHIN AIR STREAM PER IMC 606 IF A FIRE ALARM PANEL IS PROVIDED, ALL SMOKE DETECTORS SHALL BE MONITORED BY THAT PANEL IF NO FIRE ALARM PANEL IS PROVIDED A VISIBLE AND ALIDIRLE SUPERVISORY SIGNAL SHALL BE INSTALLED AT A CONSTANTLY SUPERVISED LOCATION TRIGGERED BY THE ACTIVATION OF A DUCT SMOKE DETECTOR.
- 2 ALL DUCT-MOUNTED SMOKE DETECTORS SHALL BE EQUIPPED WITH AN AUDIBLE OR VISIBLE SIGNAL IN THE CEILING DIRECTLY BELOW THE DETECTOR. THE DEVICE SHALL BE LABELED "DUCT DETECTOR TROUBLE INDICATOR" AND SHALL WARN OF DETECTOR MALFUNCTION AND/OR
- 3 SMOKE DETECTORS REQUIRED BY 2006 IMC 606 SHALL BE INSTALLED IN ACCORDING WITH NEPA 72. THE REQUIRED SMOKE DETECTORS SHALL BE INSTALLED TO MONITOR THE ENTIRE AIR FLOW CONVEYED BY THE SYSTEM INCLUDING RETRUN AIR AND EXHAUST OR RELIEF AIR. ACCESS SHALL BE PROVIDED TO SMOKE DETECTORS FOR INSPECTION AND MAINTENANCE

1 EXTEND SCHEDULE TYPE "M" COPPER CONDENSATE DRAIN AS SHOWN MIN 2% SLOPE ROUTE UNDER ROOF

### INSULATION

- 1 PROVIDE 1" ACCOUNTIC INTERNAL LINER IN SUPPLY AND RETURN DUCTWORK FROM THE DUCT CONNECTION TO THE UNIT AND LINE THE FIRST 10 FEET FROM
- 2 ALL INSULATION, MATERIAL, COVERINGS, ADHESIVES, VAPOR-BARRIERS AND TAPES SHALL CONFORM TO NEPA '90A, FLAME SPREAD CLASSIFICATION NOT TO EXCEED 25 AND SMOKE DEVELOPMENT NOT TO EXCEED 50.
- 3 SHEET METAL DUCTWORK FOR A/C SUPPLY AND RETURN SHALL BE WRAPPED WITH 1-1/2", 3/4 LB. EXTERIOR INSULATION, WITH FSK JACKET AND VAPOR BARRIER.
  - 1 TEST AND RALANCE SYSTEM TO APPROXIMATE CEM INDICATED ON MECHANICAL FLOOR PLAN AND ADJUST TO THE TENANT'S SATISFACTION, MARK ALL FINAL DAMPER SETTINGS WITH A PAINT DOT. THE BALANCE SHALL BE PERFORMED BY AN INDEPENDENT AABC CERTIFIED BALANCE CONTRACTOR, PROVDE A COPY OF AIR BALANCE REPORT THE CITY BUILDING INSPECTOR PRIOR TO OR BEFORE FINAL MECHANICAL INSPECTION.

# I.E.C.C. NOTES

- EACH HEATING AND COOLING SYSTEM SHAL HAVE AT LEAST ONE SOLID—STATE PROGRAMMABLE THERMOSTAT. THE THERMOSTAT SHALL HAVE THE CAPABILITY TO SET BACK OR SHUT DOWN THE SYSTEM BASED ON DAY FOR THE WEEK AND TIME OF DAY, AND PROVIDE A READILY ACCESSABLE MANUAL OVERRIDE THAT WILL RETURN TO THE PRESETBACK OR SHUTDOWN SCHEDULE WITHOUT
- ALL SUPPLY AND RETURN DUCTS AND PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R-8 INSULATION WHEN LOCATED IN UNCONDITIONED SPACES, AND WITH A MINIMUM OF R-8 INSULATION WHEN LOCATED OUTSIDE THE BUILDING.
- 3. ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK, SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, CASKETS, MASTICS, MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS OR TAPES. TAPES AND MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH ULIBIA OR ULIBIAD. DUCT CONNECTIONS TO FLANGES OR AIR DISTRIBUTION SYSTEM COUPMENT SHALL BE SEALED AND MECHANICALLY FASTED, UNLISTED DUCT TAPE IS NOT PERMITTED AS A SEALENT ON ANY METAL DUCTS.
- MATERIALS, EQUIPMENT AND SYSTEMS SHALL BE IDENTIFIED IN A MANNER THAT WILL ALLOW A DETERMINATION OF THEIR COMPLIANCE WITH APPLICABLE PROVISIONS OF THE IECC.

 SECTION 101.4.3
 ADDITIONS, ALTERATIONS, RENOVATION OR REPAIR TO AN EXISTING BUILDING.
 BUILDING SYSTEM OR PORTION THEREOF SHALL CONFORM TO THE PROVISIONS OF THIS CODE AS THEY RELATE TO NEW CONSTRUCTION WITHOUT REQUIRING THE UNALTERED PORTION(S) OF THE EXISTING BUILDING OR BUILDING SYSTEM TO COMPLY WITH THIS CODE, ADDITIONS, ALTERATIONS, RENOVATION OR REPAIR SHALL NOT CREATE AN UNSAFE OR HAZARDOUS CONDITION OR OVERLOAD EXISTING BUILDING SYSTEM.

EXCEPTIONS: THE FOLLOWING NEED NOT COMPLY PROVIDED THE ENERGY USE OF THE BUILDING IS NOT INCREASED.

- 1. STORM WINDOWS INSTALLED OVER EXISTING FENESTRATION.
- 2. GLASS ONLY REPLACEMENT IN AN EXISTING SACH AND FRAME.
- 3. EXISTIING CEILING, WALL OR FLOOR CAVITIES EXPOSED DURING CONSTRUCTION PROVIDED THAT THESE CAVITIES ARE FILLED WITH INSULATION.
- 4. CONSTRUCTION WHERE THE EXISTING CHOOSE CHAPTED ALONE CAVITY IS NOT BUILDING PLANS



# **PLAN INDEX**

- M1 MECHANICAL SPECIFICATIONS
  M2 MECHANICAL DEMOLITION & MECHANICAL PLAN
  M3 MECHANICAL DETAILS

PROJECT NO.: TP2308 DESIGNED BY: DG DRAWN BY: GB CHECKED BY: DG

NO.	REVISION	DATE

ENGINEERING SEAL





MECHANICAL & ELECTRICAL

OFFICE: (480)361-3667 MOBILE: (480)217-5853

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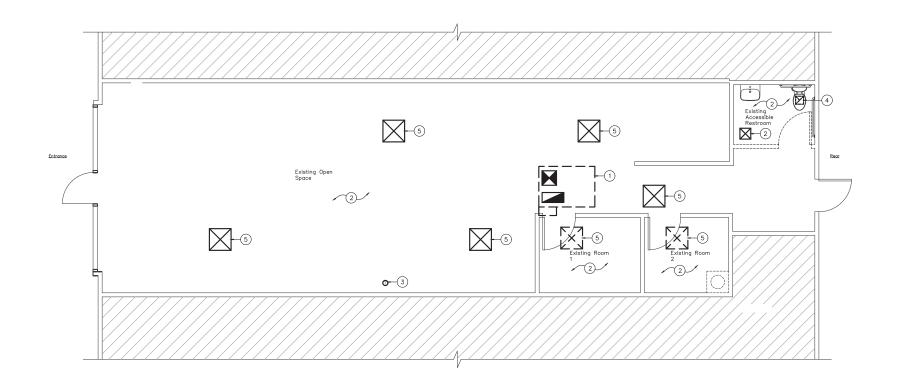
EDUARD BARBERSHOP TI I N SCOTTSDALE RD SUITE SCOTTSDALE, AZ 85266

SHEET TITLE:

497-24

CHECK#

PLAN



2 (TYP.)

4 B

Office Area

12"ø

# **KEYNOTES**

- (1) EXISTING 5-TON HEAT PUMP ROOFTOP PACKAGE HVAC UNIT TO REMAIN.
- 2 EXISTING DUCTIMORIK, DIFFUSERS, AND REGISTERS REMAIN U.NO. SEE MECHANICAL PLAN FOR RELOCATION OF DIFFUSERS.
- 3) EXISTING THERMOSTAT TO REMOVE AND REPLACE.
- 4) EXISTING COLLING EXHAUST FAN TO REMOVE AND REPLACE.
- (5) EXISTING CEILING SUPPLY AIR DIFFUSER TO REMOVE AND RELOCATE.

PROJECT NO.: TP2308 DESIGNED BY: DG DRAWN BY: GB CHECKED BY: DG

NO.	REVISION	DATE

ENGINEERING SEAL



EXPIRES 03/31/25



MECHANICAL & ELECTRICAL ENGINEERING

441 S. 48TH ST. SUITE 10<sup>-1</sup> TEMPE, AZ 85281 OFFICE: (480)361-3667 MOBILE: (480)217-5853

# **KEYNOTES**

- 1) EXISTING 5-TON HEAT PUMP ROOFTOP PACKAGE HVAC UNIT TO REMAIN.
- 2) EXISTING DUCTWORK REMAINS.
- 3) RELOCATED/NEW SUPPLY AIR DIFFUSER TO REMAIN, ADJUST AIR FLOW AS NOTED (TYP.)
- 4) NEW RETURN AIR FILTER GRILLE.
- 5) RELOCATED PROGRAMMABLE THERMOSTAT TO REMAIN.
- 6 REPLACEMENT CEILING EXHAUST FAN TO REMAIN WITH BACK-DRAFT DAMPER AND VENT THROUGH ROOF.
- $\fbox{7}$  New ceiling exhaust fan with Back-draft damper and vent through Roof.
- (8) NEW OUTSIDE AIR INTAKE ON AC UNIT, PROMDED WITH SCREEN AND DAMPER. ADJUST OSA TO BE 425CPM.
- 9 PROVIDE NEW CLOTHES DRYER VENT THROUGH WALL SCREENED AND LOWERED.
- (10) EXISTING CONDENSATE DRAIN TO REMAIN.
- (1) NEW SMOKE DETECTOR LOCATED INSIDE RETURN OF HP-, UPSTREAM OF FILTER.
- (12) REPLACMENT ELECTRIC WATER HEATER.

CITY OF SCOTTSDALE BUILDING PLANS
THESE PLANS HAVE BEEN REVIEWED
AND ARE READY FOR A PERMIT.
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ANY
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SHEET #:

EDUARD BARBERSHOP TI 32531 N SCOTTSDALE RD SUITE 103 SCOTTSDALE, AZ 85266

SHEET TITLE:



(3)400

<u>Entrance</u>

MECHANICAL DEMOLITION PLAN

PROJECT NO.: TP2308 DESIGNED BY: DG DRAWN BY: GB CHECKED BY: DG

NO. REVISION DATE



MECHANICAL & ELECTRICAL ENGINEERING

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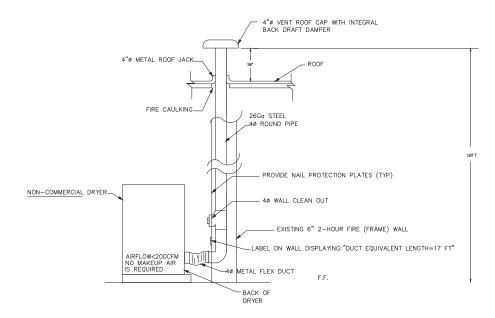
**PLAN CHECK# 497-24** 

SHEET TITLE:

SUPPORT FROM -STRUCTURE @ MAX. 4'-0" D.C. —1)\*, 26 GA. RIGID DUCT WHERE BRANCH DUCT EXTENDS 8'-0' AND LONGER — SECURE WITH WORM DRIVE METAL CLAMP— (TYPICAL) - SPIN IN FITTING WITH HAND DAMPER AND LOCKING QUADRAN TYPICAL CEILING— DIFFUSER LAY-IN CEILING

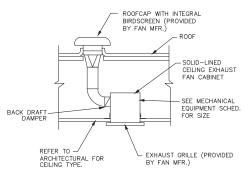
# DIFFUSER CONNECTION

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



# **CLOTHES DRYER VENT DETAIL**

NOT TO SCALE



# CEILING EXHAUST FAN / ROOF

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

NOTE:
TO COMPLY WITH THE CODE REQUIREMENT THAT DRYER EXHAUST
TO COMPLY WITH THE CODE REQUIREMENT THAT DRYER EXHAUST
VENTS NOT EXCEED A FIXED LENGTH, THE HUAC SUBCONTRACTOR
WIST AFFIX A WARNING LABEL THAT APPRISES THE HOMEOWNER
OF THEIR RESPONSIBILITY TO INSTALL AN APPLIANCE THAT DOES
NOT CREATE A HAZARD. THIS WARNING IS TO BE PERMANENTLY
ATTACHED TO THE WALL IN AN AREA WITHIN 6 FT. FROM WHERE
THE DRYER WILL BE LOCATE AND SHOULD BE VISIBLE TO THE
PURCHASER DURING AN INSPECTION / WALK—THOUGH. THE TAG
SHOULD READ AS FOLLOWS:

# RISK OF FIRE THE NET EQUIVALENT" LENGTH

THE NET EQUIVALENT" LENGTH
OF DRYER DUCT FROM THIS
LOCATION IS 8 FEET
THE MAXIMUM ALLOWABLE ENHALST DUCT LENGTH STATED IN
THE CLOTHES DOTHES INSTALLATION INSTALL BE
BOULD TO OR OFFENTER THAN THE POSTED EQUIVALENT LENGTH
NDICATED ON THIS RALCAS.

MANDATED BY INC SOLAS 5 IRC MISOZAG\*
DO NOT REMOVE OR DEFACE THIS PLACES
DOWN THE STALLAGE THIS PLACES.

THE STATE OF THE S

# DRYER TAG NOTE

CITY OF SCOTTSDALE BUILDING PLANS
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ID NUMBER	DESCRIPTION	MANUFACTURER/ MODEL	FITTINGS ACCESSORIES	KW	GALLONS PER HR.REC.AT 90° T.R.	VOLT/PH	A					
(WH−1)	50 GALLON ELECTRIC WATER HEATER	RHEEM / PRO-E-50	HEAT TRAP	4.5 KW	21.0	240/1	18.75					
NEW PLUMBING FIXTURE SCHEDULE												
			DOLLOLL IN									

NEW PLUMBING FIXTURE SCHEDULE												
	ID	DESCRIPTION	MANUFACTURER/ MODEL	FITTINGS ACCESSORIES	VENT		SH-IN	WASTE	TRAP SIZE	MAX. FLOW	REMARKS	
			MODEL	ACCESSORIES	VENT CW HW WASTE							
	SS-1,2, 3,4,5	SERVICE SINK	BY OWNER	BY OWNER	1- 1/2"	1/2"	1/2"	1- 1/2"	1-1/4"	0.25 GPM	1	
	MS-1	MOP SINK	BY OWNER	BY OWNER	1- 1/2"	1/2"	1/2"	1- 1/2"	1-1/2"	2.2 GPM	1	
	REMARKS											

LINE PRESSURE 70 PSI (ASSUMED PRESSURE)		
HORIZONTAL PIPE LENGTH, METER TO LAST FIXTURE	92	F
VERTICAL RISE TAP TO HIGHEST FIXTURE	10	F
TOTAL LENGTH PIPE	102	F
FEET LOSS (STATIC) FITTING LOSS 10%	10	F
TOTAL EQUIVALENT LENGTH	112	F
TOTAL FIXTURE UNITS:	28	F
FLOW LOAD DEMAND:	18	GP
PRESSURE LOSS:		
STREET PRESSURE (READING)	70	P:
EXISTING 3/4" TAP	4	P:
EXISTING 3/4" METER	4	P:
STATIC HEIGHT (15X.5)	5.0	P:
MINIMUM REQUIRED PRESSURE	20	P:
TOTAL LOSS	0.33	P:
AVAILABLE PRESSURE FOR PIPING LOSSES	27	Р

EXISTING 3/4" WATER METER AND 1" MAIN WATER LINE ARE RATED TO REMAIN FOR THIS PERMIT

INSTALL PER MANUFACTURER'S RECOMMENDATIONS

	SUITE B103 WATER AND SEWER DEMAND CALCULATIONS									
	MAXIMUM PROBABL	DOMESTIC WATER SUPPLY DEMAND								
CONDITIONS	FIXTURE	QUANT.	WASTE F.U.	WASTE TOTAL	COLD WATER F.U.	WATER TOTAL				
EXISTING	TOILET (WC)	1 6 6			5	5				
EXISTING	LAVATORY	1 2 2		2	2					
NEW	STATION SINK	5	5 2 10		2	10				
NEW	MOP-SINK	1	1 3 3		3	3				
NEW	CLOTHES WASHER	1	2	2	6	6				
	4"Ø MAIN SEWER LINE FOR THIS PERMIT	TOTAL FU= 23			TOTAL =	26				
	TOTAL DEMAND: 18 GPM									

BUILDING WATER AND SEWER DEMAND CALCULATIONS SUITES B101, B102, B103 AND B104								
MAXIMUM	PROBAE	DOMESTIC WATER SUPPLY DEMAND						
FIXTURE	QUANT.	WASTE F.U.	WASTE TOTAL	COLD WATER F.U.	WATER TOTAL			
WATER CLOSET	4	6	24	5	20			
RESTROOM LAVATORY	4	2	8	2	8			
MOP SINK	4	3	12	2	8			
3 COMP SINK	2	3	6	3	6			
PREP SINK	2	2	4	3	6			
HAND SINK	4	2	8	2	8			
HOSE BIBB	1	0	0	2.5	2.5			
LAVATORY	1	37	6	2	39			
	MAXIMUM  FIXTURE  WATER CLOSET  RESTROOM LIMATORY  MOP SINK  TREP SINK  HAND SINK  HOSE BBB	SUITE:   MAXIMUM PROBAE	SUITES B101, B	SUITES B101, B102, B10   MAXIMUM PROBABLE DRAINAGE	SUITES B101, B102, B103 AND B104			

TOTAL DEMAND: 42 GPM

# WC-1) Existing Open Space 3 PLUMBING DEMOLITION PLAN **KEYNOTES** 1 EXISTING FIXTURE REMAINS 2 EXISTING WATER HEATER TO REMOVE. 3 EXISTING NON-BEARING DRYWALL SECTION TO BE DEMOLISHED BY OTHERS.

# PLUMBING SPECIFICATIONS

CENERAL
 Soaps: Work under this section includes coordinating and furnishing all labor and material necessary to install a complete plumbing system as shown and specified and in accordance with the codes. Controctor shall pay for all permits, meters, fees, city inspections, legal notices, etc., as required.

- 1..2 Submittals: Within 15 days after award of contract, submit 8 copies of all items.
- 1..3 Record Drawings: Provide a set to the Architect at completion of project.
- 1..4 Instructions: Provide maintenance manual and instruct Owner in the proper operation and maintenance of the equipment.
- 1..5 Guarantee: One year on labor, material and equipment
- 2..1 Piping:
- 2..1.1 Water Piping:

2..1.1.1 Copper: Type M for water pipe set in or under concrete or in the ground. Provide plastic sleeve for each piping penetration through concrete slab.

2..1.1.2 Fittings: Wrought copper conforming to ANSI B16.22.

2..1.1.3 Tubing: above and below grade, Type: Wirsbo AQUAPEX. Cross—linked polyethylene (PEX) manufactured by PEX—a or Engel method. Manufactured in accordance with ASTM F876 and ASTM F877 and lested for compliance by an independent third party agency. Standard Grade hydrostatic design and pressure ratings from PPI. Verify proposed installation is acceptable to Autority Having Jurisdiction prior to

2..1.1.4 Insulation: For automatic circulating hot water and heat-traced systems, hot water piping shall be insulated with no less than 1 inch of insulation having a conductivity not less than 0.7 BIU / Hr x 8 f x F. The first 8ft of piping of a non-hot-water supply temperature maintenance systems served by equipment without integral heat traps shall be insulated with 0.5 of material having a conductivity not exceeding 0.27 BIU / Hr x sf x T

### 2..1.2 Sanitary Waste and Vent Piping:

2.1.2.1 Plastic: Subject to Owner approval, ABS plastic piping confoming to ASTM D-2751-88, Schedule 40, are acceptable for sanitary waste and vent piping. Fittings: Drainage fittings to match pipe.

- 2...3 Cleanouts
- 2..3.1 Concrete and Tile Floors: J.R. Smith 4023, with scoriated nickel-bronze top.
- $2..3.2\,$  Cleanouts (exposed vertical piping): J.R. Smith 4512 cast iron branch cleanout tee with
- 2.3.3 Interior Finished Walls: J.R. Smith 4532. 2.3.4 Exterior Surface Cleanouts: J.R. Smith 4253. Provide 18" x 18" x 6" concrete pad at landscape areas; provide concrete ring below grade at asphalt areas.
- 2..3.5 Provide all cleanouts with heavy threaded bronze plugs.
- 2..3.6 Contractor shall coordinate all cleanout locations with architect and locate in non visible locations.
- 2..4 Floor Drains, Floor Sinks:
- 2..4.1 FD Floor Drains: equal to J.R. Smith 2005—A Duco cast iron drain
- 2..4.2 FS Floor Sinks equal to J.R. Smith 3190—Y,  $8-1/2^\circ$  top, cast iron flanged receptor, with acid resistant coated interior, aluminum dome bottom strainer, square nickel bronze top with half grate; trap primer connection where indicated on drawings.
- 2.5. Plumbing Fixtures: Use polithed chrome-plated, adjustable bross P-straps with wall escutcheons at all exposed locations. Use polished chrome-plated faucets with removable trim, brass body and brass handles. Fixtures and supply fitting shall be of one manufacturer. Provide diaphragm type, polished chrome-plated flush valves with integral vacuum breakers and screwdriver stops. Provide fixture stops or valves ohead of all equipment or fixtures. After fixtures are set in place and secured to walls, coulk all around between fixtures and wall with either Dow Corning #780 or G.E. Construction Sealant white silicone caulking compound. Fixtures to be selected by Architect / Owner.
- 2..6 Pipe Identification:

2..6.1 Mark soft water piping systems with Brady, Seton, Brimar or Set Mark identification markers of snap—on type after pipe has been painted or insulated where exposed.

2..6.3 Identification material sizes shall be as follows:

2..7 Acceptable Manufacturers: The following is a list of manufacturers whose equipment is acceptable as to manufacturer, subject to conformance with all drawings, specifications and addenda items:

Water Heaters: Rheem, American, A. O. Smith, State, Eemax, Hot Aqua, Rinnai.

Valves: Crane, Kennedy, Stockham, Grinnell, Milwaukee, Wolverine.

Hose Bibbs: Acorn, Chicago, Woodford.

Supplies, Stops: Eastman, Kohler, Eljer, Brasscraft, McGuire

Drains and Cleanouts: J. R. Smith, Zurn, Joseph Wade, Western

Hangers: Grinnell, Fee & Mason, Elcen, Kin-Line, F & S, B-Line, Michigan.

- 3. EXECUTION
- 3..1.1 All work to be tested and approved before covering as directed by Architect. Remake all leaking joints and retest.
- 3..1.2 Potable Water Systems: 150 psi hydrostatic pressure held without loss for four hours.
- 3..1.3 Sanitary Waste and Vent System: Fill with water to highest point in the system and let stand without loss for two hours.
- 3.1.4 Sterilization (Domestic Water System): After tests have been completed, the entire domestic water distribution system shill be thoroughly flushed with water until all entrained dirt and mud have been removed, and shall be sterilized with solutions of either liquid chlorine conforming to Federal Specification BB-B-120 or hypochlorite conforming to Fed. Spec. O-C-114, Type II, Grade G, or Fed. Spec. O-S-602, Grade A or B. The chlorinating material shall provide a dosage of not less than 50 parts per million and shall be introduced into the system in an approved manner, and retained in the system for 8 hours before flushing.
- 3..2 Flashing, Sleeves and Escutcheon Plates:
- 3..2.1 Flashing: Supply flashing for all vent pipe and other types of piping through roof to be installed with roofing. Flash vents with Stoneman S1300-4 or with sheet lead weighing not less than 4 pounds per square foot or equal. Extend flashing into roofing at least 10° from vent and turn flashing over and down into vent opening.
- 3..2.2 Sleeves: Use 20 gauge galvanized steel sleeves around pipes passing through masonry walls and concrete slabs.
- 3..2.3 Escutcheon Plates: Install cast brass split ring with setscrew at all locations where exposed pipes pass through walls, floors and/or ceilings. Provide polished chrome-plated escutcheons in finished rooms, all others polished brass.
- 3..3 Underground Water Piping: Bury all underground water piping a minimum of 24" below finished grade. Install copper lines below concrete floors so that no joints occur below floor and wrap with 20 mils of polyethylene tope with a minimum of 50% overlap.

# PLUMBING GENERAL NOTES

1. ALL DESIGN AND CONSTRUCTION FOR PLUMBING SYSTEM TO BE IN COMPLIANCE WITH IPC 2018

# PLUMBING LEGEND (NOT ALL USED)

- NEW EXISTING
- RELOCATE

- R) RELOCATE
  X C, MENVE CELLING
  U.S. POLOGE STAP
  POINT OF CONNECTION
  BFP BACKFLOW PREVENTOR
  WC TOILETUN
  LAVATORY
  KS KITCHEN SINK
  VS VEGETABLE/ PREPARATION SINK
  ASS THREE COMPATTMENT SINK
  HS HAND SINK
  HS HAOSE BIBB
  MS MOP SINK
  FCV FLOW CONTROL VALVE
  FCO FLOW CONTROL VALVE
  FCO FLOOR CLEANOUT
  G NATURAL GAS LINE
- NATURAL GAS LINE GREASE INTERCEPTOR
- CW COLD WATER HW HOT WATER LINE HWR HOT WAER RECIRCULATING LINE
- WH WATER HEATER
  TB TRAP PRIMER
- VTR VENT THRU ROOF
- V SEWER VENT SD SEWER DRAIN
- SEWER DRAIN OR LINE
- SH SHOWER SOV SHUT-OFF VALVE
- FCO FLOOR CLEAN OUT URINAL
- WCO WALL CLEAN OUT
- MUA MAKE-UP AIR UNIT (EVAPORATIVE COOLER)
  WS WATER SOFTENER
  US UTILITY SINK
  SS SHAMPOO STATION

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# PLUMBING PLAN INDEX

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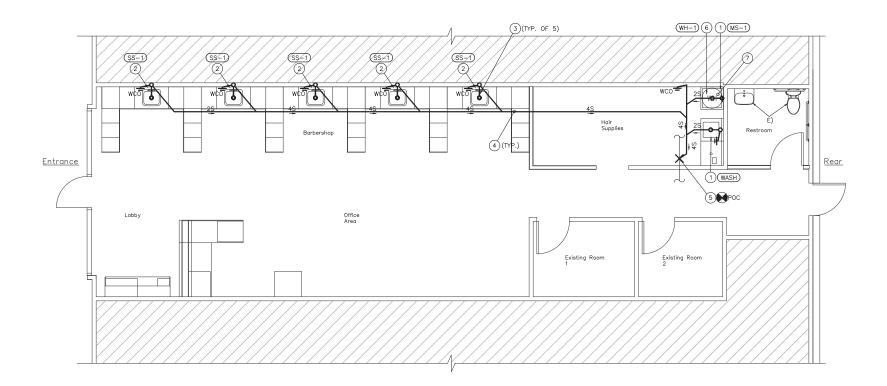
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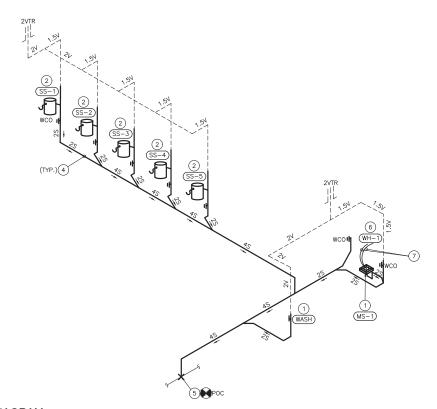
CHECK#

PLAN

SHEET TITLE:







SEWER ISOMETRIC DIAGRAM

SCALE: N.T.S.

# KEYNOTES

NEW FIXTURE.

- 2 NEW SERVICE-SINK AT EACH BARBER STATION.
- 3 PROVIDE PLASTIC HAIR TRAP, 2"X2" COUNSELED IN ACCESSIBLE CABINET. USE LUKLOY OR EQUAL.
- 4) NEW SCH. 40 ABS SEWER LINE ROUTED UNDER-SLAB (TYP.)
- (5) POINT-OF-CONNECTION TO EXISTING MAIN SEWER LINE, FIELD VERIFY EXACT LOCATION, SIZE AND INVERT PRIOR CONSTRUCTION.
- 6 NEW 50 GALLON ELECTRIC WATER HEATER MOUNTED ON FLOOR BASE.
- 7 PROVIDE 3/4" TYPE "M" COPPER DRAIN LINES, ONE FROM T&P RELIEF VALVE AND FROM TANKS DRAIN VALVE, BOTH TO DISCHARGE INDIRECTLY TO MOP-SINK WITH 1-1/2" AIR-GAP (TYP.)

PROJECT NO.: TP2308 DESIGNED BY: DG DRAWN BY: GB CHECKED BY: DG

ı	NO.	REVISION	DATE
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ENGINEERING SEAL



EXPIRES 03/31/25



MECHANICAL & ELECTRICAL ENGINEERING

441 S. 48TH ST. SUITE 101 TEMPE, AZ 85281 OFFICE: (480)361-3667 MOBILE: (480)217-5853

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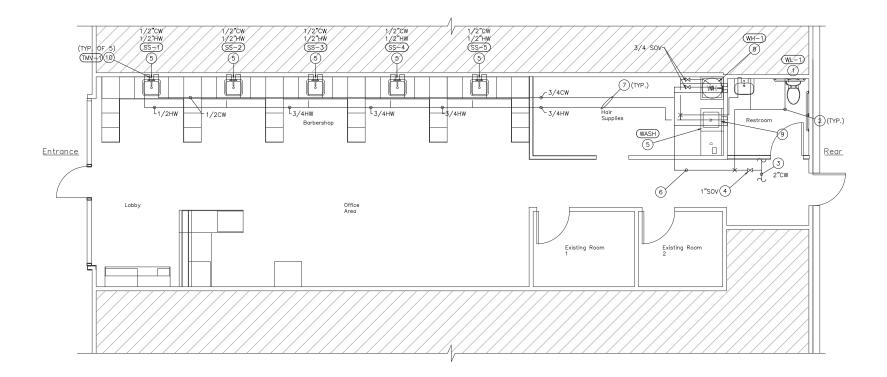
CITY OF SCOTTSDALE
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AND ARE READY FOR A PERMIT.
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PROJECT:

SHEET #:

SHEET TITLE:

SEWER PLUMBING PLAN





# **KEYNOTES**

- 1) EXISTING PLUMBING FIXTURE REMAINS WITH ITS ASSOCIATED PIPING.
- 2 RE-CONNECT EXISTING PIPING TO NEW HOT AND COLD PIPE ABOVE CEILING, EXTEND AS NECESSARY.
- 3 EXISTING 2" WATER LINE ABOVE CEILING.
- 4 EXISTING 1" SHUT-OFF VALVE LINE TAP TO MAIN VALVE.
- 5 NEW PLUMBING FIXTURE.
- 6 NEW PEX MAIN COLD WATER LINE TAP TO MAIN VALVE.
- 7) NEW PEX WATER LINES ROUTED AVOVE CEILING AND / OR CONCEALED IN WALLS (TYP.)
- 8 NEW 50 GALLON ELECTRIC WATER HEATER.
- 9 PROVIDE CLOTHES WASHER VALVE BOX ON WALL.
- 10 PROVIDE TEMPERATURE-LIMITING MIXING VALVE.

PROJECT NO.: TP2308 DESIGNED BY: DG DRAWN BY: GB CHECKED BY: DG

NO.	REVISION	DATE

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ROJECT:

SHEET #:

\_\_\_\_\_ P3

SHEET TITLE:

WATER PLUMBING PLAN

PROJECT NO.: TP2308 DESIGNED BY: DG DRAWN BY: GB CHECKED BY: DG

NO. REVISION DATE

SHEET #:

497-24

CHECK#

PLAN

SHEET TITLE:

EXTEND TO HEIGHT OF PARAPET WHEN WITHIN 10' OF PARAPET, OR ABOVE MAXIMUM LOCAL SNOW DEPTH. ROOF INSULATION CORE DRILL ROOF OR PROVIDE SLEEVE IF REQUIRED BY TYPE OF ROOF DECK. ROOF DECK REFER TO — MINIMUM 12" ABOVE ROOF NORMALLY.

PREFER TO — GOOF NORMALLY.

PROOF NORMALY.

PROOF NORMALLY.

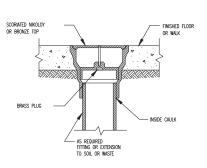
PROOF NORMALY.

PROOF NORMALLY.

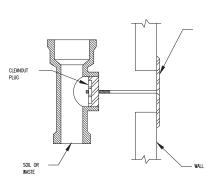
PRO AND LOCATION(S)

LOCATE VIR MINIMUM THREE FEET FROM PROPERTY LINE, TEN FEET HORZOMAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPPINION OR FEED AN BY THE AND THE THREE FEET VERTICAL ABOVE ANY BUILDING OPPINION OR FEED AN BRITTAN AND FEET OF LOCAL COOKS FOR OTHER WON'T VERTICAL SURFACE. RETER TO LOCAL COOKS FOR OTHER WON'T REMINIMUM FOR FEED VERTICAL COOKS FOR OTHER WON'T VERNINGHAM THE FEED AND THE THREE FEED OF THREE F

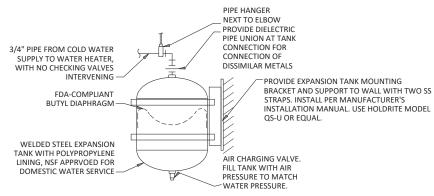
### **VENT TROUGH ROOF**



# FLOOR CLEAN OUT

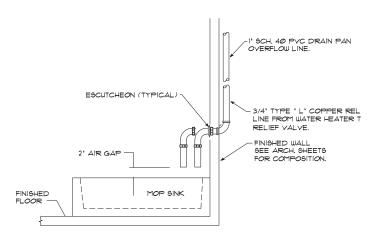


# WALL CLEAN OUT

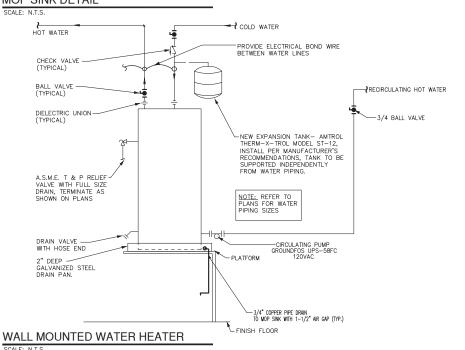


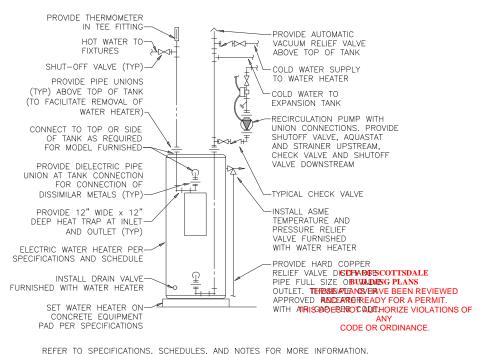
PIPING ARRANGEMENT SHOWN IS SCHEMATIC ADJUST TO SUIT FIELD CONDITIONS. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATIONS PROCEDURE. VERIFY PROPER OPERATION WHEN INSTALLED. PROVIDE SEISMIC STRAP OR BRACING WHEN REQUIRED BY LOCAL AUTHORITIES.

# NEW SMALL EXPANSION TANK



# MOP SINK DETAIL





PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. VERIFY CONNECTION SIZES AND LOCATIONS WITH WATER HEATER FURNISHED. REFER TO FLOOR PLANS FOR PIPE SIZES AND CONTINUATIONS. PROVIDE SEISMIC STRAP OR BRACING WHEN REQUIRED BY LOCAL AUTHORITIES. POWER WIRING AND DISCONNECT SWITCHES ARE SPECIFIED BY ELECTRICAL. INTERLOCK OF AQUASTAT WITH RECIRCULATION PUMP IS SPECIFIED BY ELECTRICAL.

# **ELECTRIC WATER HEATER & PUMP**

**=** 

Sec. PANEL BOARD

0 CEILING MOUNTED LIGHT FIXTURE.

 $\sim$ J JUNCTION BOX IN ACCESSIBLE LOCATION ABOVE REMOVABLE CEILING WITH FLEXIBLE CONDUIT CONNECTION TO LIGHT FIXTURE.

FLUORESCENT LIGHT FIXTURE. CONNECT TO NON-SWITCHED LTG.
CIRCUIT SERVING SAME AREA. SEE LIGHT FICTURE SCHEDULE.

FLUORESCENT STRIP FIXTURE.

FLEX CONNECTION TO EQUIPMENT. LIQUID TIGHT FLEX WHERE EXPOSED TO WEATHER.

JUNCTION BOX IN ACCESSIBLE LOCATION. NEMA 3R WHERE EXPOSED TO WEATHER. J

DUPLEX CONVENIENCE RECEPTABLE AT +18° OR AS NOTED.

0 RECEPTACLE AT FLOOR.

> FOUR-PLEX CONVENIENCE RECEPTACLE AT 18°OR AS NOTED. SPLIT WIRED DUPLEX CONVENIENCE RECEPTACLE AT +18° OR AS

TOGGLE SWITCH —SINGLE POLE, THREE WAY, KEYED, FOUR WAY ('P' INDICATES ILLUMINATED

 $\boxtimes$ MOTOR CONTROLLER , FURNISHED WITH EQUIPMENT

DISCONNECT SWITCH H.P. RATED, WITH DUAL ELEMENT TIME—DELAY FUSED (CLASS RK1), NEMA 3R ENCLOSURE WHERE EXPOSED TO WEATHER. FUSE PER EQUIPMENT MANUFACTURE'S RECOMMENDATIONS, N.F. INDICATES NON-FUSED. 0

M

TELE/DATA OUTLET @ +18" WITH 3/4" STUD ABOVE CEILING.

TELE/DATA OUTLET @ 44" WITH 3/4" STUD ABOVE CEILING.



CIRCUIT IN CONDUIT, CONCEALED IN OR UNDER FLOOR. HASH MARKS INDICATES QUANTITY OF CONDUCTORS. NO MARKS INDICATE TWO CONDUCTORS, PLUS EQUIPMENT AND IG GROUNDS. (NOTE: WIRE AND OR CONDUIT SIZE SHOWN AT HOMERUN IS MINIMUM SIZE FOR ENTIRE OR CONDUIT SIZE SHOWN AT HOMERUN IS MINIMUM SIZE FOR ENTIRE CIRCUIT: 124 MINIMUM). LONG STROKE(S) INDICATES NEUTRAL CONDUCTOR(S), SHORT STROKES INDICATES PHASE OR SWITCHED CONDUCTORS, (TYPICAL). EACH ISOLATED GROUND CIRCUIT SHALL HAVE A SEPARATE NEUTRAL AND IG GROUND WIRE. GROUND WIRES SHALL BE INSULATED COPPER.

IECC C405.3.2 Interior lighting power allowance. The total interior lighting power allowance (watts) shall be determined according to Table C405.3.2(1) using the Building Area Method or Table C405.3.2(2) using the Space-by-Space Method. The interior lighting power allowance for projects that involve only portions of a building shall be determined according to Table C405.3.2(2) using the Space-by-Space Method.

 $\sim$ 

# **AS NOTED**

	ELECTRICAL EQUIPMENT SCHEDULE									
UNIT IDENTIFIER	EQUIPMENT DESCRIPTION	VOLTAGE	UNIT FLA	CONNECTION						
HP-1	5-TON HEAT PUMP UNIT	BY MECHANICAL PLANS	208/3	28.0	DIRECT					
WH-1	WATER HEATER	RHEEM / PROE-50	208/1	21.6	DIRECT					

	INTERIOR LIGHTING FIXTURE SCHEDULE									
SYMBOL	DESCRIPTION	MAKE & MODEL	QTY.	LAMP TYPE	WATTAGE PER FIXTURE	MOUNTING	REMARKS			
A		2'X4' LINEAR LED	BY CONTRACTOR	120/1	9	LED	33	SUSPEND / LAY-IN		
B	0	6" CAN LIGHT	BY CONTRACTOR	120/1	6	LED	25	RECESSED	IC-RATED	
©	42	EMERGENCY LIGHT / EXIT SIGN COMBO	BY CONTRACTOR	120/1	2	LED	5	WALL MOUNTED	PROVIDE WITH 90 ,IM. BACKUP BATTERY	
(D)	4-4	EMERGENCY LIGHT	BY CONTRACTOR	120/1	3	LED	5	WALL MOUNTED	PROVIDE WITH 90 ,IM. BACKUP BATTERY	

### **ELECTRICAL SPECIFICATIONS**

- <u>GENERAL</u> 1. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, TRANSPORTATION, TOOLS, PERMITS, FEES AND INCIDENTALS NECESSARY FOR THE INSTALLATION
- IOULS, PERMITS, FEES AND INCIDENTALS NECESSARY FOR THE INSTALLATIC OF A COMPLETE ELECTRICAL SYSTEMS IN CLASS "A" WORKING ORDER. ALL WORK SHALL BE IN COMPLIANCE WITH THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL CODES AND ORDINANCE THESE DRAWINGS ARE SCHEMATIC IN NATURE. CONTRACTOR SHALL PROVID ALL BOXES, FITTINGS, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION EVEN IF THOSE ITEMS ARE NOT CALLED OUT ON THE CONSTRUCTION OCCUMENTS.

- EVEN IF THOSE ITEM'S ARE NOT CALLED OUT ON THE CONSTRUCTION DOCUMENTS.

  4. CONTRACTOR SHALL FURNISH SIX COPIES OF THE MANUFACTURER'S LITERATURE AND DRAWINGS DESCRIBING ALL PROPOSED EQUIPMENT AND MATERIALS INDICATED IN THE DRAWINGS AND SPECIFICATIONS. SUBMITTALS SHALL INCLUDE DETAILED SPECIFICATIONS AND CONSTRUCTION DATA.

  5. EQUIPMENT MANUFACTURER'S AND CATALOGUE NUMBERS CALLED OUT ON THESE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITINS COMPETITION. EQUAL PROPUCTS BY OTHER MANUFACTURER'S ARE ACCEPTABLE.

  6. ALL MATERIAL FURNISHED BY THE CONTRACTOR SHALL BE NEW UNLESS OTHERWISE NOTED.

  7. PROVIDE ENGRAVED PHENOLIC NAMEPLATES ON ALL PANELBOARDS, DISCONNECTS, ETC. NAMEPLATES SHALL BE 1/4" HIGH AND SHALL BE FASTENDED TO THE EQUIPMENT WITH RIVETS OR SCREWS.

  8. CONTRACTOR SHALL FURNISH A CLEAN SET OF DRAWINGS ON WHICH VARIATIONS TO THE ORICINAL CONSTRUCTION DOCUMENTS ARE LEGIBLY RECORDED AND DESIGNATED AS "AS—BUILT" UPON COMPLETION AND ACCEPTANCE OF WORK.

  9. CONTRACTOR SHALL GUARANTEE ALL LABOR AND MATERIALS FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. ALL WORK / MATERIALS FOUND TO BE DEFECTIVE WITHIN THIS SHALL NOT INCLUDE DAMAGE DUE TO FIRE, STORMS, VANDALISM, OR OTHER FACTORS BEYOND THE CONTROL OF THE CONTROL OST TO THE OWNER. ALL WORK / MATERIALS FOUND TO BE DEFECTIVE WITHIN THIS SHALL NOT INCLUDE DAMAGE DUE TO FIRE, STORMS, VANDALISM, OR OTHER FACTORS BEYOND THE CONTROL OF THE CONTROL OST TO THE OWNER. THIS SHALL NOT INCLUDE DAMAGE DUE TO FIRE, STORMS, VANDALISM, OR OTHER FACTORS BEYOND THE CONTROL OF THE CONTROL OST TO THE OWNER. THIS SHALL NOT INCLUDE DAMAGE DUE TO FIRE, STORMS, VANDALISM, OR OTHER FACTORS BEYOND THE CONTROL OF THE CONTROL OST TO THE OWNER. THIS SHALL NOT INCLUDE DAMAGE DUE TO FIRE, STORMS, VANDALISM, OR OTHER FACTORS BEYOND THE CONTROL OF THE CONTROL OST TO THE OWNER. THIS SHALL NOT INCLUDE DAMAGE DUE TO FIRE, STORMS, VANDALISM, OR OTHER FACTORS BEYOND THE CONTROL OF THE CONTROL OST TO THE OWNER. THIS SHALL NOT INC

- DNDUIT

  ELECTRICAL METALLIC CONDUIT (EMT) CONDUIT WITH COMPRESSION
  COUPLINGS AND FITTINGS MAY BE USED INDOORS OR OUTDOORS IN
  NON-HAZARDOUS AREAS AND IN AREAS NOT SUBJECT TO PHYSICAL
  DAMAGE, SET SCREW TYPE CONNECTORS ARE NOT ACCEPTABLE.
  RIGID CALVANIZED STEEL (RCS) CONDUIT WITH THREADED COUPLINGS AND
  FITTINGS SHALL BE USED INDOORS OR OUTDOORS IN HAZARDOUS AREAS
  AND IN LOCATIONS SUBJECT TO PHYSICAL DAMAGE.
  LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED IN OUTDOOR OR
  WET LOCATIONS, AND FLEXIBLE METAL CONDUIT SHALL BE USED IN OUTDOORS
  IN DRY LOCATIONS TO EXTEND CONDUIT CONNECTIONS TO MOTIORS, LIGHT
  FIXTURES, ETC. MAXIMUM LENGTH SHALL NOT EXCEED 72" FOR RECESSED
  LIGHT FIXTURES OR 24" FOR ALL OTHER APPLICATIONS.
  MINIMUM SIZE CONDUIT SHALL BE 1/2" UNIVESS OTHERWISE NOTED.
- MINIMUM SIZE CONDUT SHALL BE 1/2" UNLESS OTHERWISE NOTED.
  CONDUTS SHALL BE CONCEALED IN ALL FINISHED PARTS OF THE
  BUILDING. CONDUTIS SHALL BE ROUTED PARALLEL TO THE BUILDING LINES

   DIAGONAL RUNS ARE NOT ACCEPTABLE. SECURE CONDUTTS TO BUILDING
  STRUCTURES AT INTERVALS OF NOT MORE THAN 8 FEET.
- CONDUCTORS
   CONDUCTORS LOCATED INDOORS IN DRY LOCATIONS SHALL BE COPPER TYPE THHN / THWN. CONDUCTORS LOCATED OUTDOORS OR IN WET LOCATIONS SHALL BE COPPER TYPE XHHW.
- CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED. MINIMUM CONDUCTOR SIZE FOR POWER AND LIGHTING CIRCUITS SHALL BE #12 AWG. MINIMUM CONDUCTOR SIZE FOR CONTROL AND SIGNALING
- #12 AWG. MINIMUM CONDUCTOR SIZE FOR CONTROL AND SIGNALING CIRCUITS SHALL BE #14 AWG.

  2.5. CONDUCTORS FOR USE ON 120/208V SYSTEMS SHALL BE COLOR CODED BLACK, RED, BLUE AND WHITE FOR PHASES A, B, C, AND NEUTRAL RESPECTIVELY.

  2.6. IN LIEU OF CONDUCTORS IN CONDUIT, CONTRACTOR MAY USE TYPE 'MC' CABLE IN LOCATIONS APPROVED BY THE NEC AND AS APPROVED BY THE OWNER / ARCHITECT. TYPE 'MC' CABLE SHALL BE USED FOR BRANCH CIRCUIT, CONCEALED RUNS ONLY, HOMERUNS AND EXPOSED INSTALLATIONS SHALL BE CONDUCTORS IN CONDUIT.

  3. DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE 'HD'.
- DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE 'HD'
- FUSIBLE DISCONNECTS SHALL HAVE PROVISIONS FOR CLASS 'R' FUSES.
  LOCATE / MOUNT DISCONNECTS TO PROVIDE PROPER WORKING
  CLEARANCE AS REQUIRED BY THE NEC. DISCONNECTS FOR USE WITH
  HYAC EQUIPMENT SHALL NOT BE SUPPORTED BY OR MOUNTED TO THE OTHER MOUNTING MEANS FOR MOUNTING DISCONNECT SWITCHES AS REQUIRED.

### 4. FUSES

- FUSES SHALL BE 'BUSSMAN LOW PEAK' OR EQUAL
- FUSES RATE 1/10 AMP TO 600 AMPS SHALL BE UL CLASS R DUAL ELEMENT, CURRENT LIMITING, EQUAL TO BUSSMAN LPS-RK (600V) OR ELEMENT, CURRENT LIMITING, EQUAL TO BUSSMAN LPS-RK (600V) OR LPN-RK (250V).

  4.3. FURNISH OWNER WITH ONE SPARE SET OF THREE OF EACH SIZE AND TYPE OF FUSE USED ON THIS PROJECT.

  5. CIRCUIT BREAKERS

  5.1. BREAKERS SHALL BE BOLT ON, THERMAL MAGNETIC, MOLDED CASE

  5.2. BREAKERS SHALL BE QUICK MAKE QUICK BREAK.

  5.3. BREAKERS SHALL BE FULLY RATED FOR THE AVAILABLE FAULT CURRENT (SERIES RATINGS ARE UNACCEPTABLE).

  5.4. BREAKERS SHALL BE COMMON TRIP TYPE FOR ALL MULTI-POLE APPLICATIONS.

  5.5. BREAKERS SHALL BE COMMON TRIP TYPE FOR ALL MULTI-POLE APPLICATIONS.

- APPLICATIONS.

  5.5. BREAKERS SHALL BE MARKED 'HACR' WHEN USED TO FEED AIR CONDITIONING EQUIPMENT

  6. WIRING DEVICES

  6.1. RECEPTACLES SHALL BE 20 AMP, 125 VOLT, SPECIFICATION GRADE, HUBBELL SERIES 5362 OR EQUAL. TAMPERPROOF RECEPTACLES SHALL BE 20 AMP, 125 VOLT, SPECIFICATION GRADE, HUBBELL SERIES 5362TR OR EQUAL.
- 6.2. LIGHT SWITCHES SHALL BE 20 AMP, 120/277 VOLT, SPECIFICATION GRADE, HUBBELL SERIES 1221 (SINGLE POLE) OR 1223 (THREE WAY) OR MANUAL MOTOR STARTERS SHALL HAVE "QUICK MAKE - QUICK BREAK
- MANUAL MOTOR STARTERS SHALL HAVE "QUICK MAKE QUICK BREAK"
  TOGGLE MECHANISM, OVERLOAD HEATER(S) SIZED PER MOTOR NAMEPLATE
  AND/OR MANUFACTURER'S RECOMMENDATION, AND SUITABLE FOR THE
  VOLTAGE, HP AND NUMBER OF PHASES SHOWN ON THE DRAWNIOS.
  COLOR OF RECEPTACLES, SWITCHES, AND MANUAL MOTOR STARTERS
  SHALL BE PER THE ARCHITECT'S DIRECTION.
  COVER PLATES IN FINISHED AREAS SHALL BE STAINLESS STEEL LUNLESS
  OTHERWISE DIRECTED BY THE ARCHITECT. COVER PLATE IN UNFINISHED
  AREAS, OR FOR EXPOSED INSTALLATIONS SHALL BE RAISE STAMPED
  STEEL.

- AREAS, OR FOR EXPOSED INSTALLATIONS SHALL BE RAISE STAMPED STEEL.

  6.6. FLUSH MOUNT RECEPTACLES 18" TO BOTTOM OF BOX ABOVE FINISHED FLOOR WITH GROUND PIN AT TOP UNLESS OTHERWISE NOTED.

  6.7. RECEPTACLES ABOVE COUNTERS SHALL BE HORIZONTALLY FLUSH MOUNTED AT 6" ABOVE COUNTER UNLESS OTHERWISE NOTED

  6.8. SWITCHES SHALL BE FLUSH MOUNTED AT 42" TO BOTTOM OF BOX ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. TOGGLE HANDLE SHALL BE UP IN THE 'ON' POSITION AND DOWN IN THE 'OFF' POSITION JUNCTION, PULL AND DEVICE BOXES

  7.1. JUNCTION AND PULL BOXES SHALL BE OF CODE GALVANIZED STEEL.

  7.2. JUNCTION AND PULL BOXES SHALL BE OF CODE GALVANIZED STEEL.

  7.3. DEVICE BOXES AND GENERAL PURPOSE JUNCTION BOXES SHALL BE ONE PIECE GALVANIZED PRESSED STEEL, KNOCK-OUT TYPE WITH SIMILAR COVER. MINIMUM SIZE SHALL BE 4" SQUARE.

  7.4. DEVICE BOXES IN EXTERIOR LOCATIONS SHALL BE CASE IRON WITH GASKETED COVER, CROUSE HINDS FD OR EQUAL.

  8. GROUNDING

  8. GROUNDING

  8. GROUNDING

  8. RECEWAYS. GROUND CONDUCTOR SHALL BE SIZED PER NEC 250—122.

### **ELECTRICAL SPECIFICATIONS**

- LIGHTING FIXTURES

  1. LED LAMPS SHALL HAVE THE LUMEN AND DEGREE KELVIN RATINGS AS CALLED OUT ON THE DRAWINGS. LED LAMPS SHALL BE ENERGY STAR RATED WITH A MINIMUM CRI OF 80. LED LAMPS WITH REPLACEABLE DRIVERS SHALL HAVE A MINIMUM WARRANTY OF THREE YEARS, WHILE LED LAMPS WITH NON-REPLACEABLE DRIVERS SHALL HAVE A MINIMUM WARRANTY OF FIVE YEARS. LED LAMPS SHALL DELIVER A MINIMUM OF 70% OF INITIAL LUMENS AFTER 50,000 HOURS.
- YEARS. LED LAMPS SHALL BE ENERGY STAR RATED WITH A CLASS 'A' SOUND RATING 30,000 HOURS.

  LED DRIVERS SHALL BE ENERGY STAR RATED WITH A CLASS 'A' SOUND RATING, A MINIMUM OPERATING TEMPERATURE OF 20°C, AND AN OUTPUT OPERATING FREQUENCY OF 120HZ OR GREATER. LED DRIVERS SHALL PROVIDE A MINIMUM POWER FACTOR OF 0.7 FOR LAMPS WITH INPUT POWER GREATER THAN 5 WATTS OF LESS. WHERE DIMMING IS CALLED OUT ON THE DRAWINGS, LED DRIVERS SHALL ALOW CONTINUOUS DIMMING FROM 100% TO 10% WITHOUT FLICKER OR NOISE. NON-REPLACEABLE DRIVERS SHALL HAVE A MINIMUM WARRANTY OF FIVE YEARS, WHILE REPLACEABLE DRIVERS SHALL HAVE A MINIMUM WARRANTY OF THREE YEARS.

  TIME CLOCKS, CONTACTORS AND PHOTOCELLS SHALL BE AS SHOWN ON THE DRAWINGS. PHOTOCELLS SHALL BE FAIL IN THE 'ON' POSITION AND SHALL BE LOCATED ON ROOF FACING NORTH DIMMERS SHALL BE SHALL BE SOLID STATE, SLIDE TYPE, FLUSH MOUNTED WITH POSITIVE 'ON'-OFF' INDICATION. DIMMERS AT GANGED LOCATIONS SHALL BE DERATED PER MANUFACTURER'S INSTRUCTIONS. DIMMERS FOR LED FIXTURES
- DEATED PER MANUFACTURER'S INSTRUCTIONS. DIMMERS FOR LED FIXTURES SHALL BE COORDINATED WITH THE TYPE OF DRIVER TO BE USED TO ENSURE COMPATIBILITY. MOUNT DIMMERS AT WALL SWITCH HEIGHT. DIMMERS
- ENSORE COMPATIBILITY. MOUNT DIMMERS AT WALL SWITCH HEIGHT, DIMMER SHALL BE LUTRON OR EQUAL. RECESSED FIXTURES SHALL BE FURNISHED WITH ALL ACCESSORIES REQUIRED TO FIT THE FIXTURE TO THE CEILING CONSTRUCTION ALL LIGHT FIXTURES SHALL BE SECURELY SUPPORTED FROM BUILDING STRUCTURE. TROFFER STYLE FIXTURES IN EXPOSED T—BAR GRID CEILINGS SHALL BE SUPPORTED FROM THE STRUCTURE WITH #12 WIRE AT OPPOSITE CORNERS OF THE FIXTURE, AND SHALL BE SECURELY FASTENED TO THE
- EXTERIOR LIGHTING FIXTURES SHALL BE 'FULL CUT OFF' WHERE REQUIRED
- BY LOCATED ORDINANCES SHALL BE FURNISHED COMPLETE WITH GASKETS AND SHALL BE RATED FOR DAMP OR WET LOCATIONS.

# **GENERAL NOTES**

- A. CONTRACTOR TO PROVIDE AND INSTALL ELECTRICAL WORK, ACCORDING TO
- B. CONTRACTOR TO COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL AND PLUMBING WORK, PER 2017 N.E.C. AND APPLICABLE RULES, REGULATIONS, AND ORDINANCES.
- C. GENERAL NOTE: CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY DIMENSIONS OF SPACE AND QUANTITIES, SIZES, ETC. PRIOR TO CONSTRUCTION.
- D. PROVIDE COPPER WIRE THHN/ THHN #12 MINIMUM. CONDUITS SHALL BE EITHER RIGID OR EMT AS ALLOWED BY CODE. CONDUIT EXPOSED TO THE ELEMENTS OR BURIED UNDERGROUND SHALL BE WRAPPED WITH SCOTCH 51 TAPE OR EQUAL.
- E. MC CABLE IS ACCEPTABLE
- F. ROMEX CABLE IS NOT ACCEPTABLE

**ELECTRICAL PLANS INDEX** 

ELECTRICAL DEMOLITION & LIGHTING PLAN ELECTRICAL POWER PLAN

ELECTRICAL POWER PLAN
ELECTRICAL SITE PLAN, PANEL SCHEDULE AND PARTIAL ONE-LINE DIAGRAM

- FOR RECEPTACLE HOMERUNS OVER 65 LINEAL FEET, USE #10 AWG FOR RECEPTACLE HOMERUNS OVER 115 FEET IN LINEAL FEET USE #8 AWG WIRE.
- EQUIPMENT, RACEWAYS, ETC. SHALL HAVE PROPER GROUNDING PER NATIONAL

CITY OF SCOTTSDALE BUILDING PLANS
THESE PLANS HAVE BEEN REVIEWED

AND ARE READY FOR A PERMIT.

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**GARDEL** 

EXPIRES 09/30/26

PROJECT NO.: TP2308 DESIGNED BY: DG DRAWN BY: GB CHECKED BY: DG

ENGINEERING SEAL

NO. REVISION

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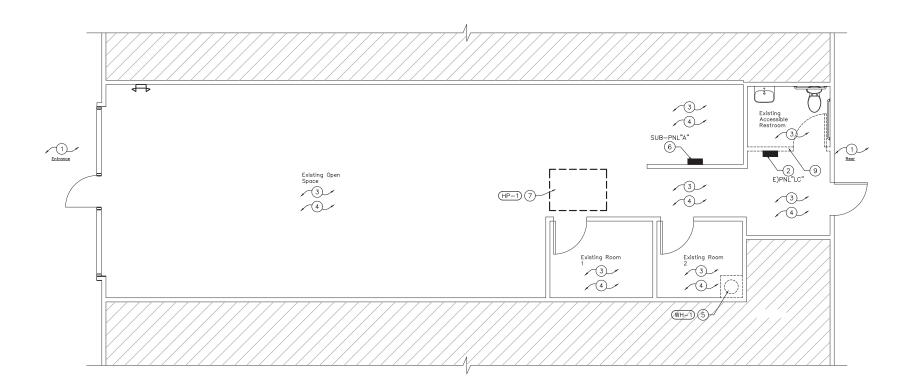
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SHEET TITLE:

CHECK# PLAN

497-24



 $\triangle$ 

# **KEYNOTES**

- 1 EXISTING EXTERIOR LIGHTING. TO REMAIN. NO CHANGES
- 2) EXISTING PANEL "LC" TO BE RELOCATED TO NEW WALL.
- (3) EXISTING INTERIOR LIGHT FIXTURE TO BE DEMOLISHED BY OTHERS. REMOVE ALL CONDUIT, SWITCH, BOXES, CONDUIT AND WIRING PRIOR TO DEMOLITION
- (4) EXISTING RECEPTACLES TO BE DEMOLISHED BY OTHERS. REMOVE ALL CONDUIT SWITCH, BOXES, CONDUIT AND WIRING PRIOR TO DEMOLITION
- (5) EXISTING ELECTRIC WATER HEATER TO BE REMOVED, REPLACE AND RELOCATED BY OTHERS. REMOVE ALL CONDUIT SWITCH, BOXES, CONDUIT AND WIRING PRIOR RELOCATION
- (6) EXISTING SUB-PANEL "A" TO BE DEMOLISHED BY OTHERS. REMOVE ALL CONDUIT SWITCH, BOXES, CONDUIT AND WIRING PRIOR TO DEMOLITION
- (7) EXISTING HEAT PUMP UNIT ON ROOFTOP TO REMAIN. DISCONNECT AND IDENTIFY WIRING. INSPECT WIRING REPLACE OR REPAIR IF NECESSARY AND RECONNECT PER ELECTRICAL PLANS
- (8) EXISTING WP-GFCI SERVICE RECEPTACLE ON ROOFTOP TO REMAIN. DISCONNECT AND IDENTIFY WIRING, INSPECT WIRING REPLACE OR REPAIR IF NECESSARY AND RECONNECT PER ELECTRICAL PLANS
- $\begin{tabular}{lll} \hline (9) & Existing non-bearing drywall to be demolished by others. Remove all conduit, switch, boxes, conduit and wiring prior to demolition.$

PROJECT NO.: TP2308 DESIGNED BY: DG DRAWN BY: GB CHECKED BY: DG

NO. REVISION DATE ENGINEERING SEAL





441 S. 48TH ST. SUITE 101 TEMPE, AZ 85281 OFFICE: (480)361-3667 MOBILE: (480)217-5853

EDUARD BARBERSHOP TI 1 N SCOTTSDALE RD SUITE 103 SCOTTSDALE, AZ 85266

# **KEYNOTES**

B (TYP. OF 6)

4 D (TYP. OF 3)

(TYP. 0F 2)

ё**б**-

E)PNL"T

LC1

E)PNL"LC"(2

- 1 EXISTING EXTERIOR LIGHTING SYSTEM TO REMAIN, NO CHANGES.
- (2) EXISTING PANEL "LC" RATED AT 200A,208/120V, DELTA 3Ø, 4W, NEMA 1. RE-ARRANGE CIRCUITS AS NOTED. SEE PANEL SCHEDULE
- 3 NEW TIMER "TC" ON WALL TO CONTROL SIGN CIRCUIT. SEE DIAGRAM
- 4 NEW EMERGENCY LIGHT CONNECT TO SERVING AREA CIRCUIT.
- (5) NEW 20A,120V, DEDICATED RECEPTACLE ON CEILING FOR SHOW WINDOW (TYP.).
- (6) NEW J-BOX ABOVE CEILING FOR FUTURE SIGN BY OTHERS ON SEPARATED PERMIT.
- 7) NEW SWITCH WITH MOTION SENSOR.

 $\sim$ PLEASE COORDINATE EXACT EXIT SIGN LOCATION/PLACEMENT WITH THE CITY OF SCOTTSDALE'S FIELD **BUILDING INSPECTOR PRIOR TO ROUGH-IN INSPECTION.** 

THIS DOES NOT AUTHORIZE VIOLATIONS OF ANY

CODE OR ORDINANCE.

**ELECTRICAL LIGHTING PLAN** 

5 Entrance

6

**Ø**h

**ELECTRICAL DEMOLITION PLAN** 

SHEET #:

E2

SHEET TITLE: ELECTRICAL DEMOLITION & LIGHTING PLAN



# **KEYNOTES**

- $\fbox{1}$  Existing pane; "A" rated at 200A, 208/120V, 30, 4W, NEMA 1, SEE PANEL SCHEDULE
- 2 NEW 120V, 20A, GFCI, FOUR-PLEX RECEPTACLE AT +44 A.F.F. VERIFY EXACT LOCATION IN REFERENCE TO COUNTER/STATION
- 3 NEW 120V, 20A DEDICATED RECEPTACLE FOR P.O.S. UNDER COUNTER. VERIFY EXACT LOCATION IN REFERENCE TO COUNTER
- 4) PROVIDE 50A, 250V, 10, 3W RECEPTACLE FOR DRYER AT +36" A.F.F.
- (5) REPLACEMENT 50 GALLON ELECTRIC WATER HEATER RELOCATED ABOVE MOP SINK (6) 30A, 250V, 2-POLE, NEWMA3R NON-FUSED DISCONNECT SWITCH
- 7 EXISTING HEAT PUMP UNIT ON ROOFTOP. RECONNECT CIRCUIT AS NOTED
- (8) EXISTING WP-GFCI SERVICE ON ROOFTOP. RECONNECT CIRCUIT AS NOTED

PROJECT NO.: TP2308 DESIGNED BY: DG DRAWN BY: GB CHECKED BY: DG NO. REVISION DATE

ENGINEERING SEAL





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EDUARD BARBERSHOP TI 1 N SCOTTSDALE RD SUITE 103 SCOTTSDALE, AZ 85266

32531

SHEET #:

**E**3

**PLAN CHECK# 497-24** 

SHEET TITLE:

PANEL"LC" NEW TIMER "TC" 20/1 A7 6 6-F2=2,756A TC BUILDING PLANS

SE PLANS HAVE BEEN REVIEWED TO AND ARE READY FOR A PERMIT.
THIS DOES NOT THE ANY CODE OR ORDINANCE.

SIGN CONTROL DIAGRAM



PROJECT NO.: TP2308 DESIGNED BY: DG DRAWN BY: GB CHECKED BY: DG

NO. REVISION DATE



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EDUARD BARBERSHOP TI 1 N SCOTTSDALE RD SUITE 103 SCOTTSDALE, AZ 85266 32531

SHEET #:

SHEET TITLE:

ELECTRICAL SITE PLAN,
PANEL SCHEDULE AND
PARTIAL ONE—LINE DIAGRAM

E4

**PLAN CHECK# 497-24** 

5 PNL"LC" T T XFMR

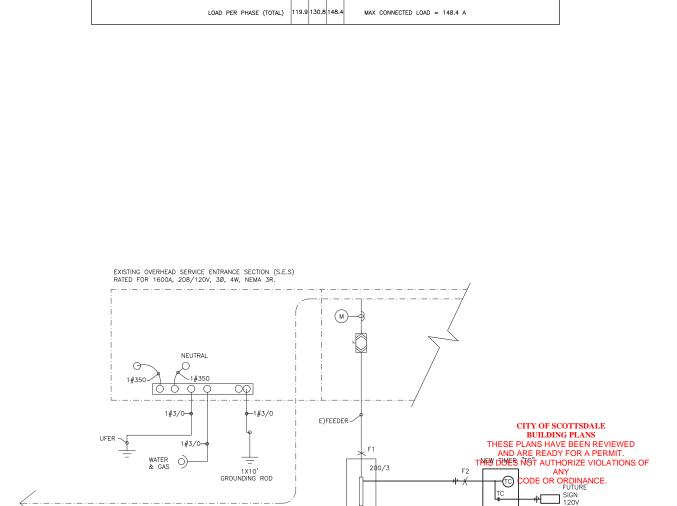


# **KEYNOTES**

- 1) EXISTING PAD-MOUNTED TRANSFORMER BY UTILITY COMPANY (APS)
- 2 EXISTING SERVICE LATERAL
- (3) EXISTING SES-3 RATED AT 1600A, 208/120V, 3Ø, 4W, NEMA 3R. SEE ONE-LINE DIAGRAM
- $\bigoplus$  EXISTING FEEDER FROM EXISTING SES-3 TO EXISTING PANEL "LC" WITH  $4\#3/0{\rm Cu},\ 1\#4{\rm Cu}{\rm G},\ 2-1/2"{\rm C}.$
- (5) EXISTING PANEL "LC" RATED AT 200A, 208/120V, 30, 4W, NEMA 1. SEE PANEL SCHEDULE

LOAD SUMMAR	Υ		
PEAK DEMAND READING SUITE 105 PEAK DEMAND READING SUITE 107 PEAK DEMAND READING SUITE 109	= = = = = = = = = = = = = = = = = = = =	37 61 44 47 62 56 84 403 101	A A A A
EXISTING S.E.S. IS RATED FOR 1600A, 2 4W, NEMA 3R.	208/	120V,	3Ø,

	FAULT CURRENT CALCULATIONS										
FALLET		CHORT CIRCUIT AT				CON	DUCTORS				
POINT	EQUIPMENT	SHORT CIRCUIT AT BEGINNING OF RUN	LINE VOLTAGE	LENGTH OF RUN	NUM OF CONDUCTORS	SIZE	С	f	m	SHORT CIRCUIT CURRENT	
1	E) PANEL "LC"	49505	208	168	1	3/0 Cu	12847	5.391	0.156479	7746	Α
2	N) PANEL "TC"	7746	208	15	1	12 Cu	617	1.811	0.355767	2756	Α



EXISTING PANEL "LC" RATED AT 200A,240/12V, DELTA,30,4W,NEMA 1 FULLY RATED AT 35KA

36

38

REPLACEMENT PANEL "A" SCHEDULE

BREAKERS SCC: 10 KA RATED: FULLY NEMA: 1 MOUNTING: FLUSH

37 35.0

39

△ 30/2 2#10 27 1#100 29

△O 20/1 2#12 1#12G

△O 40/3 3#6 1#8G

CONDITION: EXISTING VOLTAGE: 208/120V PHASES/WIRES: 30,4W

LUG AMPS: 225 A

USE / AREA SERVED

LAUNDRY GECL RECEPTACLE

GENERAL RECEPTACLES 1

GENERAL RECEPTACLES 2

ROOM 1 RECEPTACLES

ROOM 2 RECEPTACLES

WATER HEATER (WH-1)

HEAT PUMP (HP-1)

WP-GFCI SERVICE RECEPTACLE

SPARE SPARE

GENERAL LIGHTS

SHOW WINDOW

SHOW WINDOW 2

SIGN P.O.S. RECEPTACLE

WASHER

DRYER

PARTIAL ONE-LINE DIAGRAM

TYPE: BOLT-ON
MAIN CB: M.L.O.
LOCATION: SEE PLAN

C/B USE / AREA SERVED

EXISTING LOAD ON NEW BREAKER
 EXISTING LOAD ON NEW BREAKER
 LOAD CONTROLLED VIA TIMER
 CONTINUOUS LOAD

SPARE

SPARE

SPARE

SPARE

SPARE SPARE

SPARE

SPARE

SPARE

SPARE SPARE

SPARE

SPARE

SPARE SPARE  $\Delta \bullet$ 

 $\Delta \bullet$ 

 $\Delta \bullet$  $\Delta \bullet$ 

 $\Delta \bullet$ 

 $\Delta \bullet$ 

SIGN CONTROL PANEL "TC" FULLY RATED