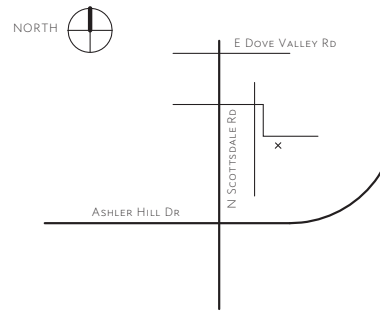


GENERAL NOTES

- 1. Execution of the contract by the contractor is a representation the contractor 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.

VICINITY MAP



PERSPECTIVE VIEW OF EXISTING EXTERIOR:

Table of abbreviations: ABS acrylonitrile butadiene styrene (plumbing pipe), AFF above finish floor, ACI american concrete institute, etc.

GENERAL NOTES 12" = 1'-0"

ABBREVIATIONS 1 1/2" = 1'-0"

CITY APPROVED PLANS ARE TO REMAIN ON THE JOB SITE AT ALL TIMES DURING COURSE OF CONSTRUCTION

PROJECT DESCRIPTION:

PLAN: 216-31-0908
QS Number: 56-45
MCR Number: 651-44
Zoning: C-2 ESL
Fema: X
Subdivision: LOT SPLIT OF THE SUMMIT AT SCOTTSDALE
Square Feet: 937,515.53
Acre: 21.52

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

SCOPE OF WORK:

Bathroom to be retiled, remove existing wall with door, and electric panel. Add new wall, and existing electric panel for accessible turn around clearance.

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

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

Add 5 sinks, 1 washer and 1 dryer.

- ALL SIGNS REQUIRE SEPARATE APPROVALS.
- NO EXTERIOR VENDING OR DISPLAY 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, UTILITY, AND COMMUNICATION EQUIPMENT SHALL BE SCREENED BY A 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)
OR
- THERE SHALL BE NO ROOF-MOUNTED OR GROUND-MOUNTED MECHANICAL, UTILITY, AND COMMUNICATION EQUIPMENT INSTALLED OR PERMITTED WITH THIS APPROVAL.
- 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.

Table of abbreviations: S south, SC solid core, SCHED schedule, SIM similar, SHT sheet, SPEC specifications, SQ square, SF square foot/feet, STOR storage, STRUCT structure(ural), STL steel, SV sheet vinyl, SYM symbol, T.O.B. top of beam, TGB top and bottom, TG tempered glass, TGG tongue and groove thickness, THK thickness, T.O. top of, T.O.C. top of concrete or curb, T.O.P. top of parapet, T.O.STL. top of steel, TOW top of wall, TPTN toilet partition, TEL telephone, TYP typical, UL underwriters laboratories, UNO unless noted otherwise, VAR varies, VEN veneer, VERT vertical, VEST vestibule, VIF verify in field, VR vapor retarder, W west or wide or width, W/ with, W/O without, WIN window, WC water closet, WD wood, WP waterproof(ing), WRB water resistive barrier, WWF welded wire fabric, WT weight, YD yard, XPS extruded polystyrene (insulation)

brand any brand or manufacturer of a product will be surrounded by quotes

AUTHORITY HAVING JURISDICTION:

CITY OF SCOTTSDALE - PLANNING & DEVELOPMENT
PHONE: 480-312-2500
EMAIL: PLANNINGINFO@SCOTTSDALEAZ.GOV
PLANNING AND DEVELOPMENT SERVICES
7447 E. 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 (IMC) AMENDMENTS (PDF)
2021 INTERNATIONAL FUEL GAS CODE (IFGC) AMENDMENTS (PDF)
2020 NATIONAL ELECTRICAL CODE (NEC) AMENDMENTS (PDF)
2021 INTERNATIONAL SWIMMING POOL AND SPA CODE (ISPS) AMENDMENTS (PDF)
THE FOLLOWING CODES WERE ADOPTED DEC. 6, 2022 AND WILL BECOME EFFECTIVE AS FOLLOWS:;

- 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:

- NONE

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:

VB

PROJECT TEAM:

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

ARCHITECT:
Trevor Pan Architects, PLLC
AZ Architect #60475
(480) 277-3499
projects@trevorpan.com
Trevor Pan, Principal
4310 N 75th St
Scottsdale, AZ 85251

SHEET LIST table with columns SHEET NUMBER and SHEET NAME. Includes CS COVER SHEET, G100 SPECIFICATIONS, A100 SITE PLAN, M1 MECHANICAL SPECIFICATIONS, P1 PLUMBING SPECIFICATIONS AND DEMOLITION PLAN, E1 ELECTRICAL SPECIFICATIONS.

TREVOR PAN ARCHITECTS

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Scottsdale, Arizona 85251

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Tenant Improvement
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Scottsdale, AZ 85266

REVISION SCHEDULE

Table with columns #, Description, Date

APPROVED
FINAL PLANS PLANNING

03/19/2024

DATE

J. Kathy

BY

GREEN BUILDING PLAN
APPROVED
BY CITY OF SCOTTSDALE PLAN REVIEW
497-24 anf 03/19/2024
PLAN CHECK NO. REVIEWER DATE
CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND ANY AND ALL DEVIATIONS WILL REQUIRE REAPPROVAL

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

SCOTTSDALE FIRE DEPARTMENT
PLANS HAVE BEEN REVIEWED AND APPROVED

Scott A. Stanek
Name

03/19/2024
Date

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



Table with columns JOB #, DATE, SCALE, DRAWN BY, CHECKED BY, COVER SHEET

SHEET CS

MPE Review By:
Jim Pappas - 480-312-7942
jpappas@scottsdaleaz.gov

PLAN CHECK# 497-24

AS NOTED

SECTION 093000 - TILING

- Summary:**
- Provide tile for the following applications:
 - Wall tile over gypsum wallboard.
 - Wall tile over tile backer board at wet areas.
 - Floor tile over concrete slab.
 - Remodel existing tile installations.
- Submittals:**
- Submit product data, samples, 4 foot by 4 foot mockup.
- Products:**
- Products: As selected by Owner complying with the following.
 - 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. Minimum three colors in patterns as indicated on the Drawings.
 - Wall 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.
 - Tile Accessories:
 - Matching trim units.
 - Marble thresholds (owner selected).
 - Setting Materials: Latex Portland cement mortar, ANSI A118.4.
 - Grout: Latex Portland cement grout, ANSI A118.7.
 - Setting Accessories:
 - Membrane waterproofing under tile.
 - Cementitious tile backer board.
 - Elastomeric Sealants:
 - One part mildew resistant silicone sealant for non traffic areas.
 - Multi part pourable urethane sealant for traffic areas.
 - Chemical resistant sealant at chemical resistant flooring.

- Installation:**
- Comply with requirements of Section 011000 - 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 joint width, and to minimize cutting.
 - Grout, cure, clean and protect tile surfaces.

END OF SECTION

SECTION 099000 - PAINTING AND COATING

- Summary:**
- 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.
- Submittals:**
- Submit product data, samples, 4 foot by 4 foot mockup of each color, extra stock consisting of 1 unopened gallon of each type of paint used.
- Products:**
- Products: As selected by Owner complying with the following.
 - Regulations: Compliance with VOC and environmental regulations.
 - First line commercial quality products for all coating systems.
 - Schedule:
 - Gypsum board 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 coats latex finish.
 - Gypsum board in bathrooms, kitchens and wet areas, semigloss finish, 1 coat latex primer, 2 coats alkyd finish.
 - 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 coats polyurethane.
 - Wood for opaque finish, site refinishing, match existing gloss, 1 coat alkyd finish.

- Installation:**
- 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 thicknesses.
 - 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

- Summary:**
- Refer to plan.
 - 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:**
- Refer to submittal data at end of specifications.
 - Systems: GOODMAN: Packaged Heat Pump, 3 Tons, 14.5 SEER / 11.0 HSPF, Cooling Capacity: 36,000 BTU/h, Heating Capacity: 32,200 BTU/h
 - Utility Service: match existing

- Submittals:**
- Submit product data, warranties, operating and maintenance data, balancing reports.
- Products:**
- Provide new materials suitable for service intended complying with approved shop drawings. Provide accessory items such as controls, anchors and insulation.

- Installation:**
- Comply with requirements of Section 011000 - Project Requirements.
 - Comply with applicable codes, regulations, ordinances and 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 below 60 degrees F.
 - Test all systems for proper operation.
 - Commission and balance systems.
 - Instruct Owner's personnel in proper operation of systems.

END OF SECTION

SECTION 260000 - ELECTRICAL

- Summary:**
- 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 location of designated lighting fixture locations.
 - Coordinate schedule of telephone and data outlet completion with Owner's communications requirements and installer as applicable.
 - Do not cut structural elements without prior written approval.

- Submittals:**
- Submit product data, warranties, operating and maintenance data, circuit diagrams.
 - Submit signed and sealed shop drawings for review and as required for building permit.

- Products:**
- 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.

- Installation:**
- Comply with requirements of Section 011000 - Project Requirements.
 - Comply with applicable codes, regulations, ordinances and requirements of 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. Locate switches 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 finished floor unless noted otherwise.
 - Group multiple junction boxes, telephone and electrical outlets together on walls. 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.
 - Label circuits in electrical panels.
 - Instruct Owner's personnel in proper operation of systems.

IgCC LOW-VOC FINISH MATERIALS

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).

- 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 limits.

**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 |

- Values in this table are derived from those specified by SCAQMD Rule 1168, October 2017.
- 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.

**IgCC TABLE 801.4.2.2
VOC CONTENT LIMITS FOR PAINTS AND COATINGS**

| 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 tint 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

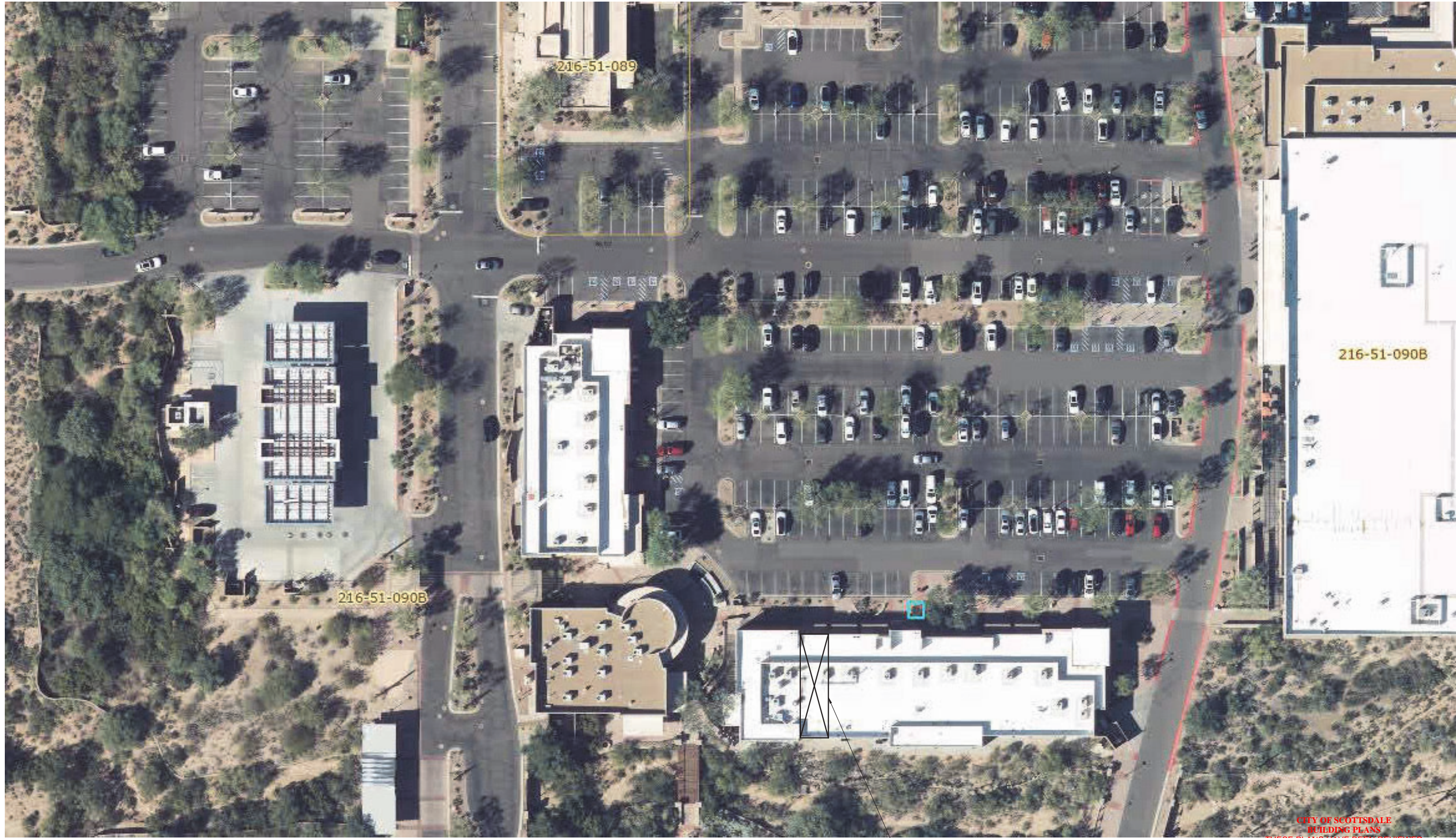
Eduard Barbershop TI
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Scottsdale, AZ 85266

| REVISION SCHEDULE | | |
|-------------------|-------------|------|
| # | Description | Date |
| | | |

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



| | |
|----------------|---------|
| JOB # | 23035 |
| DATE | 1-15-24 |
| SCALE | |
| DRAWN BY | JD |
| CHECKED BY | TP |
| SPECIFICATIONS | |



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| # | Description | Date |
|---|-------------|------|
|---|-------------|------|

① SITE PLAN
1/4" = 1'-0"

Suite 103

**CITY OF SCOTTSDALE
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**SITE PLAN
APPROVED**
BY CITY OF SCOTTSDALE PLAN REVIEW
497-24
PLAN CHECK NO. *J. King* DATE 03/19/2024
CONSTRUCTION AND INSTALLATION SHALL BE IN
ACCORDANCE WITH THIS PLAN AND ANY AND ALL
DEVIATIONS WILL REQUIRE REAPPROVAL

| | |
|------------|--------------|
| JOB # | 23035 |
| DATE | 1-15-24 |
| SCALE | 1/4" = 1'-0" |
| DRAWN BY | JD |
| CHECKED BY | TP |
| SITE PLAN | |

SHEET A100

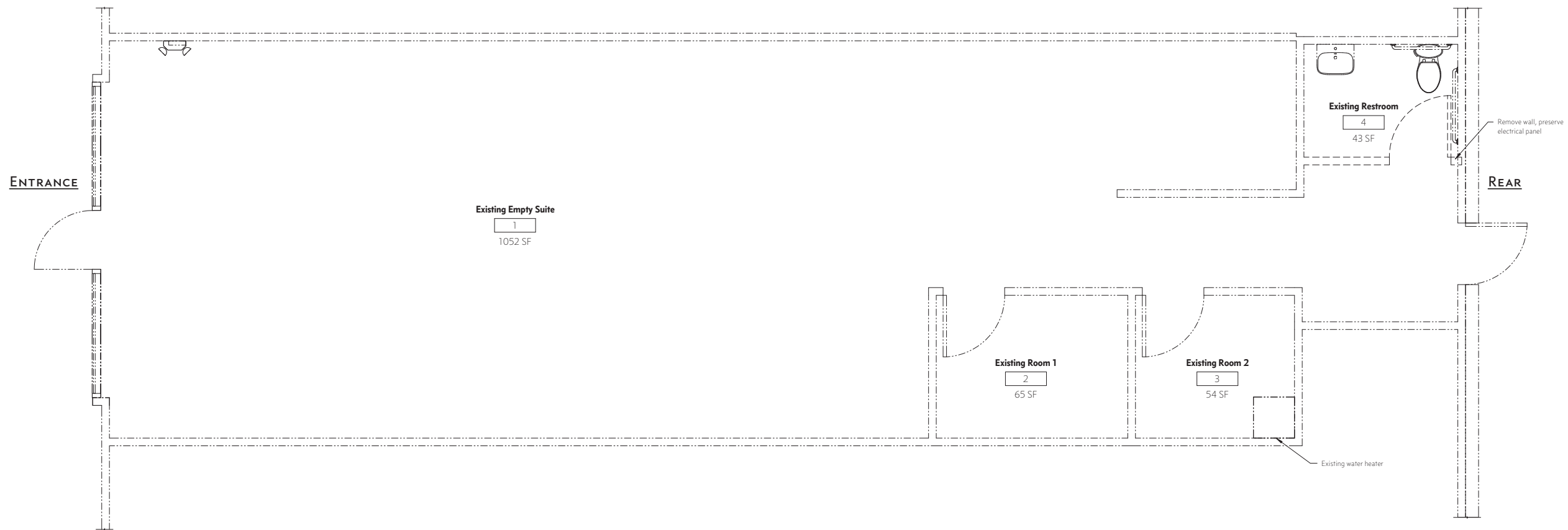
PLAN CHECK# 497-24

Eduard Barbershop TI
Tenant Improvement

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REVISION SCHEDULE

| # | Description | Date |
|---|-------------|------|
| | | |



① EXISTING FLOOR PLAN
3/8" = 1'-0"

EXISTING ROOM SCHEDULE

| 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
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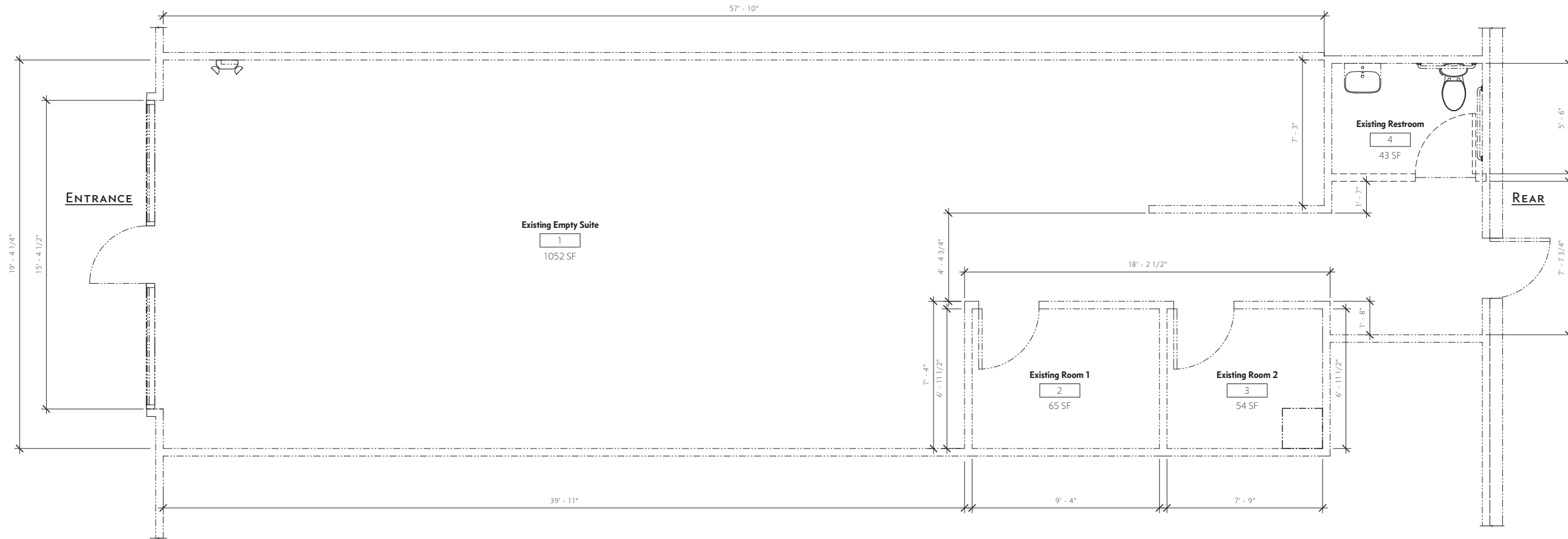


| | |
|------------|--------------|
| JOB # | 23035 |
| DATE | 1-15-24 |
| SCALE | 3/8" = 1'-0" |
| DRAWN BY | JD |
| CHECKED BY | TP |

EXISTING FLOOR PLAN

SHEET **A110**

PLAN CHECK# 497-24



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

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| REVISION SCHEDULE | | |
|-------------------|-------------|------|
| # | Description | Date |
| | | |

**CITY OF SCOTTSDALE
BUILDING PLANS**
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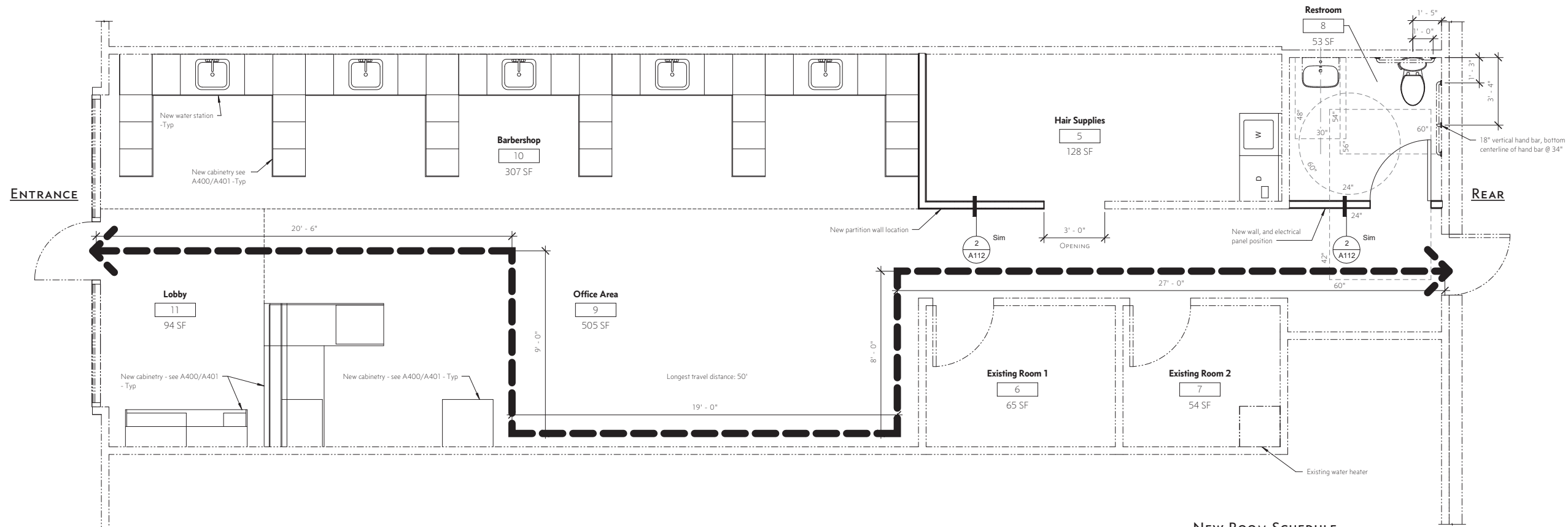


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|------------|--------------|
| JOB # | 23035 |
| DATE | 1-15-24 |
| SCALE | 3/8" = 1'-0" |
| DRAWN BY | JD |
| CHECKED BY | TP |

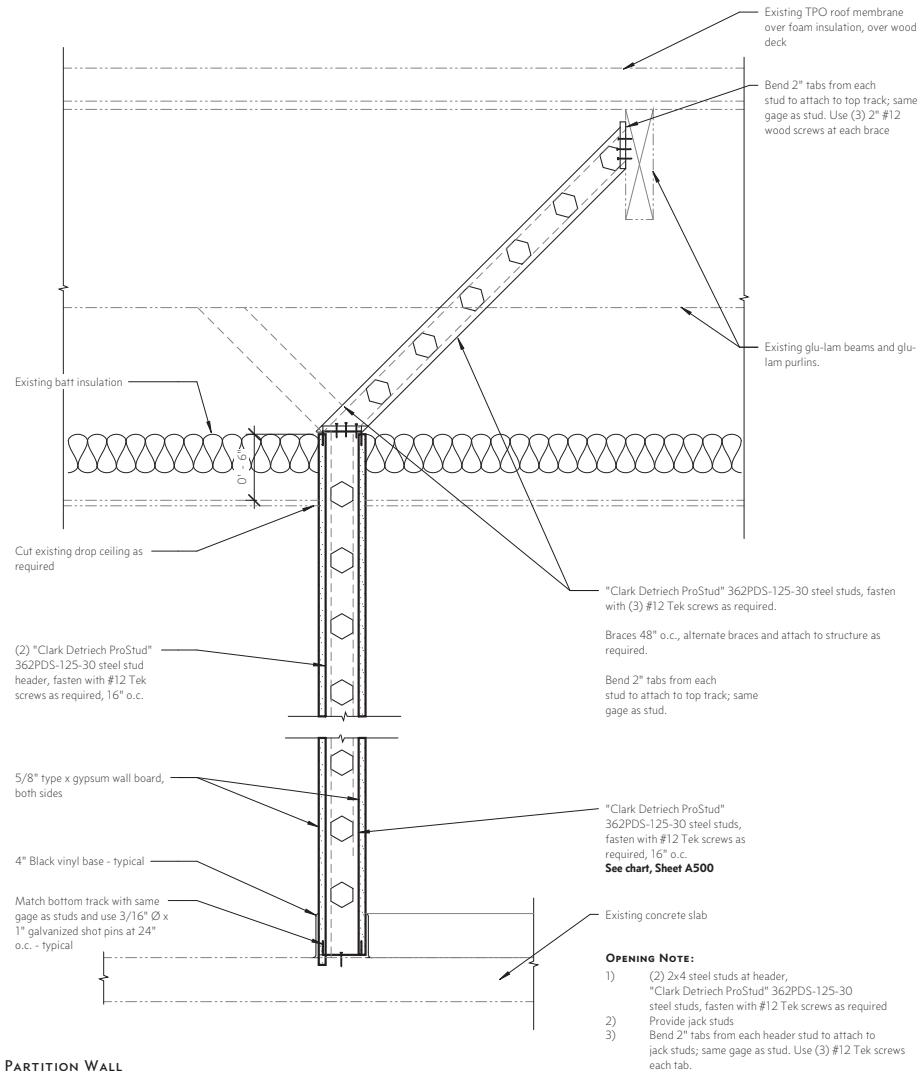
EXISTING DIMENSION PLAN

SHEET A111

PLAN CHECK# 497-24



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



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

NEW ROOM SCHEDULE

| NAME | AREA |
|-----------------|---------|
| RESTROOM | 53 SF |
| EXISTING ROOM 2 | 54 SF |
| EXISTING ROOM 1 | 65 SF |
| LOBBY | 94 SF |
| HAIR SUPPLIES | 128 SF |
| BARBERSHOP | 307 SF |
| OFFICE AREA | 505 SF |
| GRAND TOTAL | 1206 SF |

OCCUPANT LOADS (OL)
IBC 2021 Table 1004.5 and section 1004.8

| Occupancy: | Rooms: | Square footage: | Occupant load factor | Grand Total |
|------------|-----------------|----------------------------------|------------------------------|-------------|
| B | Existing Room 1 | 65sf | 150sf (general business use) | 6 Occupants |
| | Existing Room 2 | 54sf | 150sf | |
| | Restroom | 53sf | 150sf | |
| | Hair Supplies | 128sf | 150sf | |
| | Lobby | 94sf | 150sf | |
| | Office Area | 505sf | 150sf | |
| | | 899sf | | |
| Barbershop | 307sf | 50sf (concentrated business use) | 6 Occupants | |
| | 307sf | | 12 Occupants | |

1 Unisex lavatory provided per 2021 IBC Table 2902.1
Drinking fountain not required, per 2021 IBC 2902.6 "Small Occupancies"

REVISION SCHEDULE

| # | Description | Date |
|---|-------------|------|
|---|-------------|------|

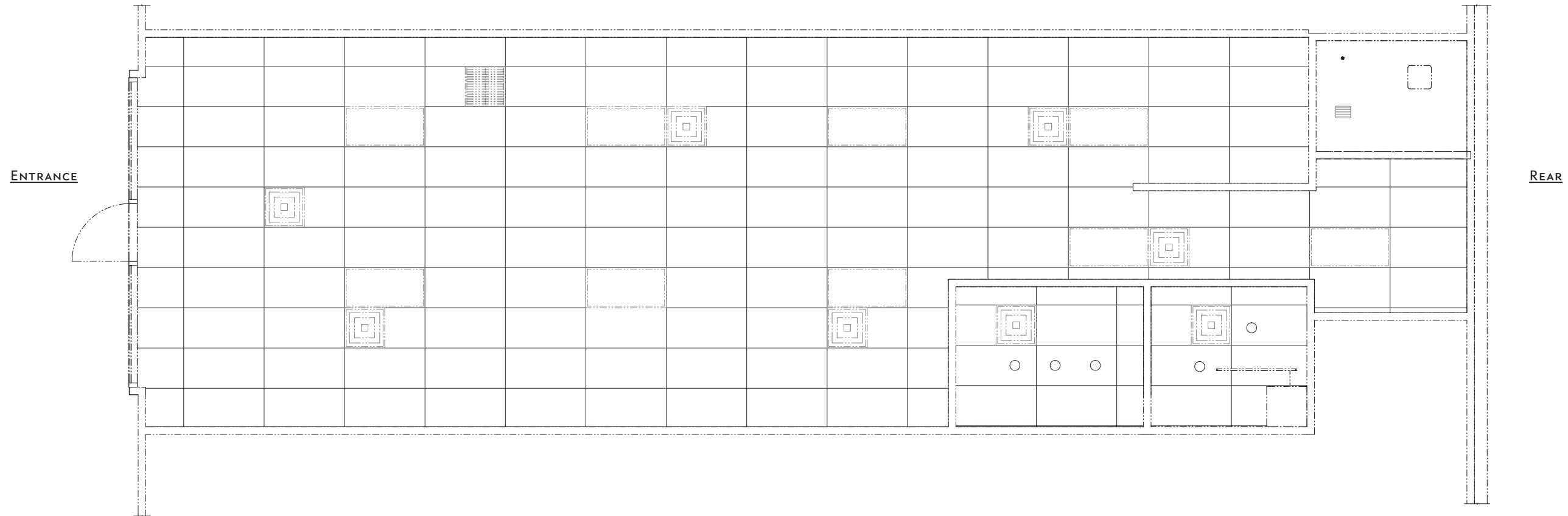
Eduard Barbershop TI
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32531 N Scottsdale Road, Suite 103,
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BUILDING PLANS
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| | |
|----------------|--------------|
| JOB # | 23035 |
| DATE | 1-15-24 |
| SCALE | AS INDICATED |
| DRAWN BY | JD |
| CHECKED BY | TP |
| NEW FLOOR PLAN | |

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ENTRANCE

REAR

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

Eduard Barbershop TI
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| REVISION SCHEDULE | | |
|-------------------|-------------|------|
| # | Description | Date |
| | | |

**CITY OF SCOTTSDALE
BUILDING PLANS**
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ANY
CODE OR ORDINANCE.



Expires: 9/30/2024

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

EXISTING REFLECTED CEILING PLAN

SHEET A120

PLAN CHECK# 497-24

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Eduard Barbershop TI
Tenant Improvement

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Scottsdale, AZ 85266

REVISION SCHEDULE

| # | Description | Date |
|---|-------------|------|
|---|-------------|------|

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

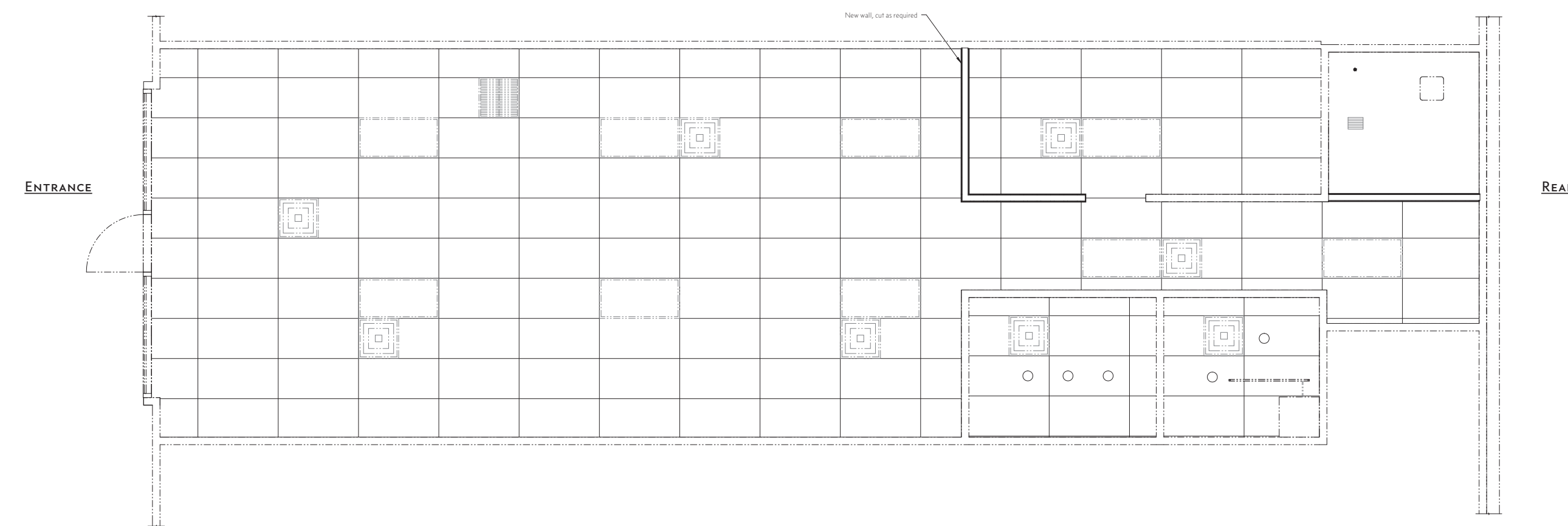
NEW REFLECTED CEILING PLAN

SHEET **A121**

PLAN CHECK# 497-24



**CITY OF SCOTTSDALE
BUILDING PLANS**
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① **NEW REFLECTED CEILING PLAN**
3/8" = 1'-0"



Project Name: Barber Shop - R7

12/14/23



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

Assembling: Y N Packing: Y N

Shipping: Y N Delivering: Y N

Requested Due Date:

Shop File Location:

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



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

TREVOR PAN ARCHITECTS

(480) 277-3499
trevorpan.com
projects@trevorpan.com
Trevor Pan Architects, PLLC
4250 N. 75th St., Ste. 145
Scottsdale, Arizona 85251

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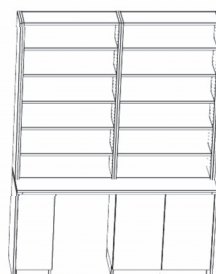
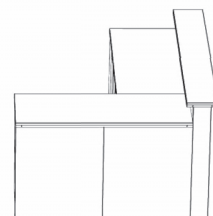
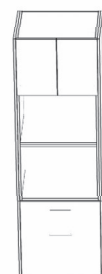
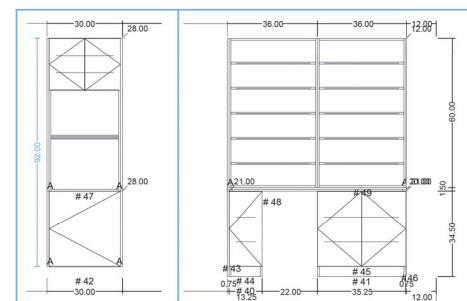
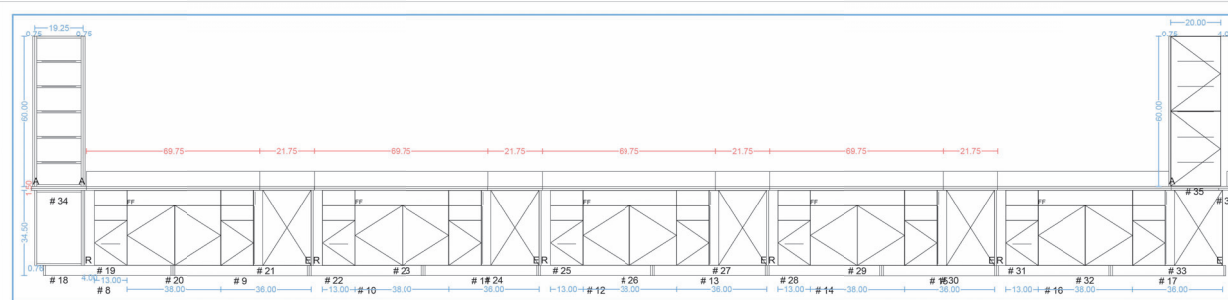
Eduard Barbershop TI
Tenant Improvement
32531 N Scottsdale Road, Suite 103,
Scottsdale, AZ 85266

REVISION SCHEDULE

| # | Description | Date |
|---|-------------|------|
| | | |

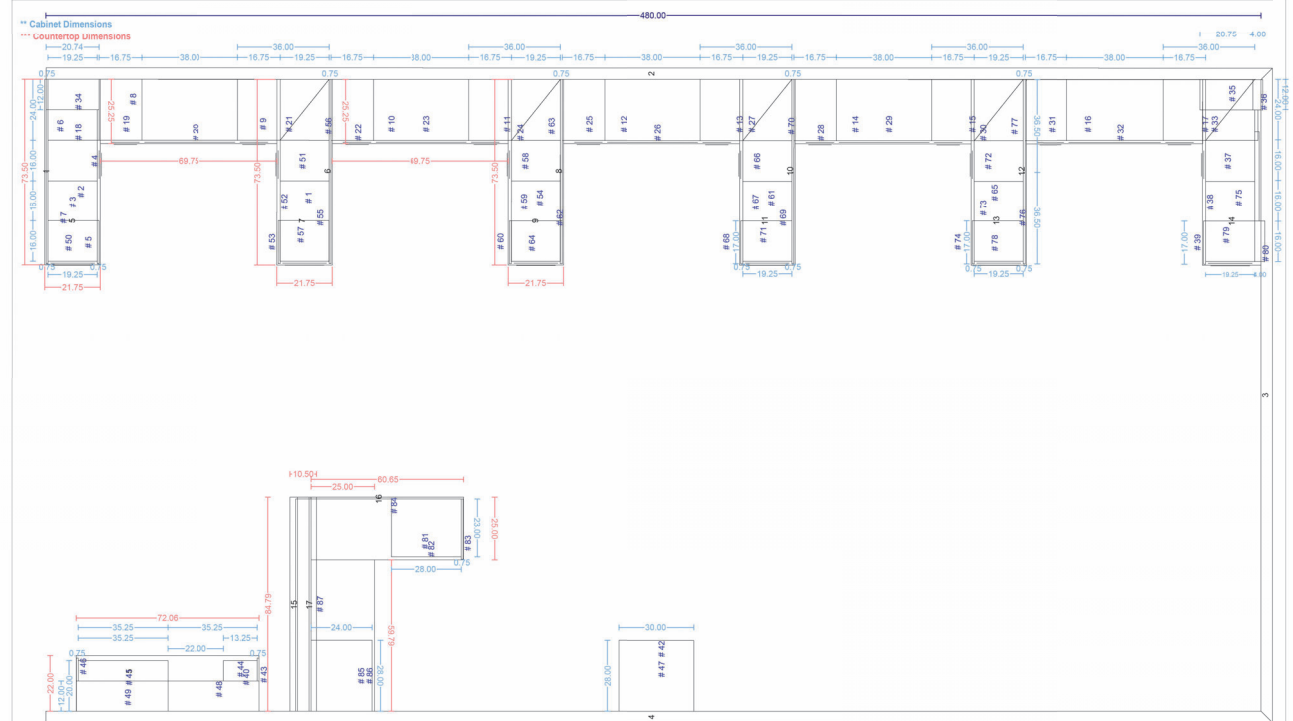
Barber Shop - R7

interiors : 3/4" 2ed black melamine exteriors : 3/4" wood grained mel
Elevation View



Cutting Edge Components
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Barber Shop - R7
interiors : 3/4" 2ed black melamine exteriors : 3/4" wood grained mel
Plan View



Cutting Edge Components
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CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN REVIEWED
AND ARE READY FOR A PERMIT.
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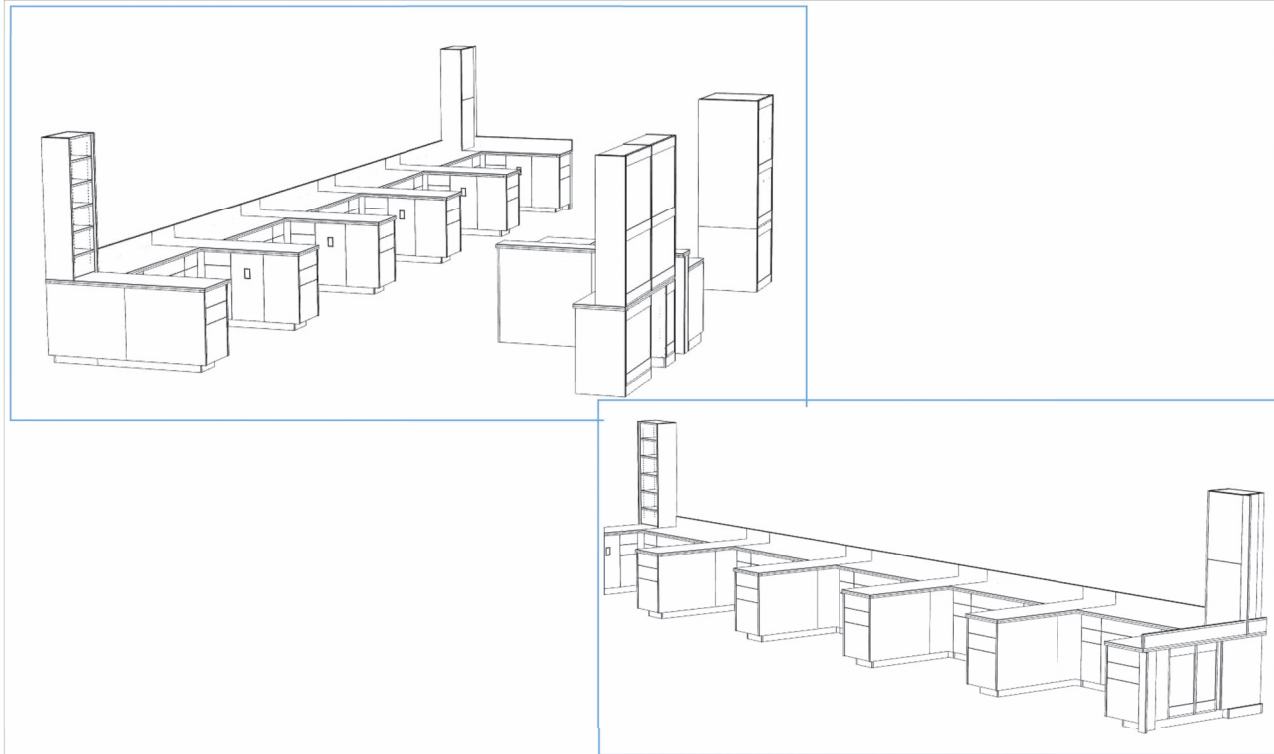
| | |
|--------------------|---------|
| JOB # | 23035 |
| DATE | 1-15-24 |
| SCALE | |
| DRAWN BY | JD |
| CHECKED BY | TP |
| CABINET ELEVATIONS | |

SHEET A400

PLAN CHECK# 497-24

Barber Shop - R7

interiors : 3/4" 2ed black melamine exteriors : 3/4" wood grained mel

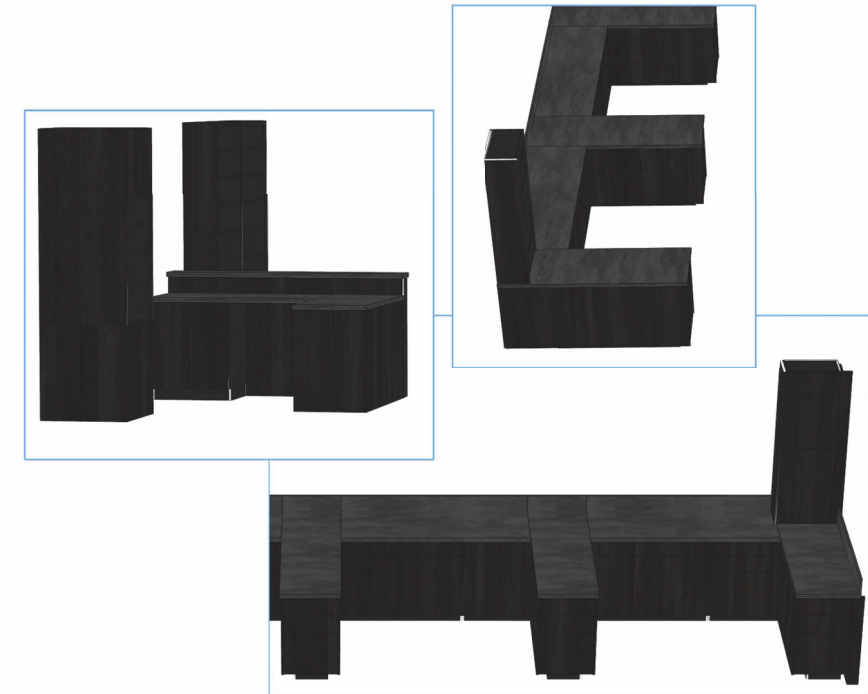


Cutting Edge Components
2237 S. 16th Street Phoenix, Arizona 85034
602-442-4400

Barber Shop - R7

interiors : 3/4" 2ed black melamine exteriors : 3/4" wood grained mel

| Item | Part No. | Qty | Width | Height | Depth | Description |
|------|-------------------------|-----|-------|--------|-------|------------------------|
| 1 | Toe Assembly | 1 | 51.50 | 4.30 | 19.25 | Detached Toe Assembly |
| 2 | Toe Assembly | 1 | 51.50 | 4.30 | 19.25 | Detached Toe Assembly |
| 3 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 4 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 5 | Added Door Panel | 1 | 17.00 | 31.50 | 0.75 | Filler / Face Panel |
| 6 | Applied End | 1 | 36.50 | 31.50 | 0.75 | Filler / Face Panel |
| 7 | Applied End | 1 | 36.50 | 31.50 | 0.75 | Filler / Face Panel |
| 8 | Toe Assembly | 1 | 55.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 9 | Toe Assembly | 1 | 55.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 10 | Toe Assembly | 1 | 48.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 11 | Toe Assembly | 1 | 48.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 12 | Toe Assembly | 1 | 48.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 13 | Toe Assembly | 1 | 48.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 14 | Toe Assembly | 1 | 48.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 15 | Toe Assembly | 1 | 48.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 16 | Toe Assembly | 1 | 48.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 17 | Toe Assembly | 1 | 48.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 18 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 19 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 20 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 21 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 22 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 23 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 24 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 25 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 26 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 27 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 28 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 29 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 30 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 31 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 32 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 33 | SM Base | 1 | 19.25 | 31.50 | 24.00 | Standard Base Cabinet |
| 34 | SM Upper | 1 | 20.75 | 42.00 | 12.00 | Standard Upper Cabinet |
| 35 | SM Upper | 1 | 20.75 | 42.00 | 12.00 | Standard Upper Cabinet |
| 36 | Upper Wall Filler Right | 1 | 4.00 | 42.00 | 12.00 | Upper Filler |
| 37 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 38 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 39 | Added Door Panel | 1 | 17.00 | 31.50 | 0.75 | Filler / Face Panel |
| 40 | Toe Assembly | 1 | 13.25 | 4.30 | 20.00 | Detached Toe Assembly |
| 41 | Toe Assembly | 1 | 13.25 | 4.30 | 20.00 | Detached Toe Assembly |
| 42 | SM Base | 1 | 30.00 | 31.50 | 28.00 | Standard Base Cabinet |
| 43 | Applied Finished End | 1 | 0.75 | 31.50 | 21.00 | End Panel |
| 44 | SM Base | 1 | 13.25 | 31.50 | 20.00 | Standard Base Cabinet |
| 45 | SM Base | 1 | 13.25 | 31.50 | 20.00 | Standard Base Cabinet |
| 46 | Applied Finished End | 1 | 0.75 | 31.50 | 21.00 | End Panel |
| 47 | SM Upper | 1 | 38.00 | 60.00 | 12.00 | Standard Upper Cabinet |
| 48 | SM Upper | 1 | 38.00 | 60.00 | 12.00 | Standard Upper Cabinet |
| 49 | SM Upper | 1 | 38.00 | 60.00 | 12.00 | Standard Upper Cabinet |
| 50 | SM Upper | 1 | 38.00 | 60.00 | 12.00 | Standard Upper Cabinet |
| 51 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 52 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 53 | Added Door Panel | 1 | 17.00 | 31.50 | 0.75 | Filler / Face Panel |
| 54 | Toe Assembly | 1 | 51.50 | 4.30 | 19.25 | Detached Toe Assembly |
| 55 | Applied End | 1 | 36.50 | 31.50 | 0.75 | Filler / Face Panel |
| 56 | Applied End | 1 | 36.50 | 31.50 | 0.75 | Filler / Face Panel |
| 57 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 58 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 59 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 60 | Added Door Panel | 1 | 17.00 | 31.50 | 0.75 | Filler / Face Panel |
| 61 | Toe Assembly | 1 | 55.00 | 4.30 | 19.25 | Detached Toe Assembly |
| 62 | Applied End | 1 | 36.50 | 31.50 | 0.75 | Filler / Face Panel |
| 63 | Applied End | 1 | 36.50 | 31.50 | 0.75 | Filler / Face Panel |
| 64 | SM Base | 1 | 19.25 | 31.50 | 18.00 | Standard Base Cabinet |
| 65 | Toe Assembly | 1 | 51.50 | 4.30 | 19.25 | Detached Toe Assembly |
| 66 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 67 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 68 | Added Door Panel | 1 | 17.00 | 31.50 | 0.75 | Filler / Face Panel |
| 69 | Applied End | 1 | 36.50 | 31.50 | 0.75 | Filler / Face Panel |
| 70 | Applied End | 1 | 36.50 | 31.50 | 0.75 | Filler / Face Panel |
| 71 | SM Base | 1 | 19.25 | 31.50 | 16.00 | Standard Base Cabinet |
| 72 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 73 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 74 | Added Door Panel | 1 | 17.00 | 31.50 | 0.75 | Filler / Face Panel |
| 75 | Toe Assembly | 1 | 55.00 | 4.30 | 19.25 | Detached Toe Assembly |
| 76 | Applied End | 1 | 36.50 | 31.50 | 0.75 | Filler / Face Panel |
| 77 | Applied End | 1 | 36.50 | 31.50 | 0.75 | Filler / Face Panel |
| 78 | SM Base | 1 | 19.25 | 31.50 | 16.00 | Standard Base Cabinet |
| 79 | SM Base | 1 | 19.25 | 31.50 | 16.00 | Standard Base Cabinet |
| 80 | Base Wall Filler Right | 1 | 4.00 | 31.50 | 16.00 | Base Filler |
| 81 | Toe Assembly | 1 | 55.00 | 4.30 | 20.00 | Detached Toe Assembly |
| 82 | SM Base | 1 | 18.00 | 31.50 | 19.25 | Standard Base Cabinet |
| 83 | Applied Finished End | 1 | 0.75 | 31.50 | 24.00 | End Panel |
| 84 | Added Door Panel | 1 | 49.00 | 31.50 | 0.75 | Filler / Face Panel |
| 85 | Toe Assembly | 1 | 28.00 | 4.30 | 24.00 | Detached Toe Assembly |
| 86 | SM Base | 1 | 28.00 | 31.50 | 24.00 | Standard Base Cabinet |
| 87 | SM Base | 1 | 24.75 | 42.00 | 4.50 | Standard Base Cabinet |
| 88 | Toe Skin | 2 | 4.06 | 42.00 | 0.75 | Filler / Face Panel |
| 89 | Toe Skin | 2 | 4.06 | 42.00 | 0.75 | Filler / Face Panel |
| 90 | Toe Skin | 6 | 4.06 | 30.00 | 0.75 | Filler / Face Panel |
| 91 | Toe Skin | 6 | 4.06 | 30.00 | 0.75 | Filler / Face Panel |



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Eduard Barbershop TI
Tenant Improvement
32531 N Scottsdale Road, Suite 103,
Scottsdale, AZ 85266

| REVISION SCHEDULE | | |
|-------------------|-------------|------|
| # | Description | Date |
| | | |

CITY OF SCOTTSDALE
BUILDING PLANS
THESE PLANS HAVE BEEN REVIEWED
AND ARE READY FOR A PERMIT.
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| | |
|--------------------|---------|
| JOB # | 23035 |
| DATE | 1-15-24 |
| SCALE | |
| DRAWN BY | JD |
| CHECKED BY | TP |
| CABINET ELEVATIONS | |

SHEET A401

PLAN CHECK# 497-24

| 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 |

| LOAD SUMMARY (MBH) | | | | | | | | | | | |
|--------------------|------------|------------|------------------------------|---------------------------|--------------------------------------|------------------------------|---------------------------------|------------------------------------|-----------------------------------|---------------------|------------------------|
| ZONE | SYST. NAME | SYST. EQU. | CALC. EQUIPMENT CAPACITY TON | 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.
- THE MINIMUM EFFICIENCY ALLOWED IS 14 SEER

| OUTSIDE AIR CALCULATION 2018 IMC TABLE 403.3 | | | | | | | | | | | | | | | | | | |
|---|------|-------------------------|----------------------|-----|------|------|------|-------------------------|------------|-----|--------|--------------|----------------|--------|--------|--------|-----|-----|
| ZONE | AZ | Occ. Density Tab. 403.3 | Pz | Rp | RpPz | Ra | RaAz | EXHAUST CFMSF Tab 403.3 | Vbz | Et | Voz | Vpz | Zp | Ev | Ps | D | Vou | Vot |
| | SF | PEOPLE | CFMPEPSO N tab 403.3 | CFM | CFM | CFM | CFM | Eq 4-1 CFM | Eq 4-2 CFM | CFM | Eq 4-5 | Eq 4-3.2.3.2 | Max. 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 | | | | - | 70 |
| TOTAL | 1206 | | 27 | | | | | 140 | | | | 2000 | | | | 27 | | 407 |

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

MECHANICAL SPECIFICATIONS

- GENERAL
- 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 EXISTING UNITS OPERATIONAL. EXISTING CONDITIONS SHALL BE VERIFIED PRIOR TO SUBMITTING BID.

- EQUIPMENT
- 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 BALANCING THE SYSTEM.
 - MECHANICAL CONTRACTOR TO VERIFY AND COORDINATE AVAILABLE VOLTAGE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.

- DUCTWORK
- 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 VERIFY 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 "0" OR CLASS "1" FOR ALL "FACTORY MADE" DUCT.
 - INSTALL RADIUS ELBOWS, TURNING VANES, EXTRACTORS AND SPLITTER DAMPERS IN DUCTWORK WHERE APPLICABLE.
 - 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 EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED. UNLISTED DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS.
 - MECHANICAL CONTRACTOR SHALL CAP UN-USED OPENINGS IN EXISTING DUCTWORK.
 - 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-
 - FOR UNCONDITIONED SPACE DUCT PROVIDE MINIMUM R=8 INSULATION.

MECHANICAL SYMBOLS (NOT ALL USED)

- ☒ SUPPLY AIR DIFFUSER/REGISTER
- ☑ RETURN AIR GRILLE
- EXHAUST AIR
- ☒ RELIEF VENT
- Ⓢ THERMOSTAT
- 8" - INDICATES SIZE OF DUCT
- A INDICATES REGISTER,DIFFUSER OR GRILLE TYPE
- METAL ROUND DUCT.
- ▭ METAL RECTANGULAR DUCT
- ⌋ ADJUSTABLE VOLUME DAMPER
- FLEXIBLE ROUND DUCT
- SD DUCT SMOKE DETECTOR
- Ⓢ VENT THRU ROOF
- XX-X EQUIPMENT IDENTIFICATION TAG, SEE SCHEDULE AND KEYNOTES
- E) EXISITNG
- R) RELOCATED
- X) REMOVE
- MD DUCT MOTORIZED DAMPER

MECHANICAL SPECIFICATIONS

- OUTLETS
- THE MECHANICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF ALL AIR DISTRIBUTION DEVICES WITH ALL TRADES PRIOR TO ANY CONSTRUCTION.
 - 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.
 - FIRE
 - APPROVED SMOKE DETECTOR DEVICES SHALL BE INSTALLED WITH ALL AIR MOVING SYSTEMS (EITHER 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 AUDIBLE SUPERVISORY SIGNAL SHALL BE INSTALLED AT A CONSTANTLY SUPERVISED LOCATION TRIGGERED BY THE ACTIVATION OF A DUCT SMOKE DETECTOR.
 - 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 SMOKE DETECTION.
 - SMOKE DETECTORS REQUIRED BY 2006 IMC 606 SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 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.

- DRAINS
- EXTEND SCHEDULE TYPE "M" COPPER CONDENSATE DRAIN AS SHOWN. MIN 2% SLOPE. ROUTE UNDER ROOF
- INSULATION
- PROVIDE 1" ACOUSTIC INTERNAL LINER IN SUPPLY AND RETURN DUCTWORK FROM THE DUCT CONNECTION TO THE UNIT AND LINE THE FIRST 10 FEET FROM
 - ALL INSULATION, MATERIAL, COVERINGS, ADHESIVES, VAPOR-BARRIERS AND TAPES SHALL CONFORM TO NFPA 90A, FLAME SPREAD CLASSIFICATION NOT TO EXCEED 25 AND SMOKE DEVELOPMENT NOT TO EXCEED 50.
 - 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.
- TESTING
- TEST AND BALANCE SYSTEM TO APPROXIMATE CFM 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. PROVIDE A COPY OF AIR BALANCE REPORT TO 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 REPROGRAMMING.
- 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.
- ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK, SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS, MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS OR TAPES. TAPES AND MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL181A OR UL181B. DUCT CONNECTIONS TO FLANGES OR AIR DISTRIBUTION SYSTEM EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTED. UNLISTED DUCT TAPE IS NOT PERMITTED AS A SEALANT 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.

- STORM WINDOWS INSTALLED OVER EXISTING FENESTRATION.
- GLASS ONLY REPLACEMENT IN AN EXISTING SACH AND FRAME.
- EXISTING CEILING, WALL OR FLOOR CAVITIES EXPOSED DURING CONSTRUCTION PROVIDED THAT THESE CAVITIES ARE FILLED WITH INSULATION.
- CONSTRUCTION WHERE THE EXISTING SPACE WITH S/D OR CAVITY IS NOT EXPOSED.

GENERAL NOTES

- ALL MECHANICAL WORK TO BE PER IMC 2018
- PROVIDE MINIMUM INSULATION VALUE AS SHOWN OR ORDINANCE.

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 |
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ENGINEERING SEAL



EXPIRES 03/31/25



MECHANICAL & ELECTRICAL ENGINEERING

441 S. 48TH ST. SUITE 101
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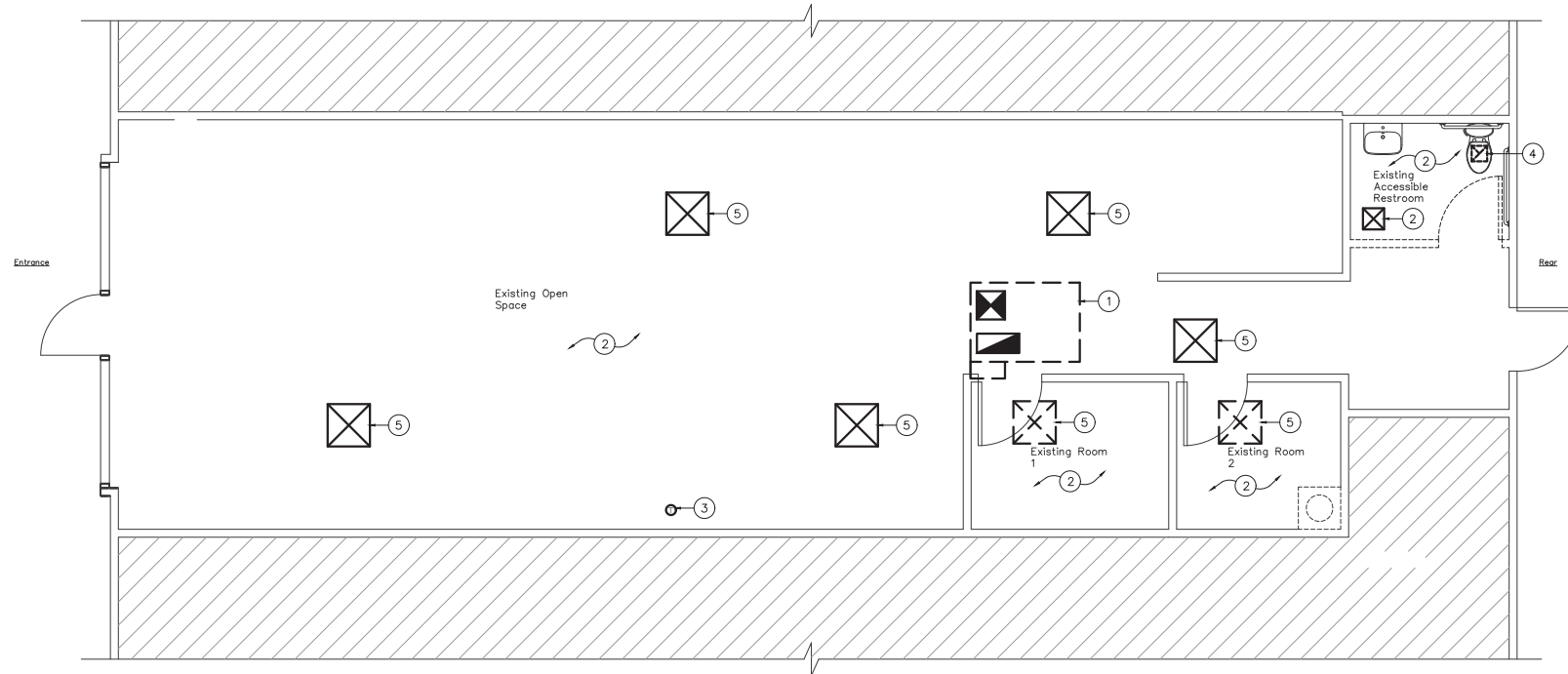
PROJECT:
EDUARD BARBERSHOP T1
32531 N SCOTTSDALE RD SUITE 103
SCOTTSDALE, AZ 85266

SHEET #:

M1

SHEET TITLE:
MECHANICAL SPECIFICATIONS

PLAN CHECK# 497-24



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

KEYNOTES

- ① EXISTING 5-TON HEAT PUMP ROOFTOP PACKAGE HVAC UNIT TO REMAIN.
- ② EXISTING DUCTWORK, DIFFUSERS, AND REGISTERS REMAIN UNO. SEE MECHANICAL PLAN FOR RELOCATION OF DIFFUSERS.
- ③ EXISTING THERMOSTAT TO REMOVE AND REPLACE.
- ④ EXISTING CEILING EXHAUST FAN TO REMOVE AND REPLACE.
- ⑤ EXISTING CEILING SUPPLY AIR DIFFUSER TO REMOVE AND RELOCATE.

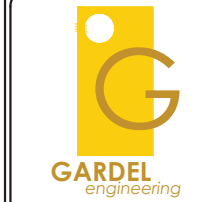
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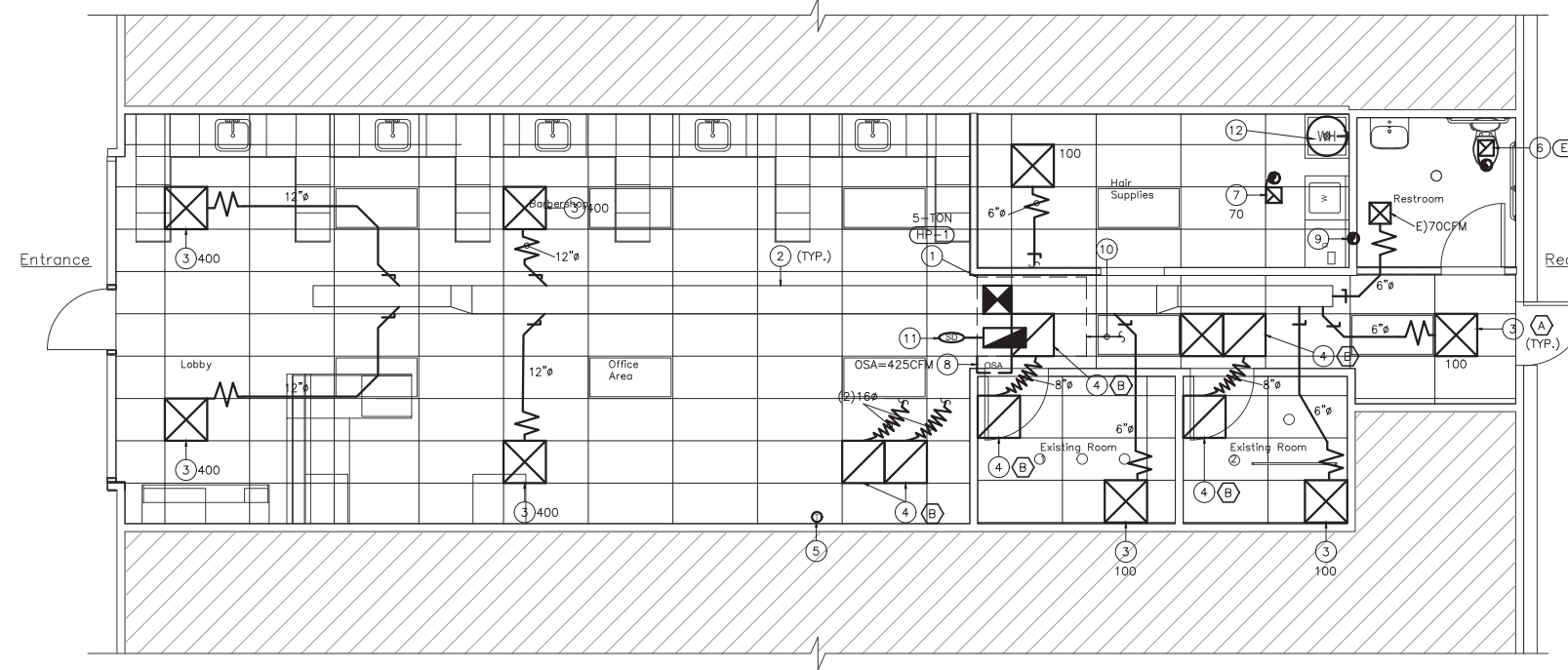
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MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

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.
- ⑦ NEW CEILING EXHAUST FAN WITH BACK-DRAFT DAMPER AND VENT THROUGH ROOF.
- ⑧ NEW OUTSIDE AIR INTAKE ON AC UNIT, PROVIDED WITH SCREEN AND DAMPER. ADJUST OSA TO BE 425CFM.
- ⑨ PROVIDE NEW CLOTHES DRYER VENT THROUGH WALL SCREENED AND LOWEDED.
- ⑩ EXISTING CONDENSATE DRAIN TO REMAIN.
- ⑪ NEW SMOKE DETECTOR LOCATED INSIDE RETURN OF HP-, UPSTREAM OF FILTER.
- ⑫ REPLACEMENT ELECTRIC WATER HEATER.

CITY OF SCOTTSDALE BUILDING PLANS
THESE PLANS HAVE BEEN REVIEWED AND ARE READY FOR A PERMIT.
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PROJECT:
EDUARD BARBERSHOP T1
32531 N SCOTTSDALE RD SUITE 103
SCOTTSDALE, AZ 85266

SHEET #:
M2
SHEET TITLE:
MECHANICAL DEMOLITION AND MECHANICAL PLAN

PLAN CHECK# 497-24

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

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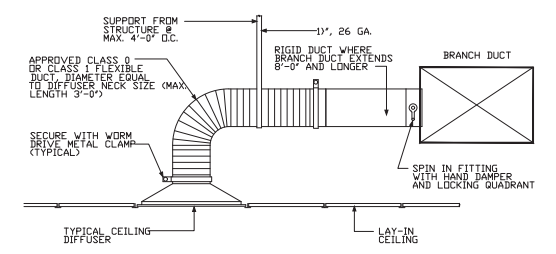
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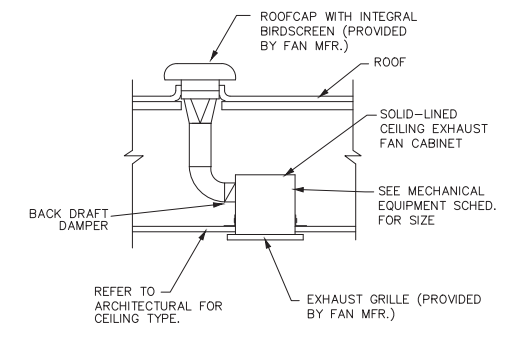
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SHEET #:
M3
 SHEET TITLE:
 MECHANICAL
 DETAILS



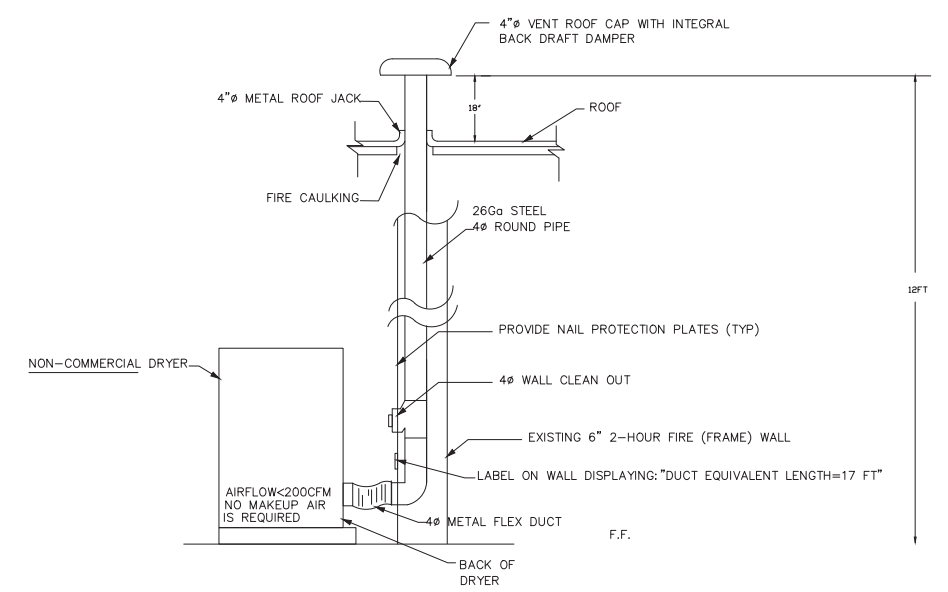
DIFFUSER CONNECTION

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



CEILING EXHAUST FAN / ROOF

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



CLOTHES DRYER VENT DETAIL

NOT TO SCALE

NOTE:
 TO COMPLY WITH THE CODE REQUIREMENT THAT DRYER EXHAUST VENTS NOT EXCEED A FIXED LENGTH, THE HVAC SUBCONTRACTOR MUST 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-THROUGH. THE TAG SHOULD READ AS FOLLOWS:

RISK OF FIRE

THE NET EQUIVALENT* LENGTH OF DRYER DUCT FROM THIS LOCATION IS **18** FEET

*THE MAXIMUM ALLOWABLE EXHAUST DUCT LENGTH STATED IN THE CLOTHES DRYER'S INSTALLATION INSTRUCTIONS SHALL BE EQUAL TO OR GREATER THAN THE POSTED EQUIVALENT LENGTH INDICATED ON THIS PLACARD.

MANDATED BY IMC 504.6.5 & IRC M502.4.6**
 DO NOT REMOVE OR DEFACE THIS PLACARD
**SEE PLACARD FOR THE EXACT SIZE AND THE CORRECT INSTALLATION INSTRUCTIONS TO BE POSTED WITHIN 4 FEET OF DRYER EXHAUST DUCT CONNECTION.
 *THIS INFO ACCORDS THE WHOLE DUCT FITTING LEVEL, 100% VENTION.

DRYER TAG NOTE

SCALE: N.T.S.

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 BUILDING PLANS**
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PLAN CHECK# 497-24

ELECTRIC WATER HEATER SCHEDULE

| 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

| ID | DESCRIPTION | MANUFACTURER/ MODEL | FITTINGS ACCESSORIES | ROUGH-IN | | | | TRAP SIZE | MAX. FLOW | REMARKS |
|--------------|--------------|---------------------|----------------------|----------|------|------|--------|-----------|-----------|---------|
| | | | | 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:
1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS

DOMESTIC WATER CALCULATION (ENTIRE BUILDING)

| | | |
|---|------|-----|
| LINE PRESSURE 70 PSI (ASSUMED PRESSURE) | | |
| HORIZONTAL PIPE LENGTH, METER TO LAST FIXTURE | 92 | FT |
| VERTICAL RISE TAP TO HIGHEST FIXTURE | 10 | FT |
| TOTAL LENGTH PIPE | 102 | FT |
| FEET LOSS (STATIC) FITTING LOSS 10% | 10 | FT |
| TOTAL EQUIVALENT LENGTH | 112 | FT |
| TOTAL FIXTURE UNITS: | 28 | FU |
| FLOW LOAD DEMAND: | 18 | GPM |
| PRESSURE LOSS: | | |
| STREET PRESSURE (READING) | 70 | PSI |
| EXISTING 3/4" TAP | 4 | PSI |
| EXISTING 3/4" METER | 4 | PSI |
| STATIC HEIGHT (15X.5) | 5.0 | PSI |
| MINIMUM REQUIRED PRESSURE | 20 | PSI |
| TOTAL LOSS | 0.33 | PSI |
| AVAILABLE PRESSURE FOR PIPING LOSSES | 27 | PSI |
| 37 PSI/112 FT x 100 = 33.0 MAX ALLOWABLE PSI DROP PER 100 FT | | |
| EXISTING 3/4" WATER METER AND 1" MAIN WATER LINE ARE RATED TO REMAIN FOR THIS PERMIT. | | |

SUITE B103 WATER AND SEWER DEMAND CALCULATIONS

| CONDITIONS | FIXTURE | QUANT. | WASTE | | DOMESTIC WATER SUPPLY DEMAND | |
|--|----------------|--------|-----------|-------|------------------------------|-------------|
| | | | F.U. | 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 | 2 | 10 | 2 | 10 |
| NEW | MOP-SINK | 1 | 3 | 3 | 3 | 3 |
| NEW | CLOTHES WASHER | 1 | 2 | 2 | 6 | 6 |
| EXISTING 4" MAIN SEWER LINE IS RATED FOR THIS PERMIT | | | TOTAL FU= | 23 | TOTAL = | 26 |
| TOTAL DEMAND: 18 GPM | | | | | | |

BUILDING WATER AND SEWER DEMAND CALCULATIONS SUITES B101, B102, B103 AND B104

| EXIS/NEW | FIXTURE | QUANT. | WASTE | | DOMESTIC WATER SUPPLY DEMAND | |
|--|-------------------|--------|-----------|-------|------------------------------|-------------|
| | | | F.U. | TOTAL | COLD WATER F.U. | WATER TOTAL |
| EXISTING | WATER CLOSET | 4 | 6 | 24 | 5 | 20 |
| EXISTING | RESTROOM LAVATORY | 4 | 2 | 8 | 2 | 8 |
| EXISTING | MOP SINK | 4 | 3 | 12 | 2 | 8 |
| EXISTING | 3 COMP SINK | 2 | 3 | 6 | 3 | 6 |
| EXISTING | PREP SINK | 2 | 2 | 4 | 3 | 6 |
| EXISTING | HAND SINK | 4 | 2 | 8 | 2 | 8 |
| EXISTING | HOSE BIB | 1 | 0 | 0 | 2.5 | 2.5 |
| NEW | LAVATORY | 1 | 37 | 6 | 2 | 39 |
| EXISTING 4" MAIN SEWER LINE IS RATED FOR THIS PERMIT | | | TOTAL FU= | 68 | TOTAL FU= | 97.5 |
| TOTAL DEMAND: 42 GPM | | | | | | |

PLUMBING SPECIFICATIONS

- GENERAL
 - Scope: 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. Contractor shall pay for all permits, meters, fees, city inspections, legal notices, etc., as required.
 - Submittals: Within 15 days after award of contract, submit 8 copies of all items.
 - Record Drawings: Provide a set to the Architect at completion of project.
 - Instructions: Provide maintenance manual and instruct Owner in the proper operation and maintenance of the equipment.
 - Guarantee: One year on labor, material and equipment.
- PRODUCTS
 - Piping:
 - 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.
 - Fittings: Wrought copper conforming to ANSI B16.22.
 - Tubing: above and below grade, Type: Wirsbo AQUAPEX. Cross-linked polyethylene (PEX) manufactured by PEX-co or Engal method. Manufactured in accordance with ASTM F876 and ASTM F877 and tested for compliance by an independent third party agency. Standard Grade hydrostatic design and pressure ratings from PPI. Verify proposed installation is acceptable to Authority Having Jurisdiction prior to construction.
 - 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 0.27 BTU / Hr x ft 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 BTU / Hr x ft x F.

- Sanitary Waste and Vent Piping:
 - Plastic: Subject to Owner approval, ABS plastic piping conforming to ASTM D-2751-88, Schedule 40, are acceptable for sanitary waste and vent piping. Fittings: Drainage fittings to match pipe.
 - Cleanouts
 - Concrete and Tile Floors: J.R. Smith 4023, with scoriated nickel-bronze top.
 - Cleanouts (exposed vertical piping): J.R. Smith 4512 cast iron branch cleanout tee with
 - 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.
 - Provide all cleanouts with heavy threaded bronze plugs.
 - Contractor shall coordinate all cleanout locations with architect and locate in non visible locations.
- Floor Drains, Floor Sinks:
 - ED Floor Drains: equal to J.R. Smith 2005-A Duco cast iron drain body with 5" diameter adjustable nickel bronze strainer trap primer connection and no-hub outlet connection.
 - ES Floor Sinks - equal to J.R. Smith 3190-Y, B-1/2" 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.
- Plumbing Fixtures: Use polished chrome-plated, adjustable brass P-traps 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 ahead of all equipment or fixtures. After fixtures are set in place and secured to walls, caulk 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.
- Pipe Identification:
 - Mark soft water piping systems with Brady, Seton, Brimor or Set Mark identification markers of snap-on type after pipe has been painted or insulated where exposed.
 - Install stencils at all major branch takeoffs, risers and at 10-foot intervals on straight runs and at each entrance or exit from pipe shafts. Markers shall be located for maximum visibility from expected approach.
 - Identification material sizes shall be as follows:
 - 2" and under 1/2" high letters
 - Over 2" 1" high letters
- 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.
 - P-Traps: Crane, Kohler, Eljer, Frost, McGuire.
 - Drains and Cleanouts: J. R. Smith, Zurn, Josam, Wade, Western.
 - Hangers: Grinnell, Fee & Mason, Elcen, Kin-Line, F & S, B-Line, Michigan.

- EXECUTION
 - Tests and Inspections:
 - All work to be tested and approved before covering as directed by Architect. Remake all leaking joints and retest.
 - Potable Water Systems: 150 psi hydrostatic pressure held without loss for four hours.
 - Sanitary Waste and Vent System: Fill with water to highest point in the system and let stand without loss for two hours.
 - Sterilization (Domestic Water System): After tests have been completed, the entire domestic water distribution system shall 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-9-120 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.
 - Flashing, Sleeves and Escutcheon Plates:
 - 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.
 - Sleeves: Use 20 gauge galvanized steel sleeves around pipes passing through masonry walls and concrete slabs.
 - 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.
 - 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 tape with a minimum of 50R overlap.

PLUMBING GENERAL NOTES

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

PLUMBING LEGEND (NOT ALL USED)

- N) NEW
- E) EXISTING
- R) RELOCATE
- X) REMOVE
- A.C. ABOVE CEILING
- U.S. UNDER STAB
- POC POINT OF CONNECTION
- BFP BACKFLOW PREVENTOR
- WC TOILET
- DF DRINKING FOUNTION
- L LAVATORY
- KS KITCHEN SINK
- VS VEGETABLE/ PREPARATION SINK
- 3CS THREE COMPATTMENT SINK
- HS HAND SINK
- FS FLOOR SINK
- HB HOSE BIB
- MS MOP SINK
- FCV FLOW CONTROL VALVE
- FCO FLOOR CLEANOUT
- G NATURAL GAS LINE
- GI 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
- S SEWER DRAIN OR LINE
- SH SHOWER
- SOV SHUT-OFF VALVE
- FCO FLOOR CLEAN OUT
- U 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

- P1 PLUMBING SPECIFICATIONS AND DEMOLITION PLAN
- P2 SEWER PLUMBING PLAN
- P3 WATER PLUMBING PLAN
- P4 PLUMBING DETAILS

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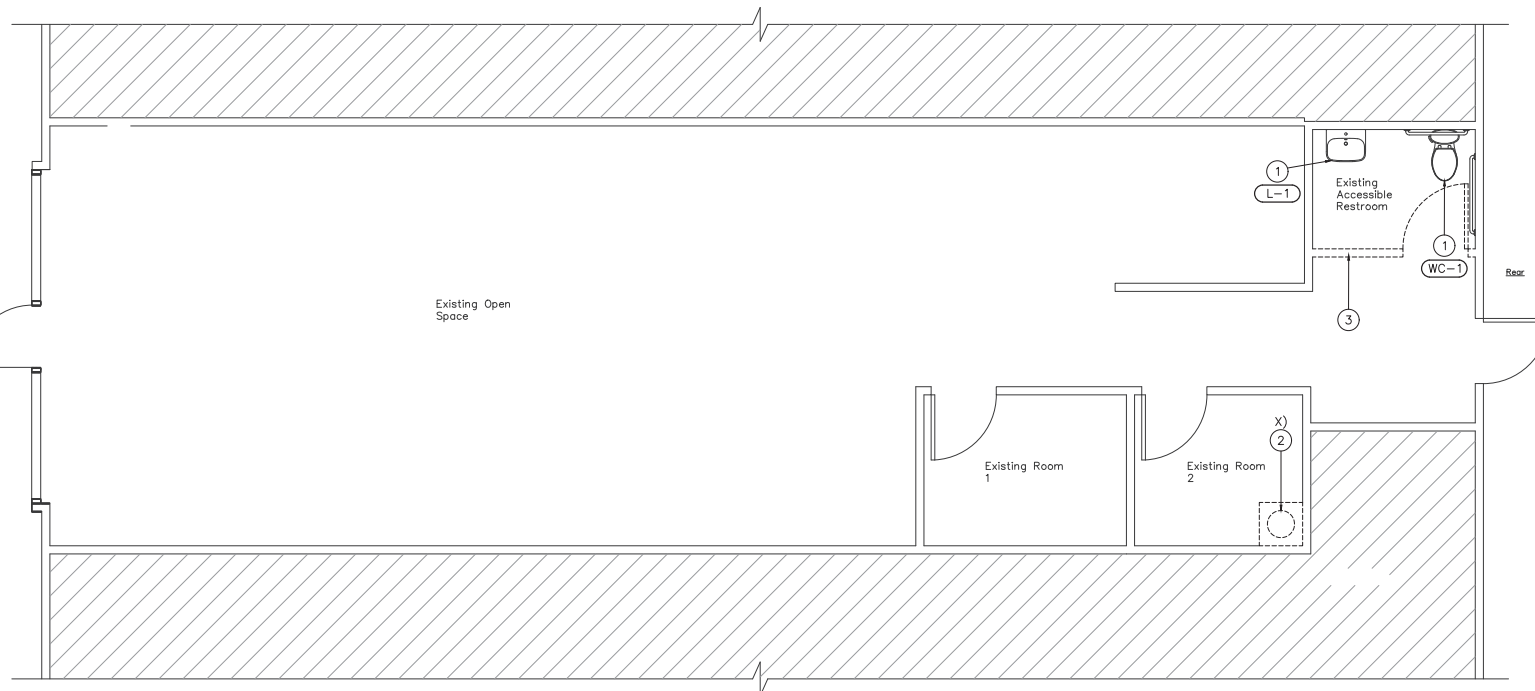
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SHEET #:

P1

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PLUMBING SPECIFICATIONS AND DEMOLITION PLAN



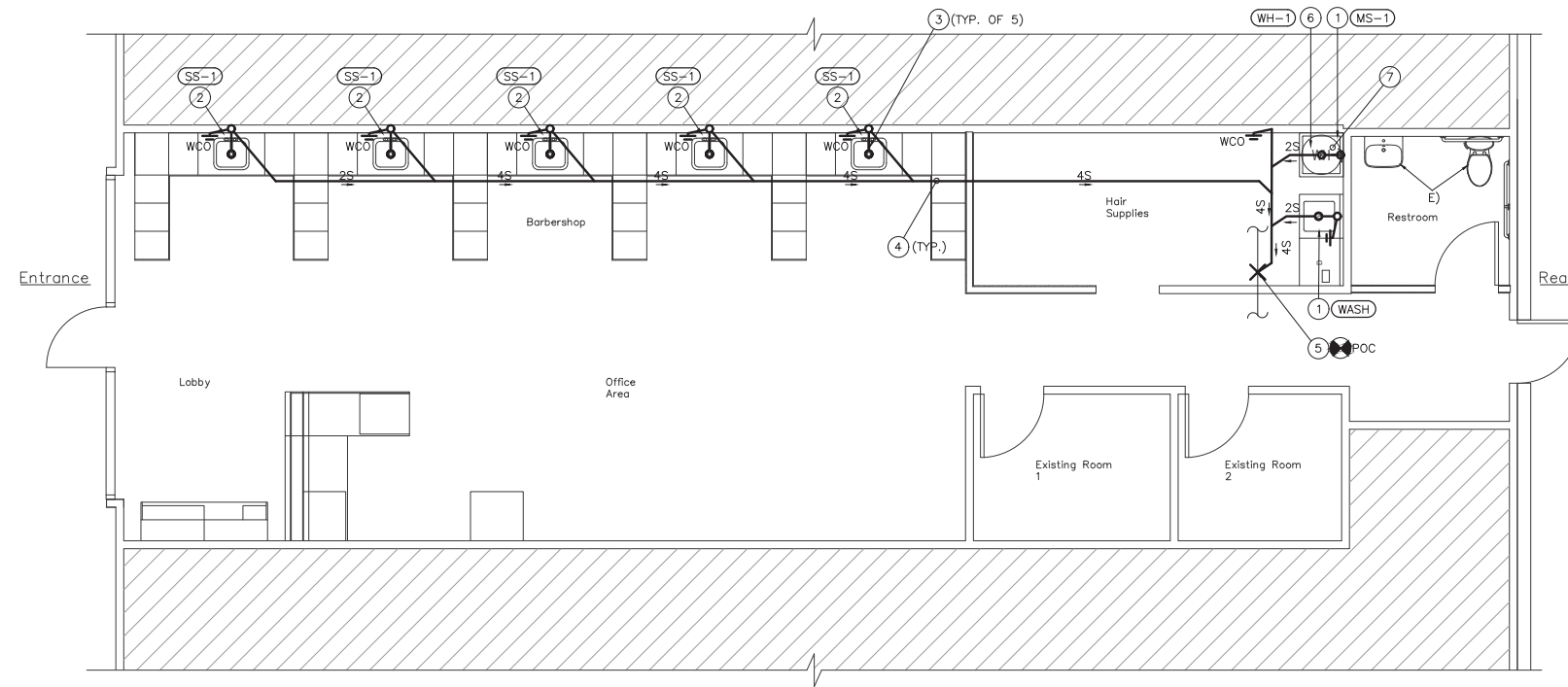
PLUMBING DEMOLITION PLAN

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

KEYNOTES

- EXISTING FIXTURE REMAINS.
- EXISTING WATER HEATER TO REMOVE.
- EXISTING NON-BEARING DRYWALL SECTION TO BE DEMOLISHED BY OTHERS.

PLAN CHECK# 497-24



KEYNOTES

- ① 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.)

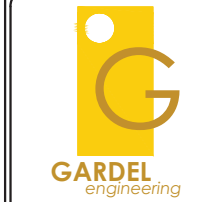
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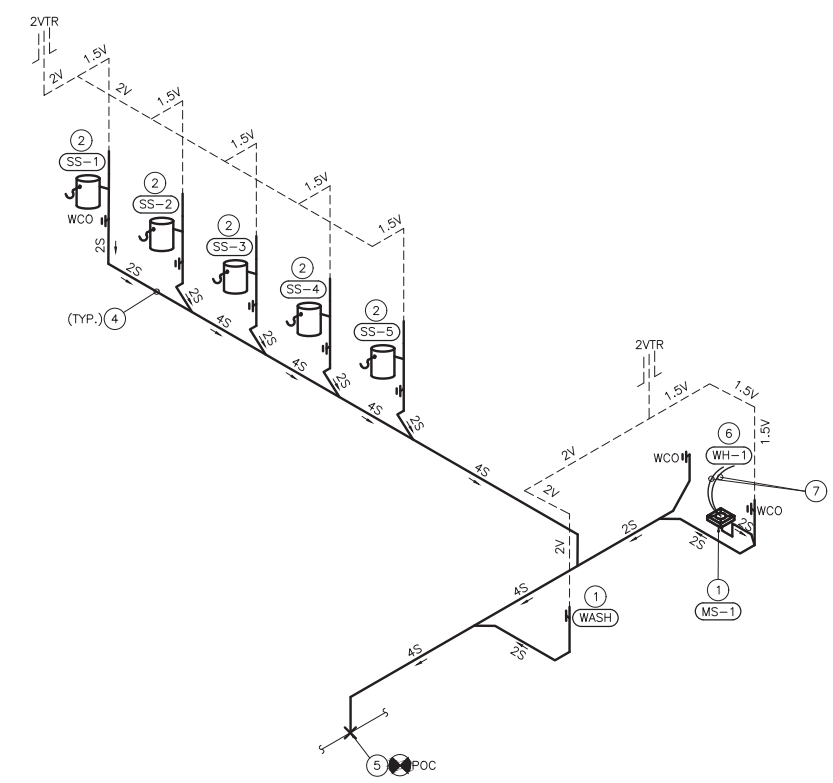


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SEWER PLUOMBING PLAN
 SCALE: 1/4" = 1'-0"



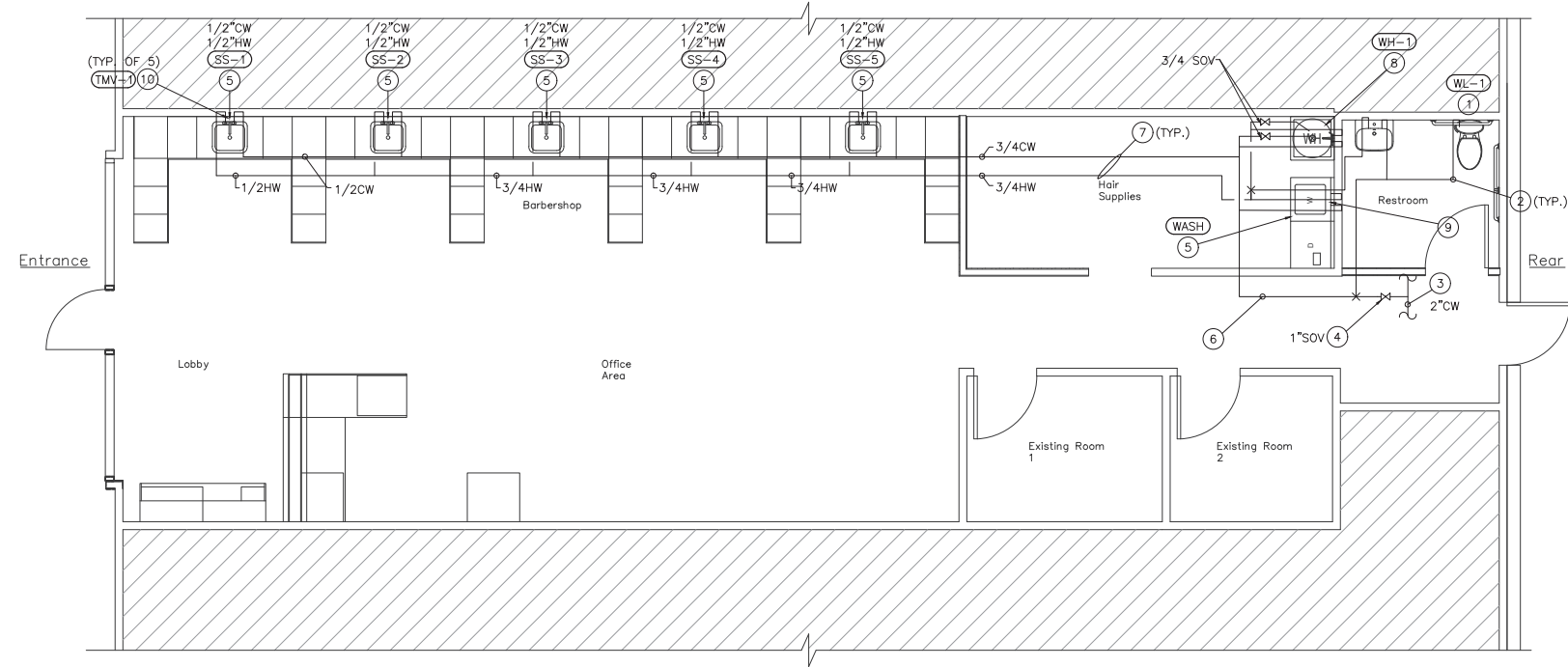
SEWER ISOMETRIC DIAGRAM
 SCALE: N.T.S.

**CITY OF SCOTTSDALE
 BUILDING PLANS**
 THESE PLANS HAVE BEEN REVIEWED
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PROJECT:
 EDUARD BARBERSHOP TI
 32531 N SCOTTSDALE RD SUITE 103
 SCOTTSDALE, AZ 85266

SHEET #:
P2
 SHEET TITLE:
 SEWER PLUMBING PLAN

PLAN CHECK# 497-24



WATER PLUMBING PLAN

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

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 ABOVE 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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PROJECT:

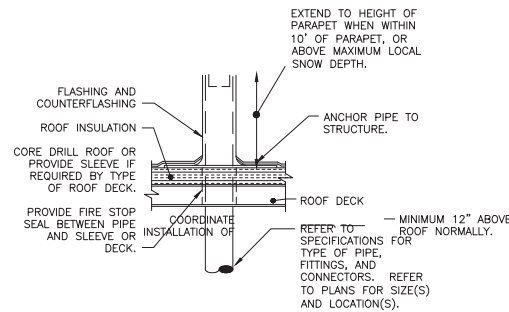
SHEET #:

P3

SHEET TITLE:

WATER PLUMBING PLAN

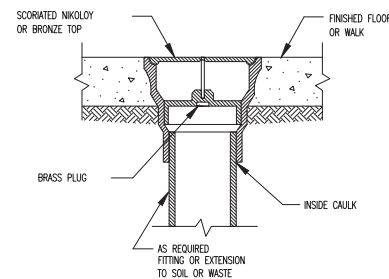
PLAN CHECK# 497-24



LOCATE VTR MINIMUM THREE FEET FROM PROPERTY LINE, TEN FEET HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, AND ONE FOOT FROM ANY VERTICAL SURFACE. REFER TO LOCAL CODES FOR OTHER VENT TERMINATION REQUIREMENTS. LOCATE VTR MINIMUM 18" FROM ADJACENT WALL, PARAPET, EXPANSION JOINT, ROOF DRAIN, EQUIPMENT CURB, OR OTHER ROOF FEATURE. OFFSET IN CEILING SPACE WHERE REQUIRED TO MEET THESE CONDITIONS. INSULATE LAST SIX FEET OF VENT PIPE INSIDE BUILDING PER SPECIFICATIONS.

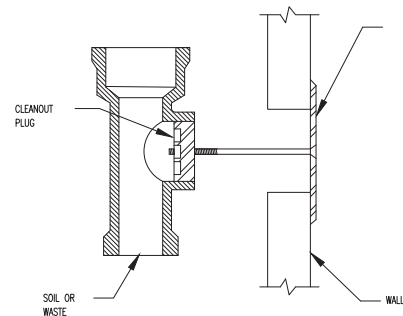
VENT TROUGH ROOF

SCALE: N.T.S.



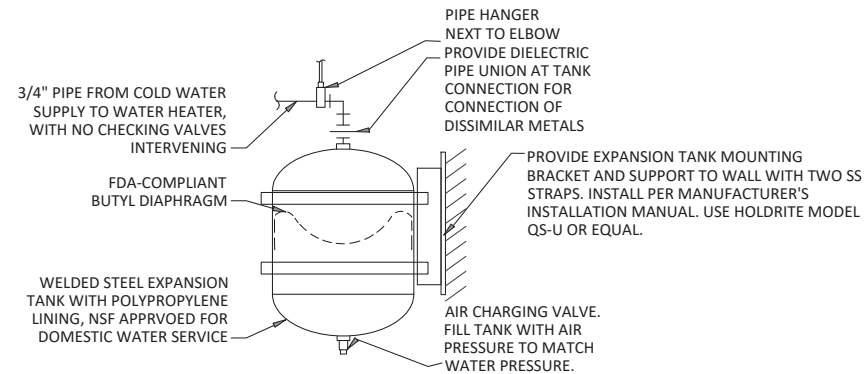
FLOOR CLEAN OUT

SCALE: N.T.S.



WALL CLEAN OUT

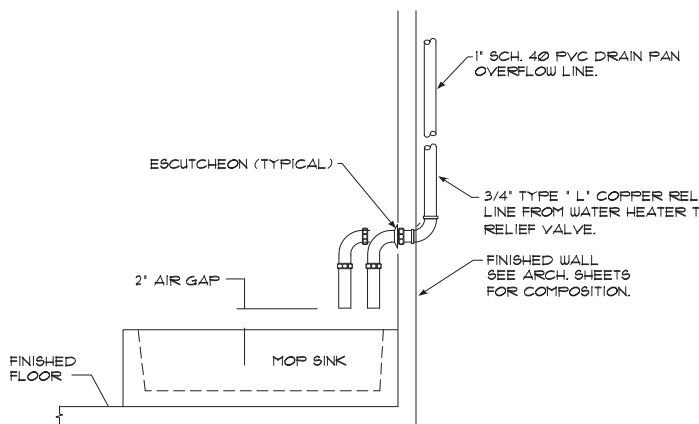
SCALE: N.T.S.



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.

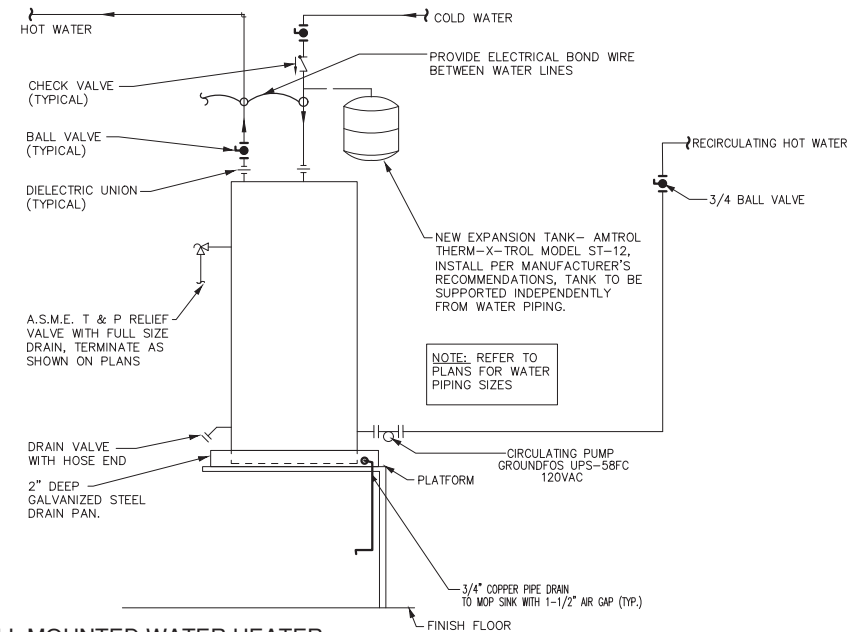
NEW SMALL EXPANSION TANK

SCALE: N.T.S.



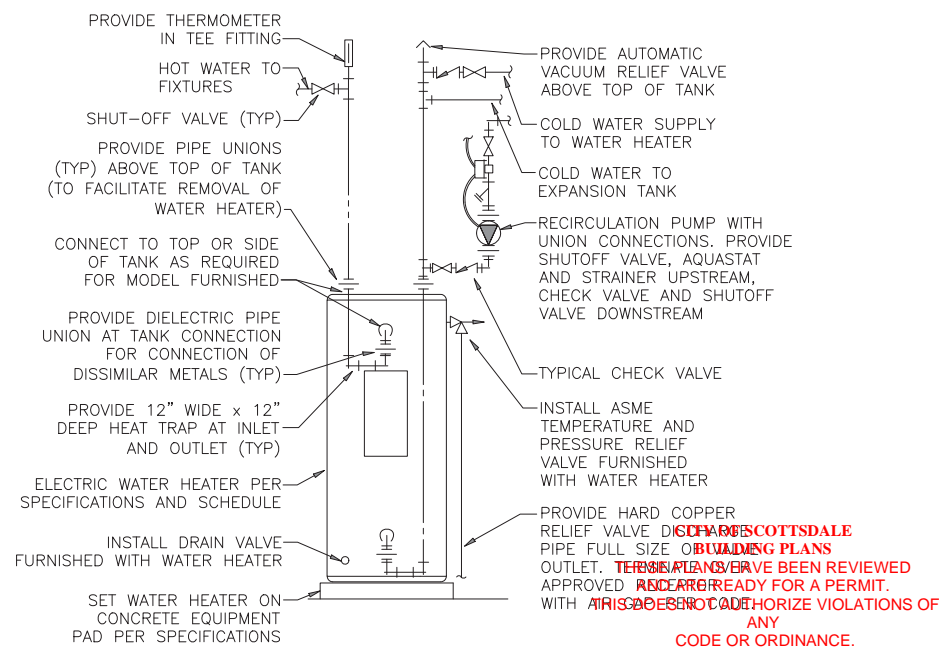
MOP SINK DETAIL

SCALE: N.T.S.



WALL MOUNTED WATER HEATER

SCALE: N.T.S.



ELECTRIC WATER HEATER & PUMP

SCALE: N.T.S.

REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE INFORMATION. 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.

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

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MECHANICAL & ELECTRICAL ENGINEERING

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SCOTTSDALE, AZ 85266

SHEET #:

P4

SHEET TITLE:
PLUMBING DETAILS

PLAN CHECK# 497-24

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EDUARD BARBERSHOP TT
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 SCOTTSDALE, AZ 85266

PROJECT:

SHEET #:

E1

SHEET TITLE:
 ELECTRICAL SPECIFICATIONS

PLAN CHECK# 497-24

ELECTRICAL SPECIFICATIONS

LIGHTING FIXTURES

- 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.
- 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 GREATER THAN 5 WATTS OF LESS. WHERE DIMMING IS CALLED OUT ON THE DRAWINGS, LED DRIVERS SHALL ALLOW 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 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 SHALL BE COORDINATED WITH THE TYPE OF DRIVER TO BE USED TO ENSURE COMPATIBILITY. MOUNT DIMMERS AT WALL SWITCH HEIGHT. DIMMERS 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 GRID.
- EXTERIOR LIGHTING FIXTURES SHALL BE 'FULL CUT OFF' WHERE REQUIRED BY LOCATED ORDINANCES.
- EXTERIOR LIGHTING FIXTURES SHALL BE FURNISHED COMPLETE WITH GASKETS AND SHALL BE RATED FOR DAMP OR WET LOCATIONS.

GENERAL NOTES

- CONTRACTOR TO PROVIDE AND INSTALL ELECTRICAL WORK, ACCORDING TO PLANS.
- CONTRACTOR TO COORDINATE ELECTRICAL REQUIREMENTS FOR MECHANICAL AND PLUMBING WORK, PER 2017 N.E.C. AND APPLICABLE RULES, REGULATIONS, AND ORDINANCES.
- GENERAL NOTE: CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY DIMENSIONS OF SPACE AND QUANTITIES, SIZES, ETC. PRIOR TO CONSTRUCTION.
- PROVIDE COPPER WIRE THHN/ THWN #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.
- MC CABLE IS ACCEPTABLE
- ROMEX CABLE IS NOT ACCEPTABLE
- ALUMINUM CONDUCTORS ARE NOT ALLOWED
- 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 ELECTRICAL CODE.

ELECTRICAL PLANS INDEX

- E1 ELECTRICAL SPECIFICATIONS
- E2 ELECTRICAL DEMOLITION & LIGHTING PLAN
- E3 ELECTRICAL POWER PLAN
- E4 ELECTRICAL SITE PLAN, PANEL SCHEDULE AND PARTIAL ONE-LINE DIAGRAM

ELECTRICAL SPECIFICATIONS

GENERAL

- THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, TRANSPORTATION, TOOLS, PERMITS, FEES AND INCIDENTALS NECESSARY FOR THE INSTALLATION 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 ORDINANCES.
- THESE DRAWINGS ARE SCHEMATIC IN NATURE. CONTRACTOR SHALL PROVIDE ALL BOXES, FITTINGS, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION EVEN IF THOSE ITEMS ARE NOT CALLED OUT ON THE CONSTRUCTION DOCUMENTS.
- 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.
- 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 LIMITING COMPETITION. EQUAL PRODUCTS BY OTHER MANUFACTURER'S ARE ACCEPTABLE.
- ALL MATERIAL FURNISHED BY THE CONTRACTOR SHALL BE NEW UNLESS OTHERWISE NOTED.
- PROVIDE ENGRAVED PHENOLIC NAMEPLATES ON ALL PANELBOARDS, DISCONNECTS, ETC. NAMEPLATES SHALL BE 1/4" HIGH AND SHALL BE FASTENED TO THE EQUIPMENT WITH RIVETS OR SCREWS.
- CONTRACTOR SHALL FURNISH A CLEAN SET OF DRAWINGS ON WHICH VARIATIONS TO THE ORIGINAL CONSTRUCTION DOCUMENTS ARE LEGIBLY RECORDED AND DESIGNATED AS "AS-BUILT" UPON COMPLETION AND ACCEPTANCE OF WORK.
- 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 PERIOD SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER. THIS SHALL NOT INCLUDE DAMAGE DUE TO FIRE, STORMS, VANDALISM, OR OTHER FACTORS BEYOND THE CONTROL OF THE CONTRACTOR

BASIC MATERIALS

- CONDUIT
 - 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 GALVANIZED STEEL (RGS) 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 INDOORS IN DRY LOCATIONS TO EXTEND CONDUIT CONNECTIONS TO MOTORS, 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" UNLESS OTHERWISE NOTED.
 - CONDUITS SHALL BE CONCEALED IN ALL FINISHED PARTS OF THE BUILDING. CONDUITS SHALL BE ROUTED PARALLEL TO THE BUILDING LINES. DIAGONAL RUNS ARE NOT ACCEPTABLE. SECURE CONDUITS 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 CIRCUITS SHALL BE #14 AWG.
 - CONDUCTORS FOR USE ON 120/208V SYSTEMS SHALL BE COLOR CODED BLACK, RED, BLUE AND WHITE FOR PHASES A, B, C, AND NEUTRAL RESPECTIVELY.
 - 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.
- DISCONNECT SWITCHES
 - 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 HVAC EQUIPMENT SHALL NOT BE SUPPORTED BY OR MOUNTED TO THE EQUIPMENT. PROVIDE UNISTRUT BRACKETS, SHEET METAL STANDS, OR OTHER MOUNTING MEANS FOR MOUNTING DISCONNECT SWITCHES AS REQUIRED.
- 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 LPN-RK (250V).
 - FURNISH OWNER WITH ONE SPARE SET OF THREE OF EACH SIZE AND TYPE OF FUSE USED ON THIS PROJECT.
- CIRCUIT BREAKERS
 - BREAKERS SHALL BE BOLT ON, THERMAL MAGNETIC, MOLDED CASE
 - BREAKERS SHALL BE QUICK MAKE QUICK BREAK.
 - BREAKERS SHALL BE FULLY RATED FOR THE AVAILABLE FAULT CURRENT (SERIES RATINGS ARE UNACCEPTABLE).
 - BREAKERS SHALL BE COMMON TRIP TYPE FOR ALL MULTI-POLE APPLICATIONS.
 - BREAKERS SHALL BE MARKED 'HACR' WHEN USED TO FEED AIR CONDITIONING EQUIPMENT
- WIRING DEVICES
 - 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.
 - LIGHT SWITCHES SHALL BE 20 AMP, 120/277 VOLT, SPECIFICATION GRADE, HUBBELL SERIES 1221 (SINGLE POLE) OR 1223 (THREE WAY) OR EQUAL.
 - 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 DRAWINGS. COLOR OF RECEPTACLES, SWITCHES, AND MANUAL MOTOR STARTERS SHALL BE PER THE ARCHITECT'S DIRECTION.
 - COVER PLATES IN FINISHED AREAS SHALL BE STAINLESS STEEL UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. COVER PLATE IN UNFINISHED AREAS, OR FOR EXPOSED INSTALLATIONS SHALL BE RAISE STAMPED STEEL.
 - FLUSH MOUNT RECEPTACLES 18" TO BOTTOM OF BOX ABOVE FINISHED FLOOR WITH GROUND PIN AT TOP UNLESS OTHERWISE NOTED.
 - RECEPTACLES ABOVE COUNTERS SHALL BE HORIZONTALLY FLUSH MOUNTED AT 6" ABOVE COUNTER UNLESS OTHERWISE NOTED
 - 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
 - JUNCTION AND PULL BOXES SHALL BE OF CODE GALVANIZED STEEL.
 - JUNCTION AND PULL BOXES MOUNTED VERTICALLY SHALL HAVE HINGED COVER AND CATCH LOCKS, BOXES MOUNTED HORIZONTALLY OR IN THE CEILING SHALL BE FURNISHED WITH SCREW COVERS
 - 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.
 - DEVICE BOXES IN EXTERIOR LOCATIONS SHALL BE CASE IRON WITH GASKETED COVER, CROUSE HINDS FD OR EQUAL.
- GROUNDING
 - PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTOR IN ALL RACEWAYS. GROUND CONDUCTOR SHALL BE SIZED PER NEC 250-122.

ELECTRICAL SYMBOLS (NOT ALL USED)

- SES SERVICE ENTRANCE SECTION
 - PANEL BOARD
 - CEILING MOUNTED LIGHT FIXTURE.
 - WALL MOUNTED LIGHT FIXTURE.
 - ⌋ 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 FIGURE 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.
 - ⊕ DUPLEX CONVENIENCE RECEPTABLE AT +18" OR AS NOTED.
 - ⊕ RECEPTACLE AT FLOOR.
 - ⊕ FOUR-PLEX CONVENIENCE RECEPTACLE AT 18"OR AS NOTED.
 - ⊕ SPLIT WIRE DUPLEX CONVENIENCE RECEPTACLE AT +18" OR AS NOTED.
 - ⊕ TOGGLE SWITCH -SINGLE POLE, THREE WAY, KEYED, FOUR WAY ('P' INDICATES ILLUMINATED)
 - ⊕ 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.
 - ⊕ MOTOR, SIZE AND RATING AS NOTED.
 - ⊕ 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 CIRCUIT: 12# 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 WIRE(S) ARE NOT SHOWN ON DRAWINGS. 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.

AS NOTED

ELECTRICAL EQUIPMENT SCHEDULE

| UNIT IDENTIFIER | EQUIPMENT DESCRIPTION | MANUFACTURER/ MODEL | 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 | MARK | DESCRIPTION | MAKE & MODEL | VOLTAGE | QTY. | LAMP TYPE | WATTAGE PER FIXTURE | MOUNTING | REMARKS |
|--------|------|-----------------------------------|---------------|---------|------|-----------|---------------------|------------------|-------------------------------------|
| A | ▬ | 2'x4' LINEAR LED | BY CONTRACTOR | 120/1 | 9 | LED | 33 | SUSPEND / LAY-IN | |
| B | ○ | 6" CAN LIGHT | BY CONTRACTOR | 120/1 | 6 | LED | 25 | RECESSED | IC-RATED |
| C | ⊕ | EMERGENCY LIGHT / EXIT SIGN COMBO | BY CONTRACTOR | 120/1 | 2 | LED | 5 | WALL MOUNTED | PROVIDE WITH 90 .JM. BACKUP BATTERY |
| D | ⊕ | EMERGENCY LIGHT | BY CONTRACTOR | 120/1 | 3 | LED | 5 | WALL MOUNTED | PROVIDE WITH 90 .JM. BACKUP BATTERY |

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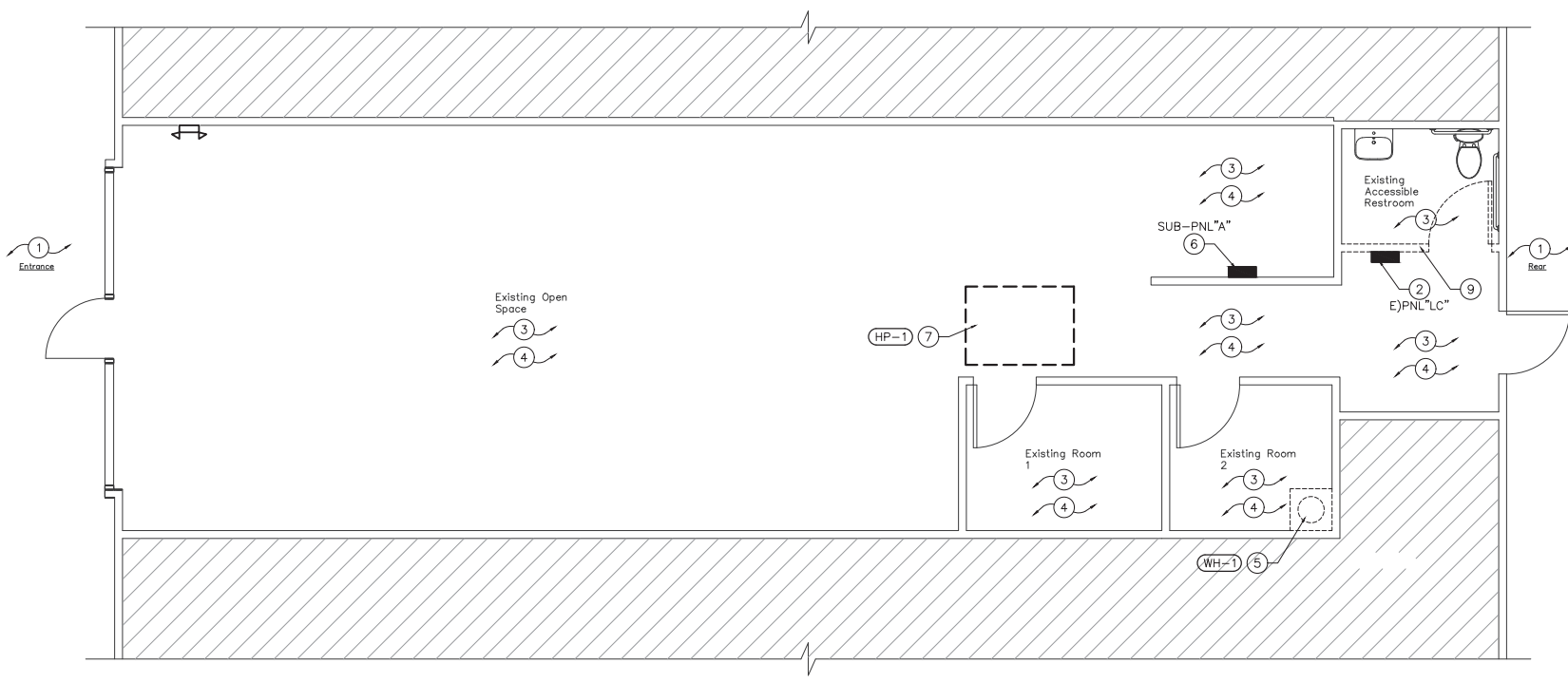
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KEYNOTES

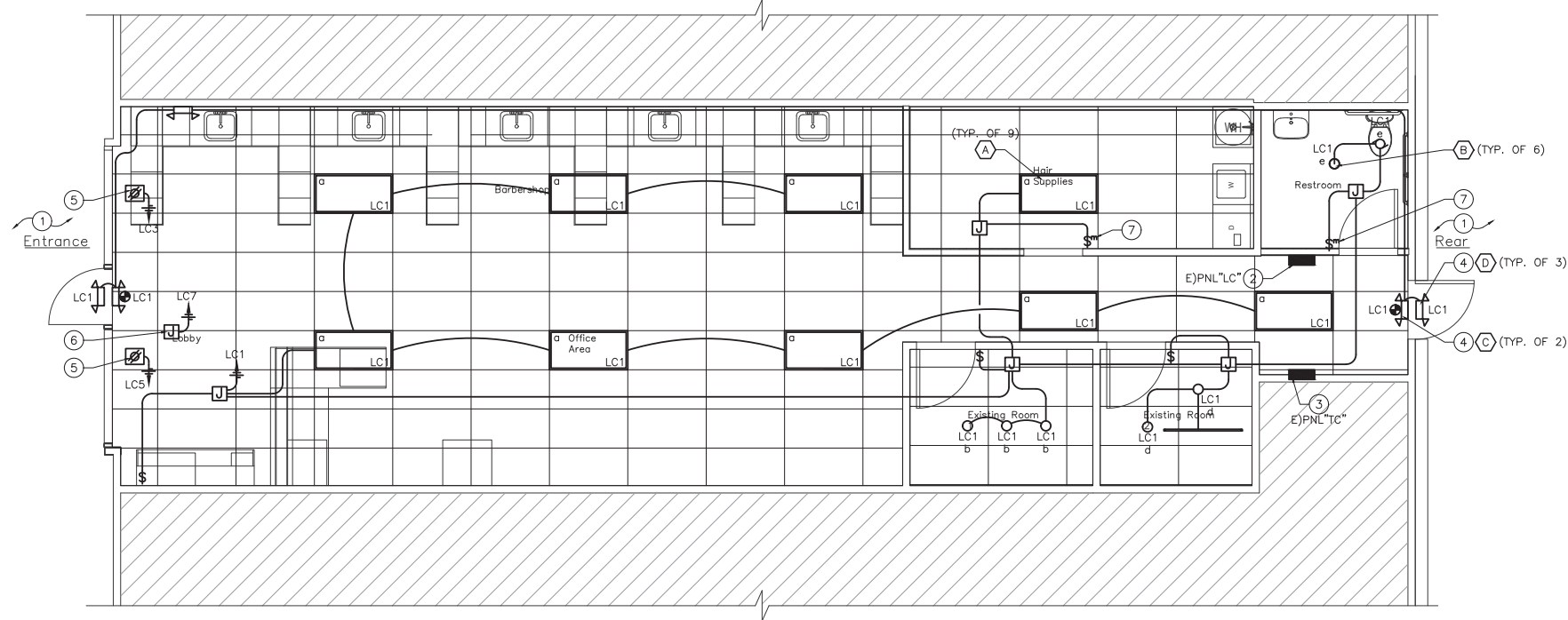
- EXISTING EXTERIOR LIGHTING. TO REMAIN. NO CHANGES
- EXISTING PANEL "LC" TO BE RELOCATED TO NEW WALL.
- EXISTING INTERIOR LIGHT FIXTURE TO BE DEMOLISHED BY OTHERS. REMOVE ALL CONDUIT, SWITCH, BOXES, CONDUIT AND WIRING PRIOR TO DEMOLITION
- EXISTING RECEPTACLES TO BE DEMOLISHED BY OTHERS. REMOVE ALL CONDUIT SWITCH, BOXES, CONDUIT AND WIRING PRIOR TO DEMOLITION
- EXISTING ELECTRIC WATER HEATER TO BE REMOVED, REPLACE AND RELOCATED BY OTHERS. REMOVE ALL CONDUIT SWITCH, BOXES, CONDUIT AND WIRING PRIOR TO RELOCATION
- EXISTING SUB-PANEL "A" TO BE DEMOLISHED BY OTHERS. REMOVE ALL CONDUIT SWITCH, BOXES, CONDUIT AND WIRING PRIOR TO DEMOLITION
- EXISTING HEAT PUMP UNIT ON ROOFTOP TO REMAIN. DISCONNECT AND IDENTIFY WIRING. INSPECT WIRING REPLACE OR REPAIR IF NECESSARY AND RECONNECT PER ELECTRICAL PLANS
- 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
- EXISTING NON-BEARING DRYWALL TO BE DEMOLISHED BY OTHERS. REMOVE ALL CONDUIT, SWITCH, BOXES, CONDUIT AND WIRING PRIOR TO DEMOLITION.



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

KEYNOTES

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



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

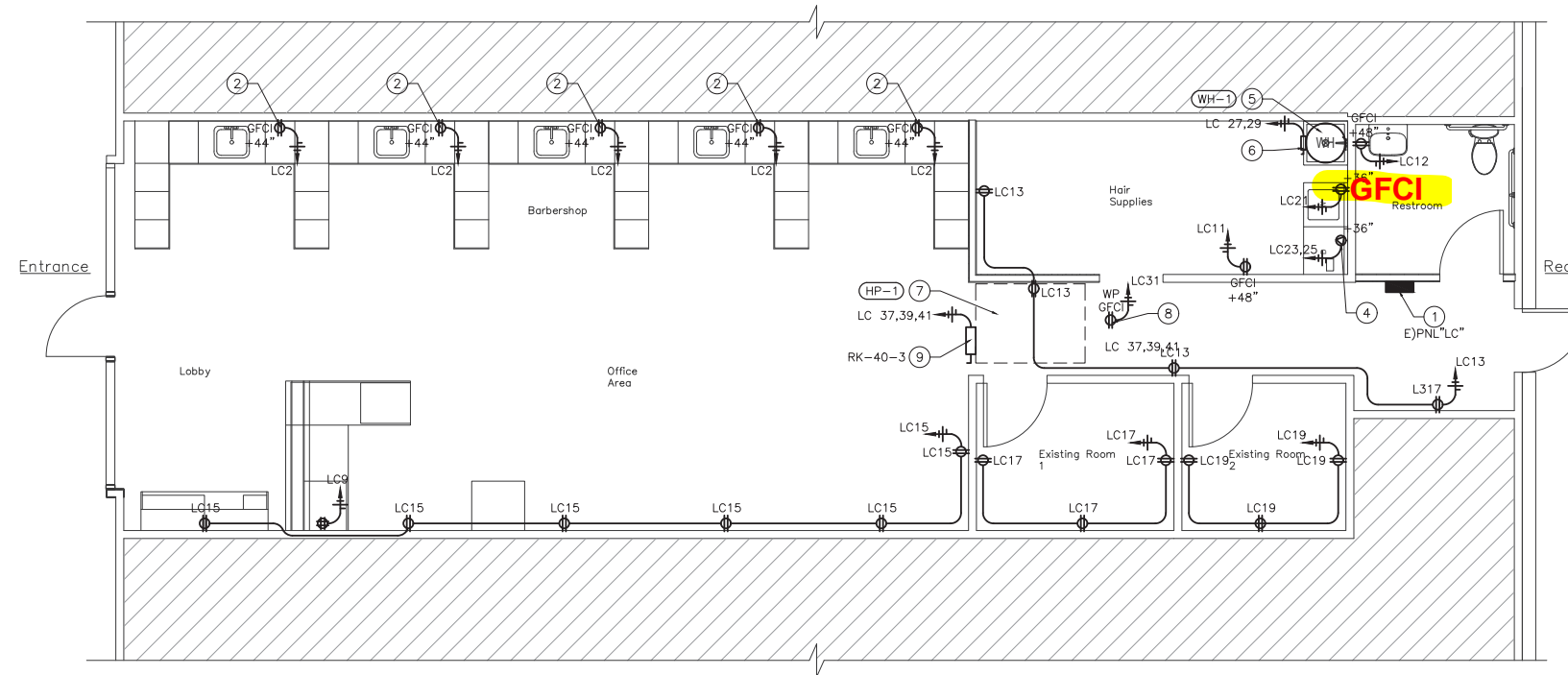
PLEASE COORDINATE EXACT EXIT SIGN LOCATION/PLACEMENT WITH THE CITY OF SCOTTSDALE'S FIELD BUILDING INSPECTOR PRIOR TO ROUGH-IN INSPECTION.

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

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

SHEET #:
E2
 SHEET TITLE:
 ELECTRICAL DEMOLITION & LIGHTING PLAN

PLAN CHECK# 497-24



KEYNOTES

- ① EXISTING PANE, "A" RATED AT 200A, 208/120V, 3Ø, 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, 1Ø, 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
- ⑨ EXISTING 60A, 250V, 3-POLE, NEMA 3R, FUSED DISCONNECT SWITCH WITH RK-40-3 FUSES

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

| NO. | REVISION | DATE |
|-----|----------|------|
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ENGINEERING SEAL



EXPIRES 09/30/26

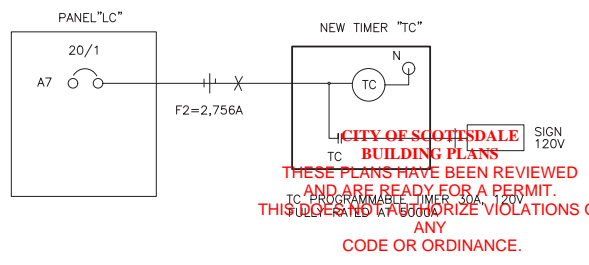


MECHANICAL & ELECTRICAL ENGINEERING

441 S. 48TH ST. SUITE 101
 TEMPE, AZ 85281
 OFFICE: (480)361-3667
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ELECTRICAL POWER PLAN
 SCALE: 1/4" = 1'-0"

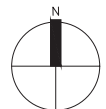
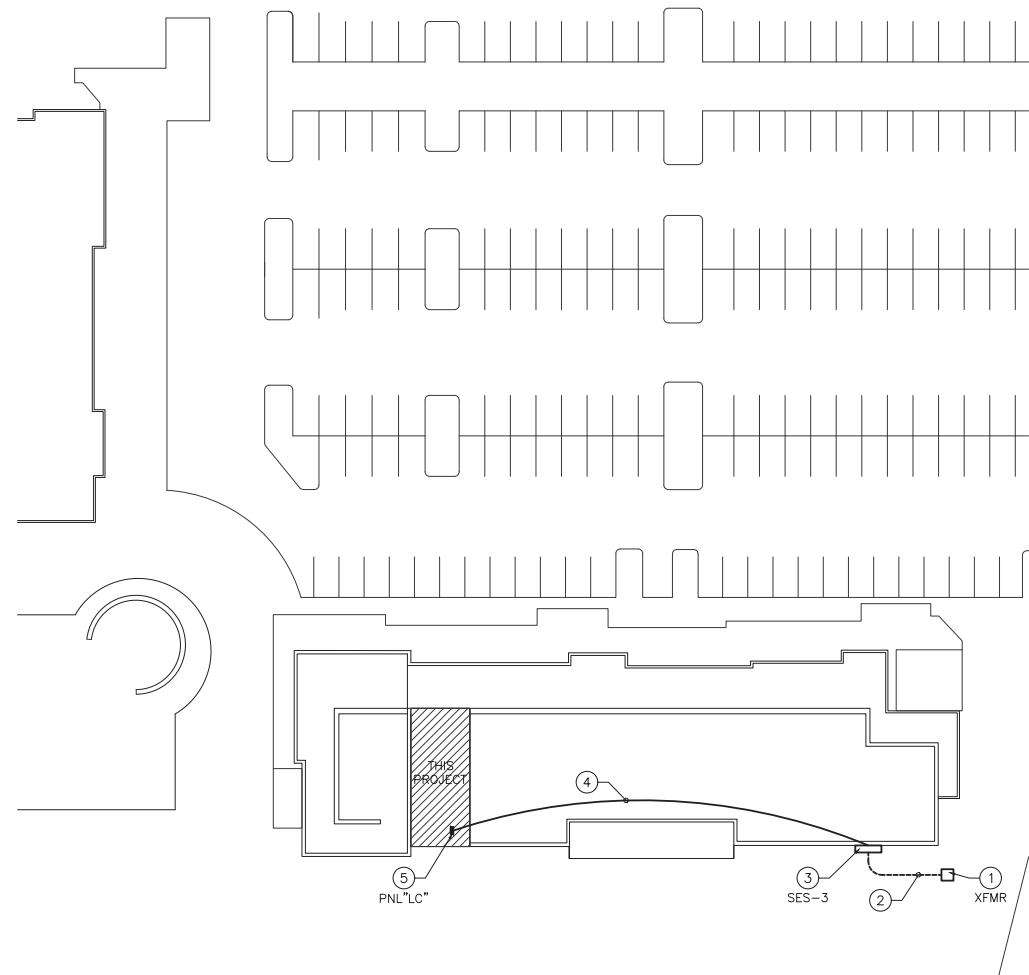


SIGN CONTROL DIAGRAM
 SCALE: N.T.S.

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

PROJECT:
 SHEET #:
E3
 SHEET TITLE:
 ELECTRICAL POWER PLAN

PLAN CHECK# 497-24



ELECTRICAL SITE PLAN

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

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
- 4 EXISTING FEEDER FROM EXISTING SES-3 TO EXISTING PANEL "LC" WITH 4#3/0Cu, 1#4CuG, 2-1/2"C.
- 5 EXISTING PANEL "LC" RATED AT 200A, 208/120V, 3Ø, 4W, NEMA 1. SEE PANEL SCHEDULE

LOAD SUMMARY

| | | |
|--|---|-------|
| PEAK DEMAND READING TO USE PANEL | = | 12 A |
| PEAK DEMAND READING SUITE 101 | = | 37 A |
| PEAK DEMAND READING SUITE 105 | = | 61 A |
| PEAK DEMAND READING SUITE 107 | = | 44 A |
| PEAK DEMAND READING SUITE 109 | = | 47 A |
| PEAK DEMAND READING SUITE 111 | = | 62 A |
| PEAK DEMAND READING SUITE 112 | = | 56 A |
| PEAK DEMAND READING SUITE 115 | = | 84 A |
| SUM | = | 403 A |
| FUTURE GROWTH (25%) | = | 101 A |
| MAX CONNECTED LEAD AT PANEL "LC" (SUITE 103) | = | 149 A |
| TOTAL | = | 653 A |

EXISTING S.E.S. IS RATED FOR 1600A, 208/120V, 3Ø, 4W, NEMA 3R.

FAULT CURRENT CALCULATIONS

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

REPLACEMENT PANEL "A" SCHEDULE

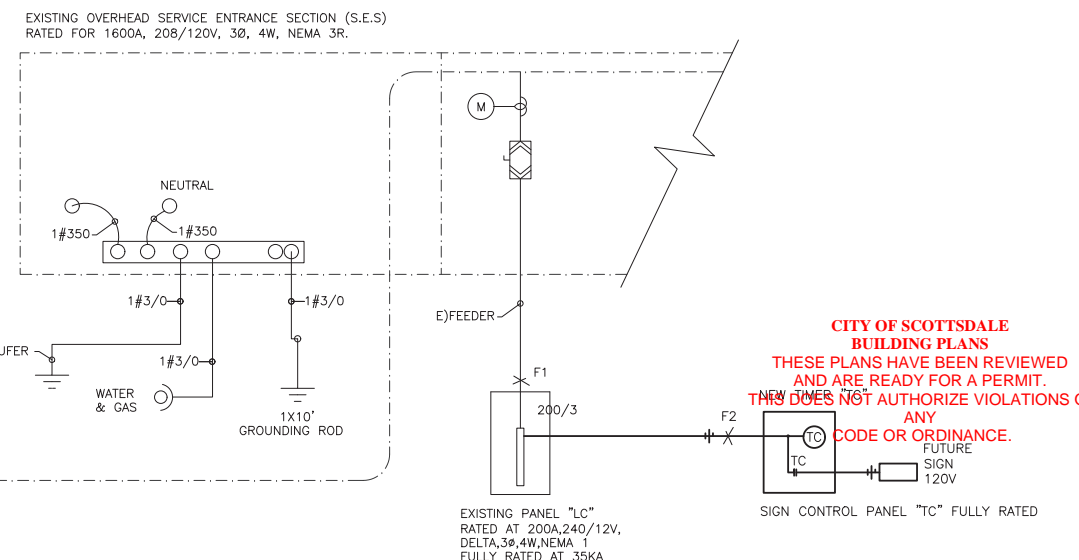
CONDITION: EXISTING
 VOLTAGE: 208/120V
 PHASES/WIRES: 3Ø,4W
 LUG AMPS: 225 A

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

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

- EXISTING LOAD ON NEW BREAKER
- EXISTING LOAD ON NEW BREAKER
- * LOAD CONTROLLED VIA TIMER
- △ CONTINUOUS LOAD

| USE / AREA SERVED | WIRING | CIR # | AMPS | | | CIR # | WIRING | C/B | USE / AREA SERVED | |
|----------------------------|-----------------|-------|----------------|----------------|----------------|------------------------------|------------|------|--------------------------|--|
| | | | A _g | B _g | C _g | | | | | |
| GENERAL LIGHTS | 20/1 2#12 1#120 | 1 | 4.70 | | | 2 | 2#12 1#120 | 20/1 | STATION 1 FOUR-PLEX | |
| SHOW WINDOW 1 | 20/1 2#12 1#120 | 3 | 12.5 | | | 4 | 2#12 1#120 | 20/1 | STATION 2 FOUR-PLEX | |
| SHOW WINDOW 2 | 20/1 2#12 1#120 | 5 | | | 12.5 | 6 | 2#12 1#120 | 20/1 | STATION 3 FOUR-PLEX | |
| SIGN | 20/1 2#12 1#120 | 7 | 12.5 | | | 8 | 2#12 1#120 | 20/1 | STATION 4 FOUR-PLEX | |
| P.O.S. RECEPTACLE | 20/1 2#12 1#120 | 9 | 12.5 | | | 10 | 2#12 1#120 | 20/1 | STATION 5 FOUR-PLEX | |
| LAUNDRY GFCI RECEPTACLE | 20/1 2#12 1#120 | 11 | | | 12.5 | 12 | 2#12 1#120 | 20/1 | RESTROOM GFCI RECEPTACLE | |
| GENERAL RECEPTACLES 1 | 20/1 2#12 1#120 | 13 | 6.30 | | | 14 | | | SPARE | |
| GENERAL RECEPTACLES 2 | 20/1 2#12 1#120 | 15 | | | 8.30 | 16 | | | SPARE | |
| ROOM 1 RECEPTACLES | 20/1 2#12 1#120 | 17 | | | 6.30 | 18 | | | SPARE | |
| ROOM 2 RECEPTACLES | 20/1 2#12 1#120 | 19 | 6.30 | | | 20 | | | SPARE | |
| WASHER | 20/1 2#12 1#120 | 21 | | | 10.5 | 22 | | | SPARE | |
| DRYER | 3Ø/2 2#8 1#80 | 23 | | | 30.1 | 24 | | | SPARE | |
| | | 25 | 30.1 | | | 26 | | | SPARE | |
| WATER HEATER (WH-1) | 20/2 2#10 1#100 | 27 | | | 27.0 | 28 | | | SPARE | |
| WP-GFCI SERVICE RECEPTACLE | 20/1 2#12 1#120 | 31 | | | 12.5 | 30 | | | SPARE | |
| SPARE | | 33 | | | | 32 | | | SPARE | |
| SPARE | | 35 | | | | 34 | | | SPARE | |
| | | 37 | 35.0 | | | 36 | | | SPARE | |
| HEAT PUMP (HP-1) | 4Ø/3 3#6 1#60 | 39 | | | 35.0 | 38 | | | SPARE | |
| | | 41 | | | | 40 | | | SPARE | |
| | | | | | | 42 | | | SPARE | |
| LOAD PER PHASE (TOTAL) | | | 119.9 | 130.8 | 148.4 | MAX CONNECTED LOAD = 148.4 A | | | | |



PARTIAL ONE-LINE DIAGRAM

SCALE: N.T.S.

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

| NO. | REVISION | DATE |
|-----|----------|------|
| | | |
| | | |
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ENGINEERING SEAL



EXPIRES 09/30/26



MECHANICAL & ELECTRICAL ENGINEERING

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

PROJECT:

SHEET #:
E4

SHEET TITLE:
 ELECTRICAL SITE PLAN,
 PANEL SCHEDULE AND
 PARTIAL ONE-LINE DIAGRAM

PLAN CHECK# 497-24