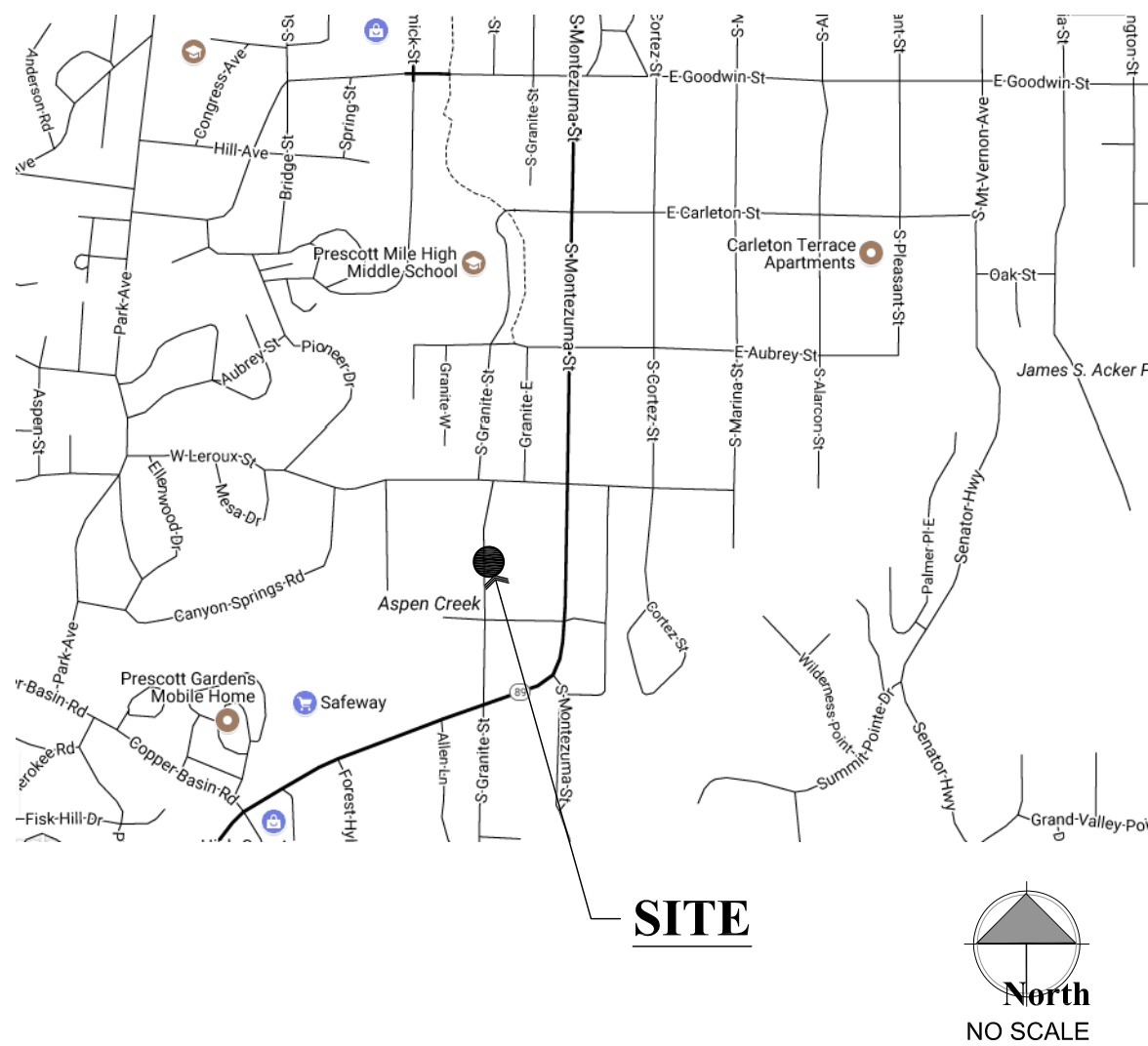


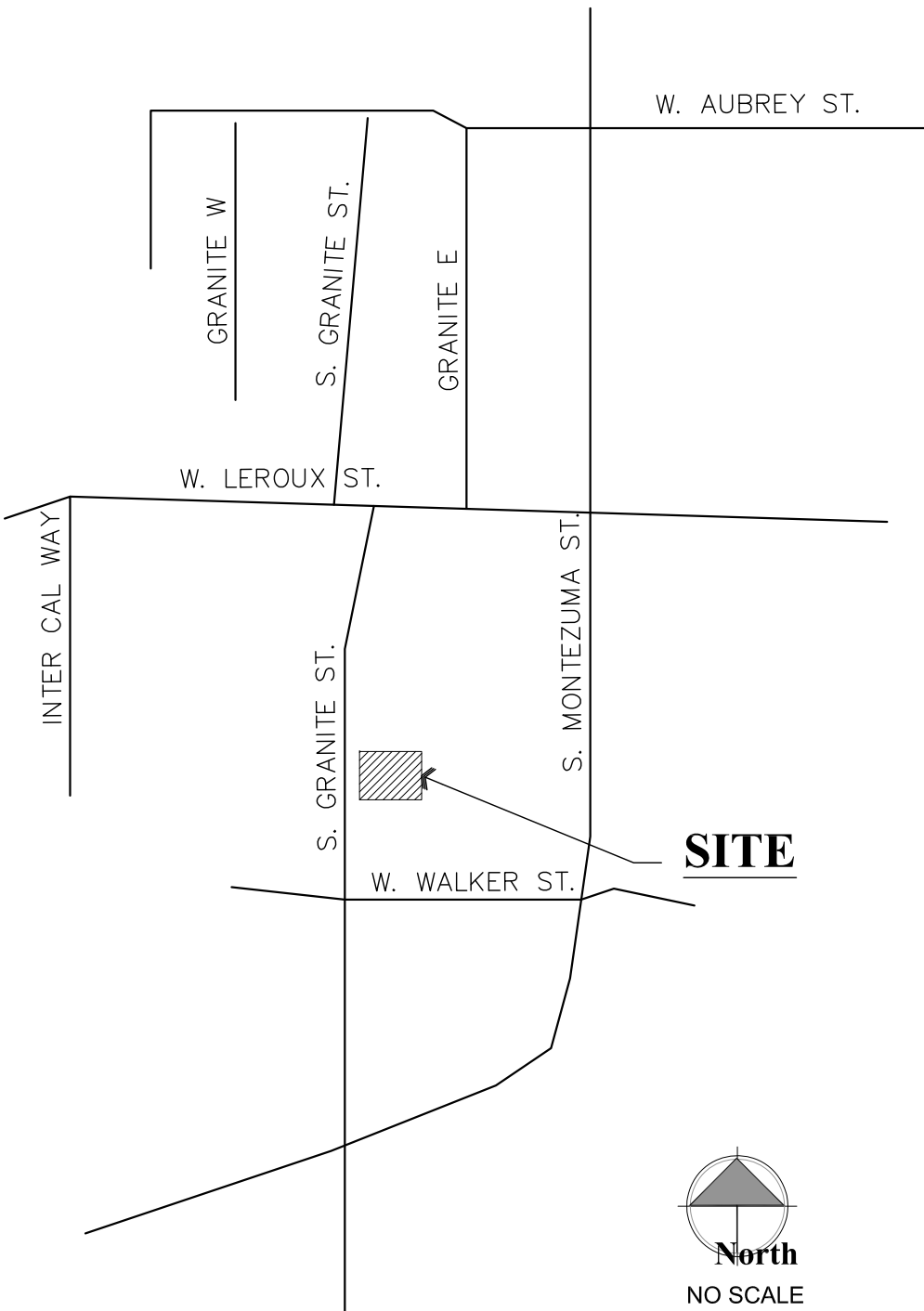
Commercial Building Renovation for:  
2nd Hand Man Building on Granite Street

PRESCOTT , ARIZONA

Area Map



Vicinity Map



Project Information

<b>CLIENT:</b>	Second Hand Man Inc 535 S. Montezuma St. Prescott, AZ 86303	PH: 928-445-6007 CONTACT: Mike Weygand
<b>PREPARED BY:</b>	W. Alan Kenson & Assoc., P.C. P.O. Box 11593 Prescott, AZ 86304	PH: 928-443-5812 CONTACT: Alan Kenson WAKA@cablone.net
<b>CONTRACTOR:</b>	Kenson Construction Company Inc. 6135 Corsair Avenue Prescott, AZ 86301	PH: 928-443-5812 CONTACT: Alan Kenson WAKA@cablone.net
<b>JOBSITE ADDRESS:</b>	535 S. Granite St. Prescott, AZ 86303	
<b>PARCEL NUMBER:</b>	109-14-033	
<b>ZONING:</b>	BR	
<b>CONST. TYPE:</b>	II-B	
<b>OCCUPANCY:</b>	F-1	
<b>EXISTING BUILDING</b>	4,800 S.F.	
<b>PARKING</b>	Parking is existing and sufficient	
<b>BUILDING CODES:</b>	2012 International Building Code 2012 International Fire Code 2012 International Plumbing Code 2012 International Mechanical Code 2012 International Fuel Gas Code 2012 International Electrical Code 2012 National Electrical Code 2006 International Energy Conservation Code	

Sheet Index

<b>ARCHITECTURAL</b>	
CS1	Cover Sheet
CS2	Code Summary
A1.0	Utilities Site Plan
A1.1	Utilities Site Details
A2.0	Reference Floor Plan, Demolition Plan, Sections, Reflected Ceiling Plan and Interior Elevation
A3.0	Enlarged Plan, Interior Elevations and Section
A4.0	Room Finish Plan and Schedules
<b>MECHANICAL</b>	
M1.1	Mechanical Floor Plan
M2.1	Mechanical Schedules and Details
<b>PLUMBING</b>	
P2.0	Plumbing Floor Plan
P3.0	Plumbing Schedules and Details
<b>ELECTRICAL</b>	
E1.1	Electrical Site Plan, One-Line Diagram, Panel Schedule and Notes.
E1.2	Electrical Lighting and Power Floor Plan

Graphic Standards

EXISTING DOOR	NORTH ARROW INDICATOR
PROPOSED DOOR	DETAIL DESIGNATOR
GRID LINE DESIGNATOR	BUILDING SECTION DESIGNATOR
REVISION DESIGNATOR	ELEVATION DESIGNATOR
DESCRIPTIVE NOTE DESIGNATOR	ROOM NUMBER / FINISH DESIGNATOR
DOOR NUMBER DESIGNATOR	DOOR TYPE DESIGNATOR
WINDOW TYPE DESIGNATOR	WALL TYPE DESIGNATOR

Project Description

2ND HAND MAN INTENDS TO RENOVATE THEIR EXISTING METAL BUILDING. CURRENTLY THE BUILDING HAS NO ELECTRIC, WATER OR GAS. THE RENOVATION WILL INCLUDE THE ADDITION OF THE UTILITIES, TWO SINGLE USER RESTROOMS, A JANITOR CLOSET, LIGHTING, ELECTRICAL OUTLETS AND NATURAL GAS UNIT HEATERS.

Architect:

W. Alan Kenson & Associates, P.C.

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ARCHITECTURE & PLANNING

DRAWING: Cover Sheet  
PROJECT: 2nd Hand Man on Granite Street  
535 S. Granite Street  
Prescott, AZ 86303  
APN: 109-14-033

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE April 27th, 2018
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CS1

Plumbing Calculations					
	Occupancy Classification	Occupancy Count	Water Closets	Lavatories	Drinking Fountains
Total Required	Factory Industrial	45	1	1	1
Fixtures Provided			2	2	2
2 Single User Restrooms Provided					

### Egress Legend:

- >

(A)

XX

XX

XX  
XX  
XX

#

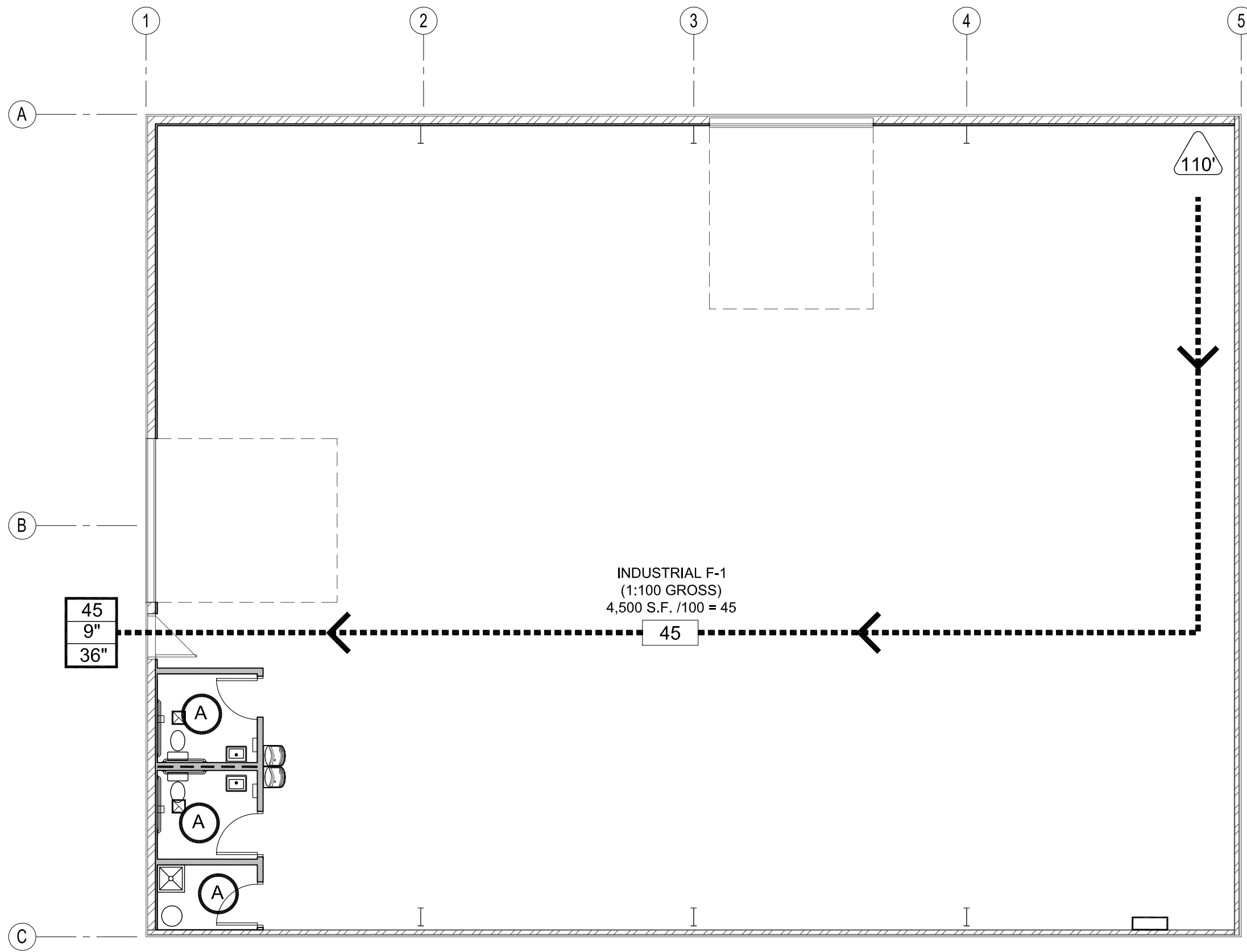
EXIT ACCESS  
ACCESSORY USE (NO OCCUPANCY)  
ROOM OCCUPANCY LOAD  
SUBTOTAL OCCUPANCY LOAD  
OCCUPANCY TOTAL  
REQUIRED EXIT WIDTH (FACTOR = 0.2)  
PROVIDED EXIT WIDTH  
WORST CASE TRAVEL DISTANCE
- | FUNCTION OF SPACE  | OCCUPANT LOAD FACTOR |
|--------------------|----------------------|
| FACTORY INDUSTRIAL | 100 GROSS            |

### Occupant load

- NOTE:  
GROSS SQUARE FOOTAGE LISTED BELOW  
DOES NOT INCLUDE ACCESSORY AREAS.
- FACTORY:                      4,500   SQ. FT.   45 OCCUPANTS

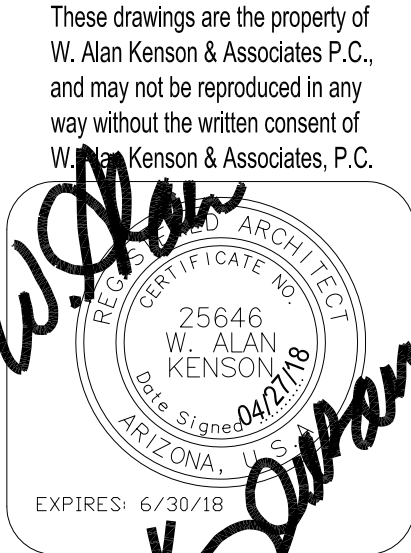
### Accessibility Notes

- ACCESS TO THESE FACILITIES SHALL BE AT PRIMARY ENTRANCES.
- THE SLOPE OF PUBLIC WALKS SHALL NOT EXCEED A MAXIMUM CROSS SLOPE OF 2%.
- WALKING SURFACES GREATER THAN 2% SHALL BE SLIP RESISTANT.
- PROVIDE A 44"x60" MINIMUM LANDING ON THE STRIKE SIDE OF THE ENTRANCE DOOR WITH 44" MINIMUM WIDTH IN THE DIRECTION OF TRAVEL.
- WALLS SHALL EXTEND 18" TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARDS THE OCCUPANT.
- RAMPS SHALL HAVE A NON-SLIP SURFACE.
- RAMPS SHALL BE A MINIMUM OF 36" WIDE.
- EVERY REQUIRED EXIT DOORWAY SHALL BE SIZED FOR A DOOR NOT LESS THAN 36" WIDE BY NOT LESS THAN 6'-8" HIGH CAPABLE OF OPENING 90 DEGREES AND MOUNTED SO THE CLEAR WIDTH OF THE EXIT WAY IS 32" MINIMUM.
- THRESHOLDS TO BE A MAXIMUM OF 1/4" ABOVE ADJACENT FLOOR FINISH. ONE-HALF INCH THRESHOLD MAY BE USED IF BEVELED PER A.D.A. STANDARDS.
- MAXIMUM EFFORT TO OPERATE A DOOR SHALL NOT EXCEED 5 POUNDS.
- THE BOTTOM 10 INCHES OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.
- PROVIDE LEVER TYPE HARDWARE, PANIC BARS, PUSH AND PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. (30" TO 44" A.F.F.)



- NOTE:
- PROVIDE A 6"x9" BLUE TACTILE 'EXIT' SIGN AS MANUFACTURED BY 'SIMPLY EXIT SIGNS (#SE-1980)' OR EQUAL COMPLYING WITH ICCA117.1 AND IBC 1011.3 ADJACENT TO EACH DOOR TO AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE. SIGN SHALL BE MOUNTED 60" A.F.F. TO THE CENTER OF THE SIGN.

REVISIONS	BY



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ARCHITECTURE & PLANNING

REGISTERED ARCHITECT  
W. ALAN KENSON  
No. 25646  
Arizona  
Expires: 6/30/18

P.O. Box 11593  
Prescott, AZ 86304

DRAWING: Code Summary

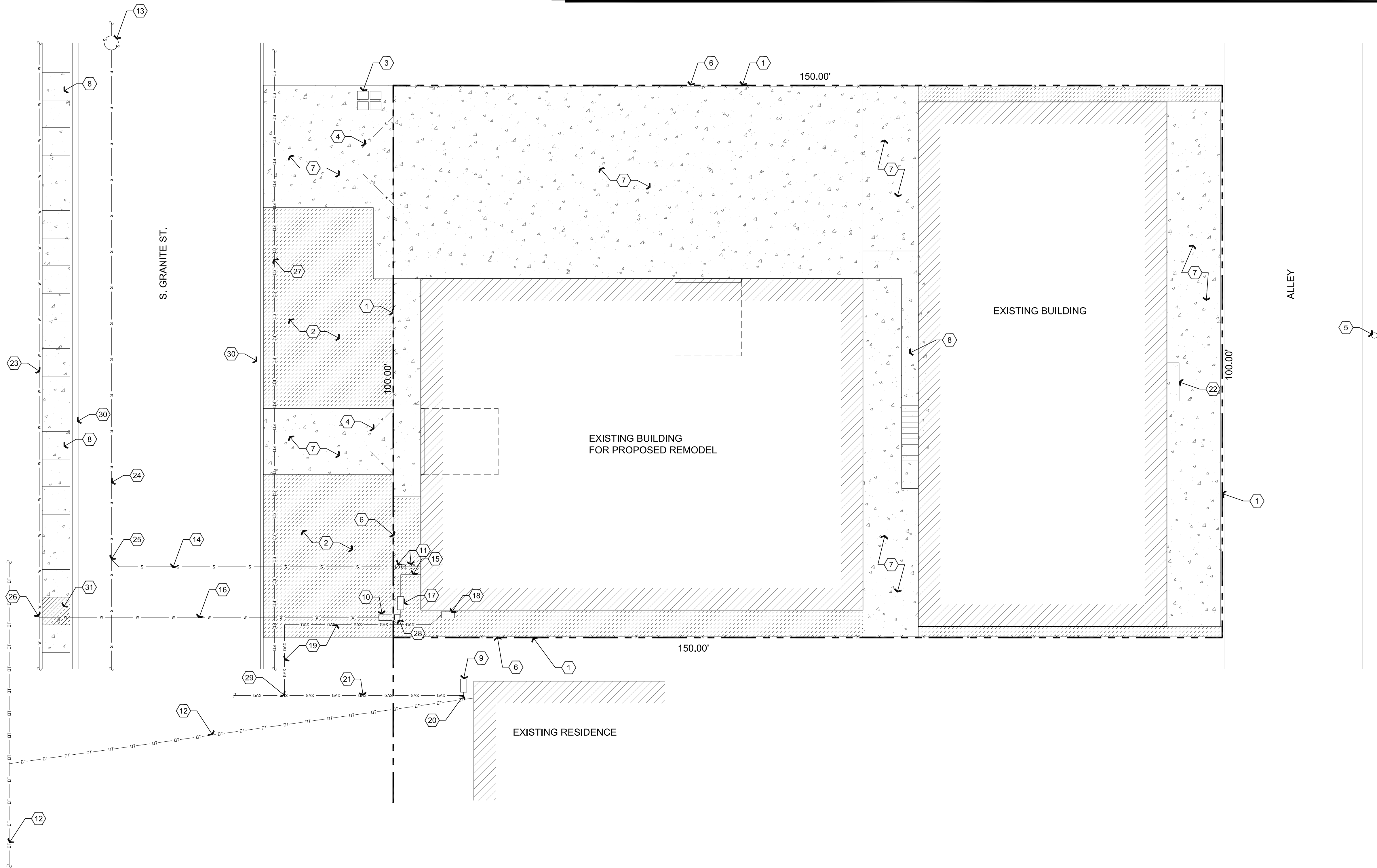
PROJECT: 2nd Hand Man on Granite Street  
535 S. Granite Street  
Prescott, AZ 86303

APN: 109-14-033

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE April 27th, 2018
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CS2

Apr 27, 2018 - 3:49pm

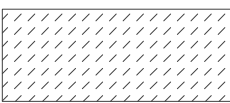


# Utilities Site Plan

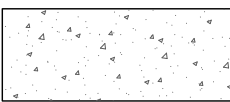
Scale: 1"=10'-0"



## Legend



TYPICALLY INDICATES EXISTING LANDSCAPED AREA



TYPICALLY INDICATES EXISTING CONCRETE

## Descriptive Keynotes

1. PROPERTY LINE.
2. EXISTING LANDSCAPE AREA.
3. EXISTING WATER METER.
4. EXISTING GATE.
5. EXISTING ELECTRIC POWER POLE.
6. EXISTING FENCE.
7. EXISTING CONCRETE SLAB.
8. EXISTING CONCRETE SIDEWALK.
9. EXISTING NATURAL GAS METER / REGULATOR.
10. PROPOSED 5/8" WATER METER INSTALLED IN ACCORDANCE WITH C.O.P. STANDARD DETAIL 316P.
11. PROPOSED 2-WAY CLEAN OUT & BACKWATER VALVE IN ACCORDANCE WITH C.O.P. STANDARD DETAIL 440P-3.
12. EXISTING OVERHEAD TELEPHONE LINE.
13. EXISTING MANHOLE.
14. PROVIDE 4" SDR 35 WASTE LINE, SAWCUT, TRENCH, BACKFILL AND SURFACE REPLACEMENT IN ACCORDANCE WITH QUAD CITY STANDARD DETAIL 200Q-1.

15. PROVIDE BELOW GRADE 1" TYPE 'K' COPPER DOMESTIC WATER LINE.
16. PROVIDE 1" TYPE 'K' COPPER DOMESTIC WATER LINE. SAWCUT, TRENCH, BACKFILL AND SURFACE REPLACEMENT IN ACCORDANCE WITH QUAD CITY STANDARD DETAIL 200Q-1.
17. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTION DEVICE IN ACCORDANCE WITH QUAD CITY STANDARD DETAIL 324Q-1.
18. NATURAL GAS METER / REGULATOR BY UNISOURCE ENERGY SERVICES.
19. POLYETHYLENE, BELOW GRADE NATURAL GAS LINE BY UNISOURCE ENERGY SERVICES.
20. POINT OF ATTACHMENT TO EXISTING NATURAL GAS SUPPLY LINE.
21. EXISTING BELOW GRADE NATURAL GAS SUPPLY LINE.
22. EXISTING ELECTRICAL SERVICE ENTRANCE SECTION TO BE REPLACED. REFER TO ELECTRICAL PLANS.

23. EXISTING CITY OF PRESCOTT 12" WATER MAIN.
24. EXISTING CITY OF PRESCOTT 6" SEWER MAIN.
25. POINT OF ATTACHMENT FOR PROPOSED SEWER SERVICE. INSTALL IN ACCORDANCE WITH C.O.P. STANDARD DETAIL 440P-1.
26. POINT OF ATTACHMENT FOR PROPOSED WATER SERVICE. INSTALL IN ACCORDANCE WITH QUAD CITY STANDARD DETAIL 340Q-1.
27. EXISTING BELOW GRADE FIBER OPTIC LINE.
28. PROVIDE 1" SHUT OFF VALVE IN CUSTOMER BOX IN ACCORDANCE WITH C.O.P. STANDARD DETAIL 316P.
29. POINT OF ATTACHMENT FOR PROPOSED NATURAL GAS LINE.
30. EXISTING CONCRETE CURB AND GUTTER.
31. REMOVE AND PROVIDE NEW SIDEWALK IN ACCORDANCE WITH QUAD CITY STANDARD DETAIL 230Q. SAWCUT SIDEWALK AT EXISTING CONTROL JOINTS.

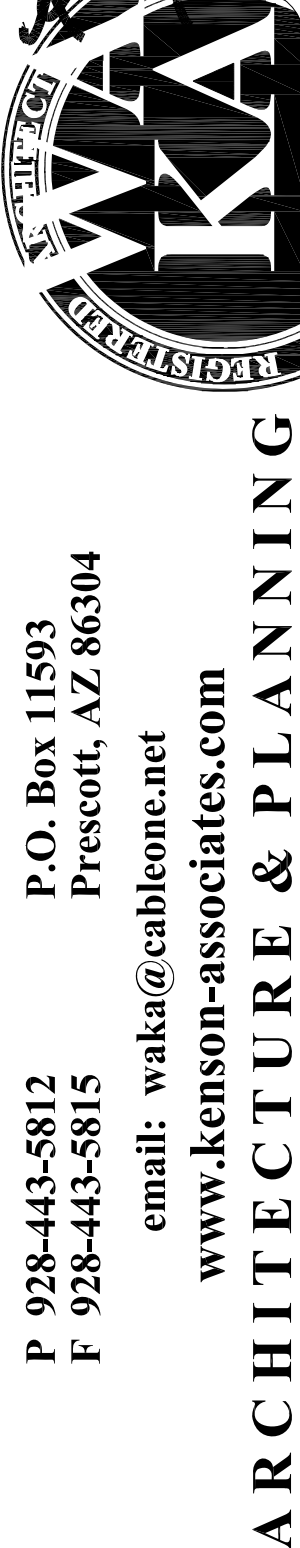
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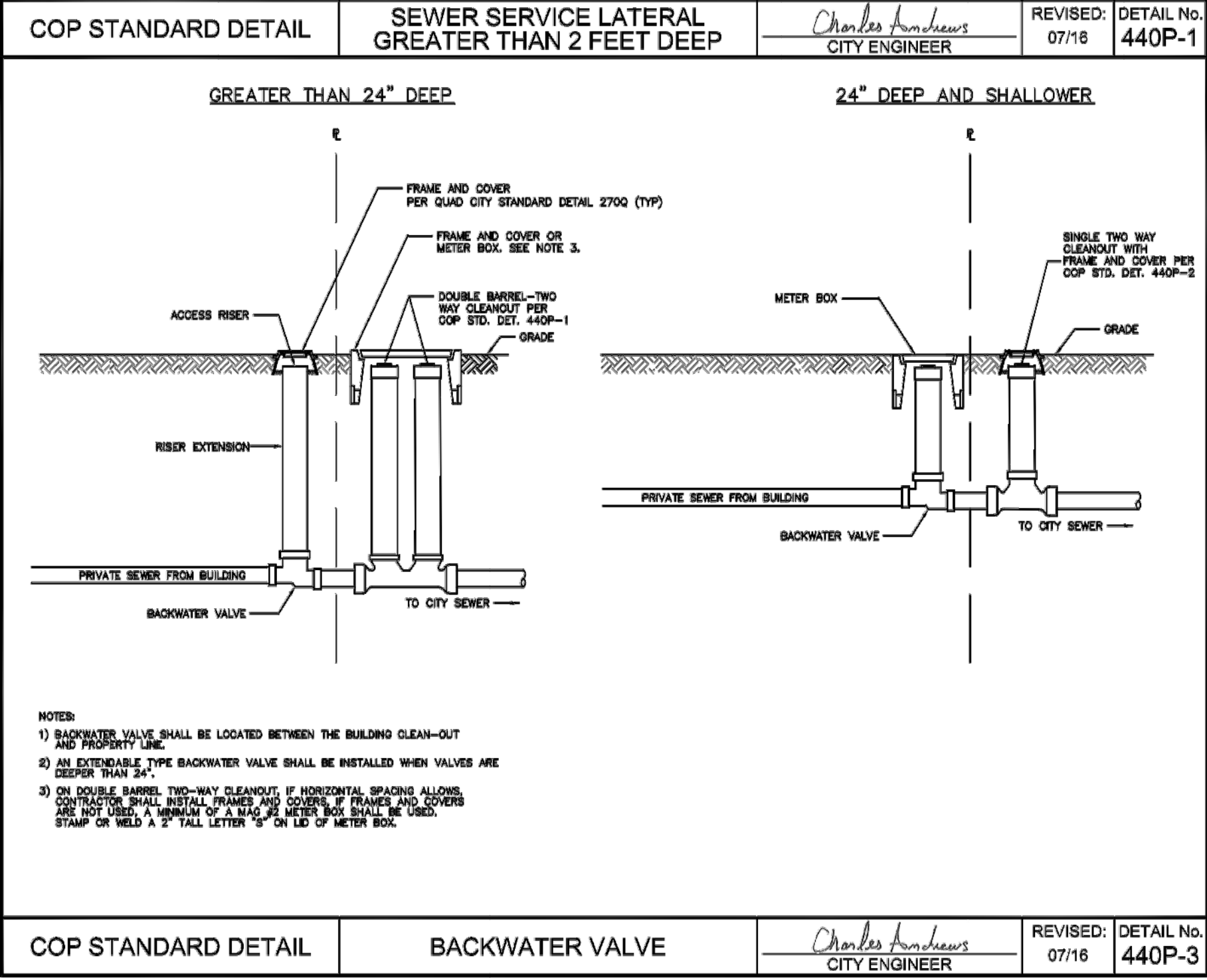
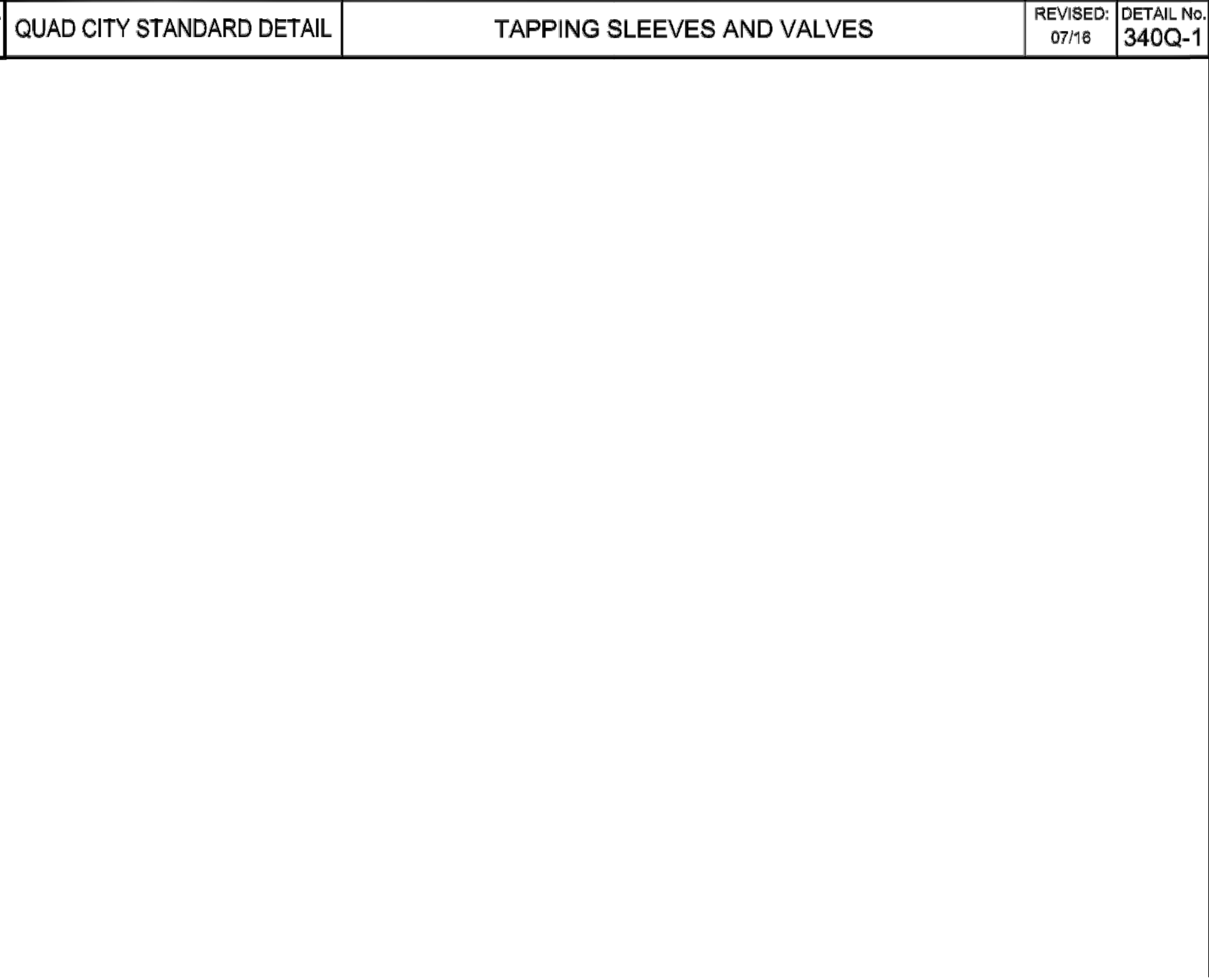
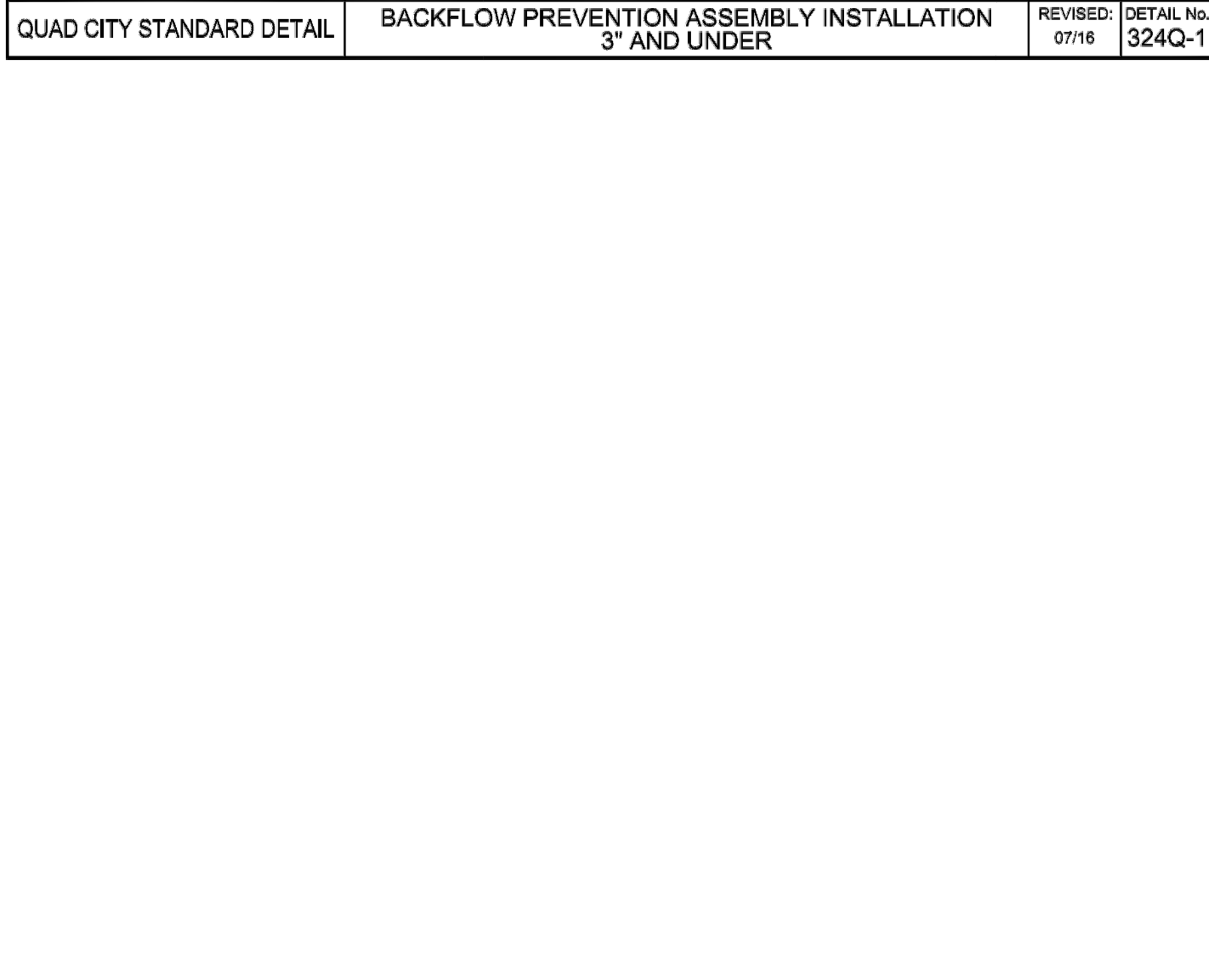
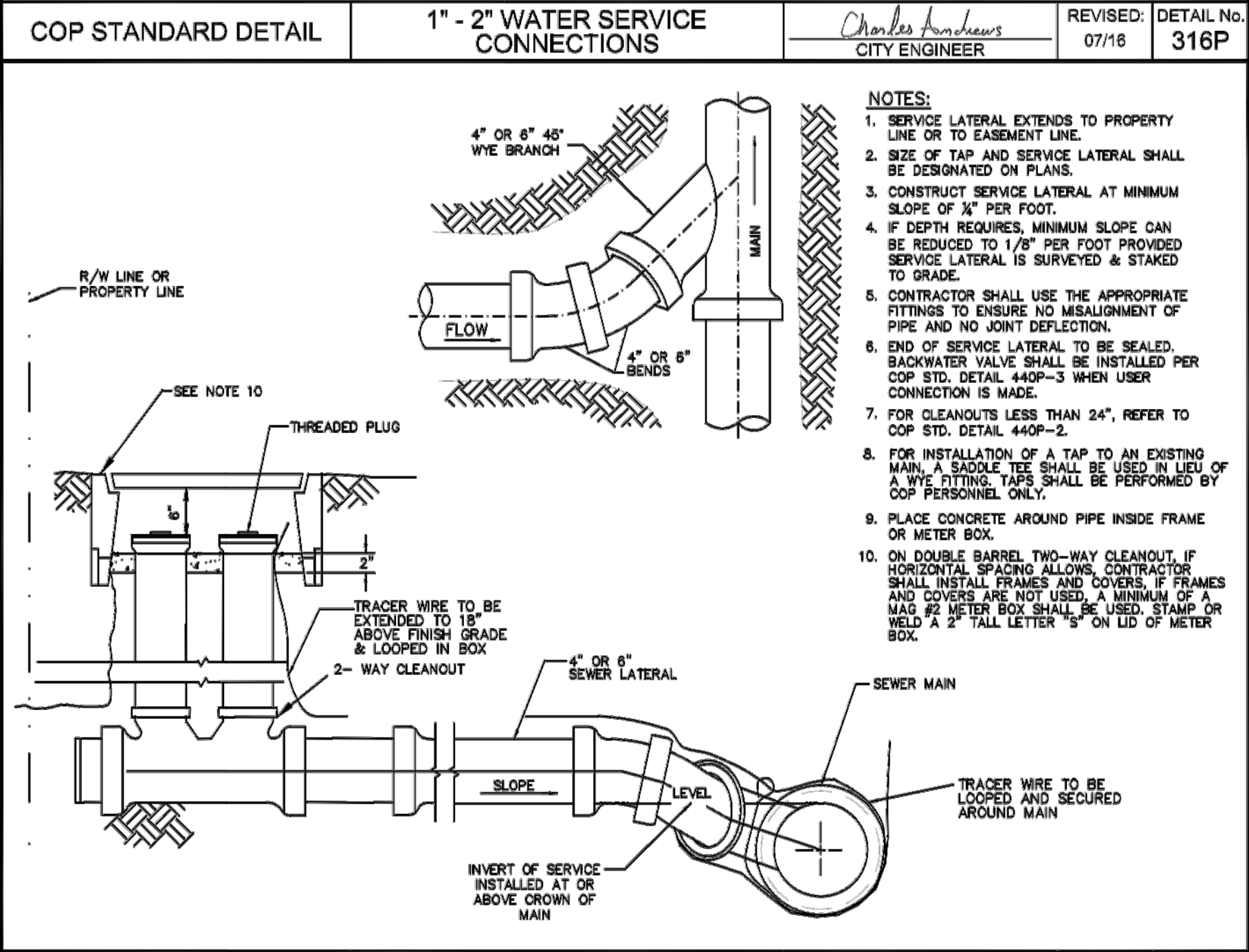
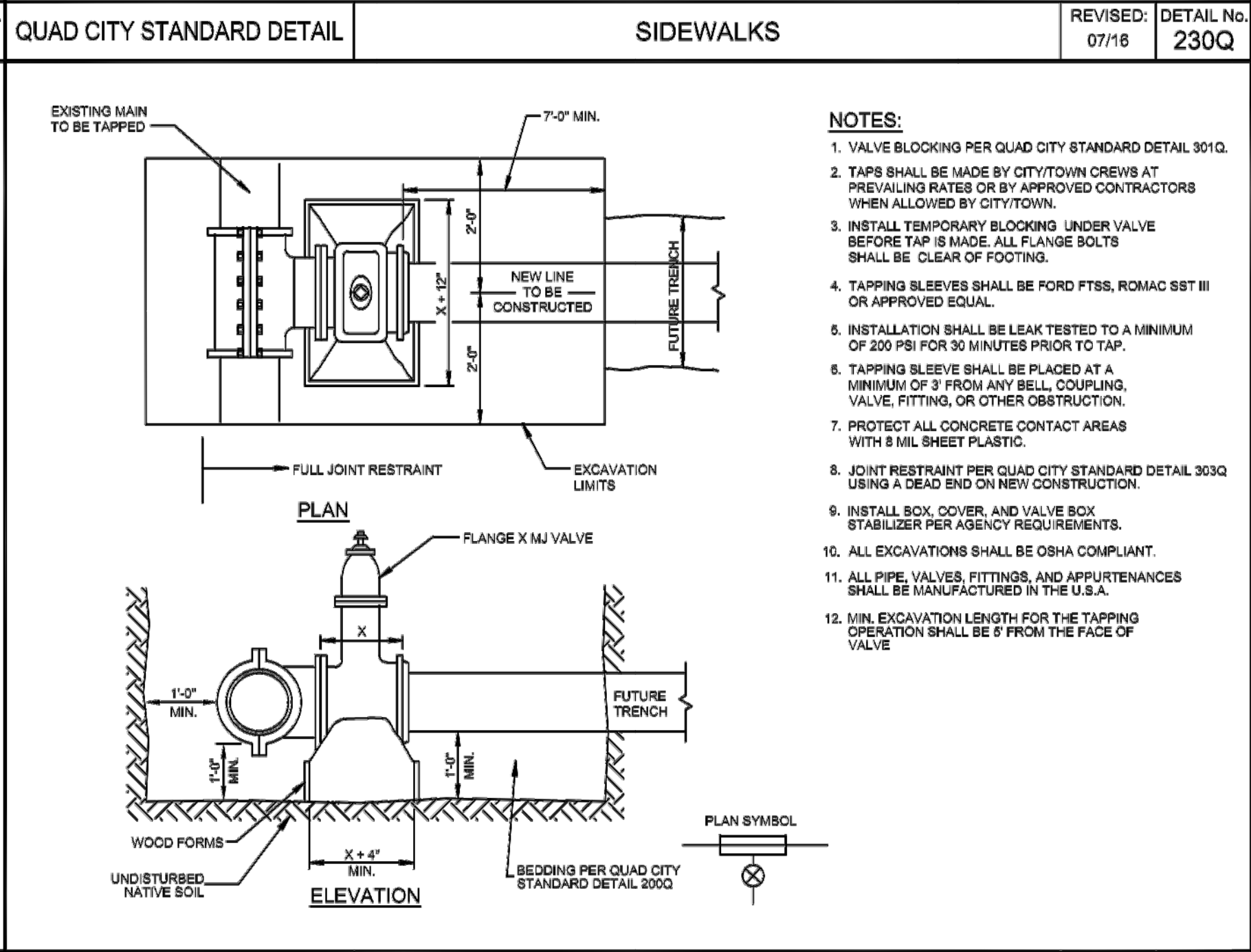
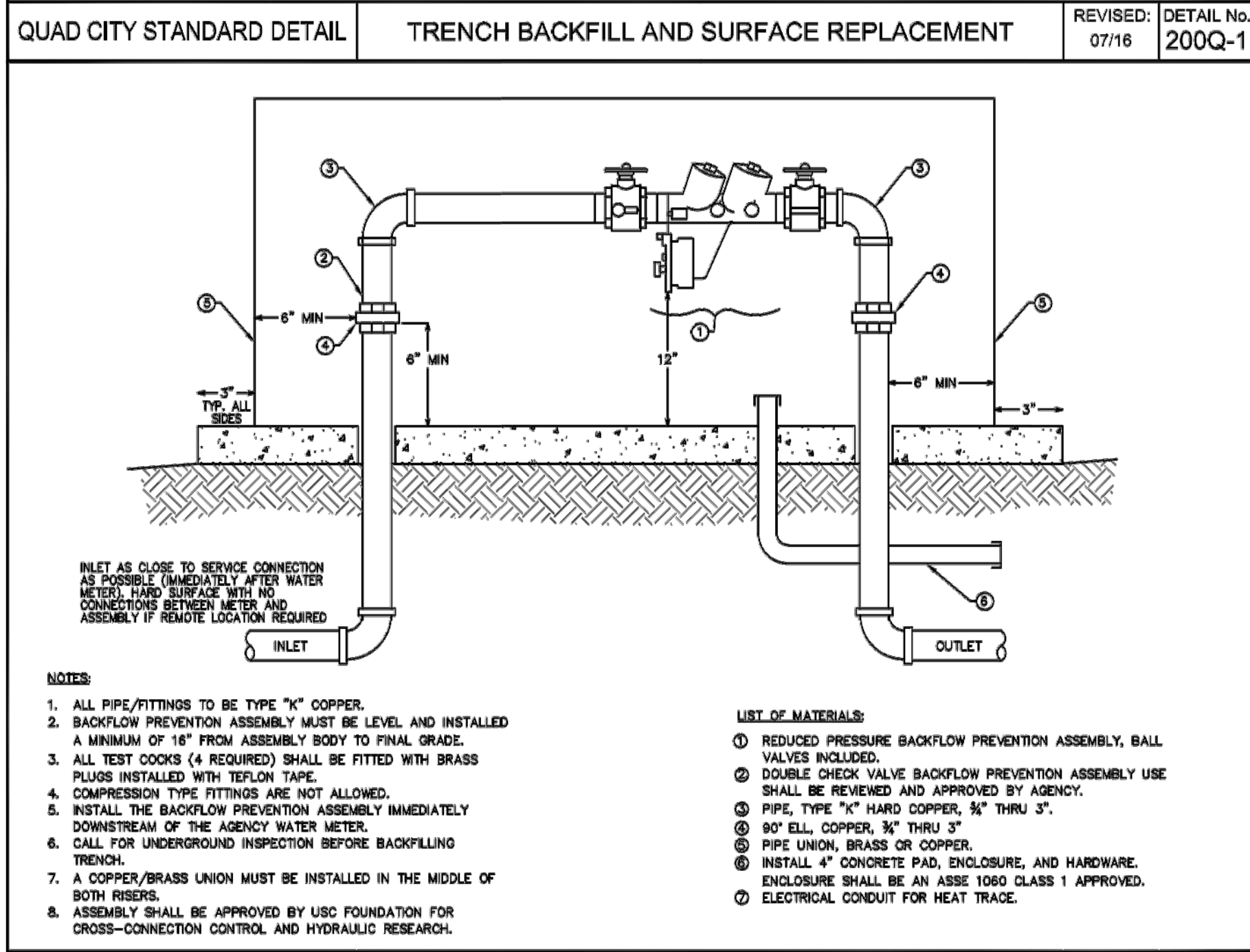
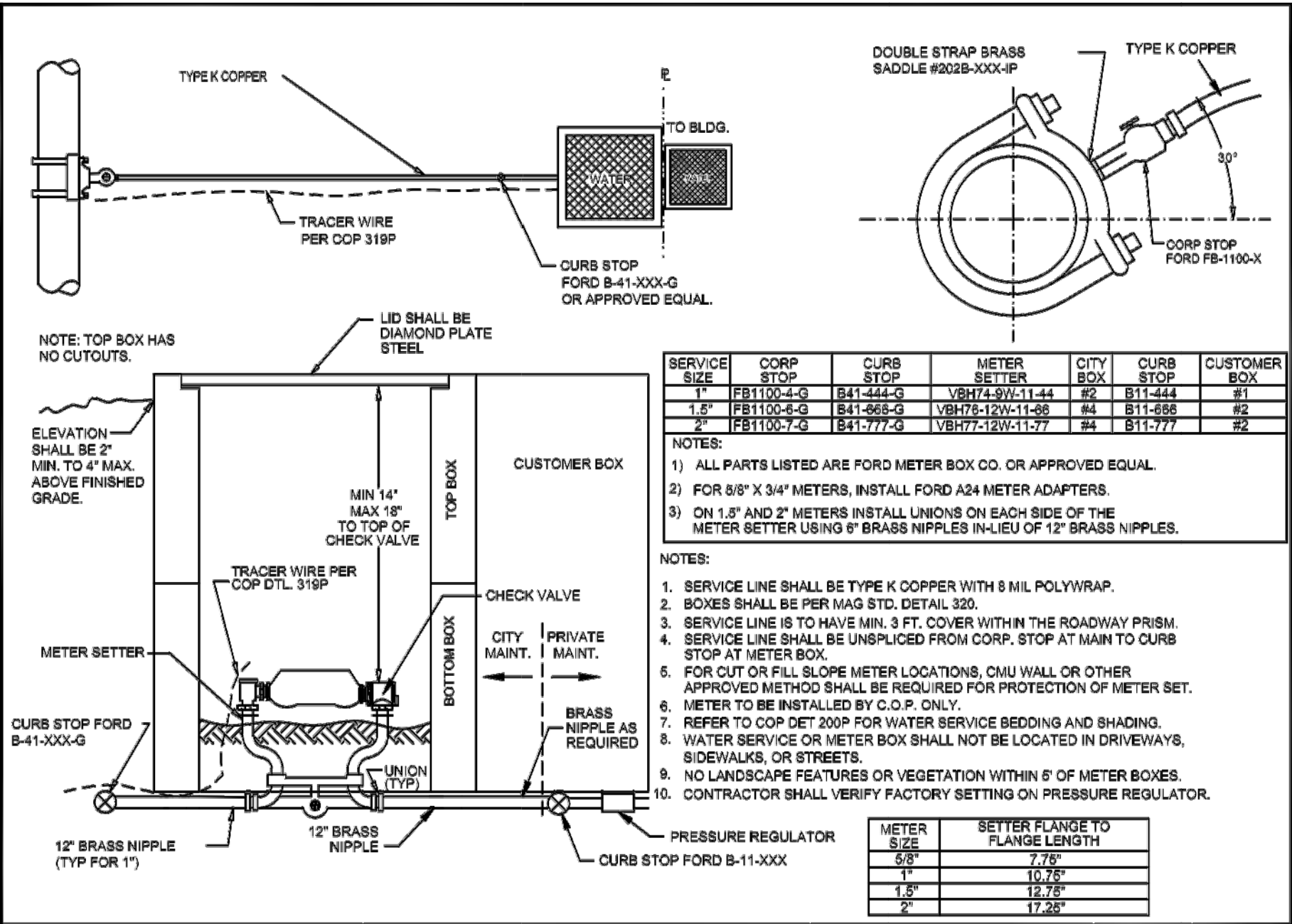
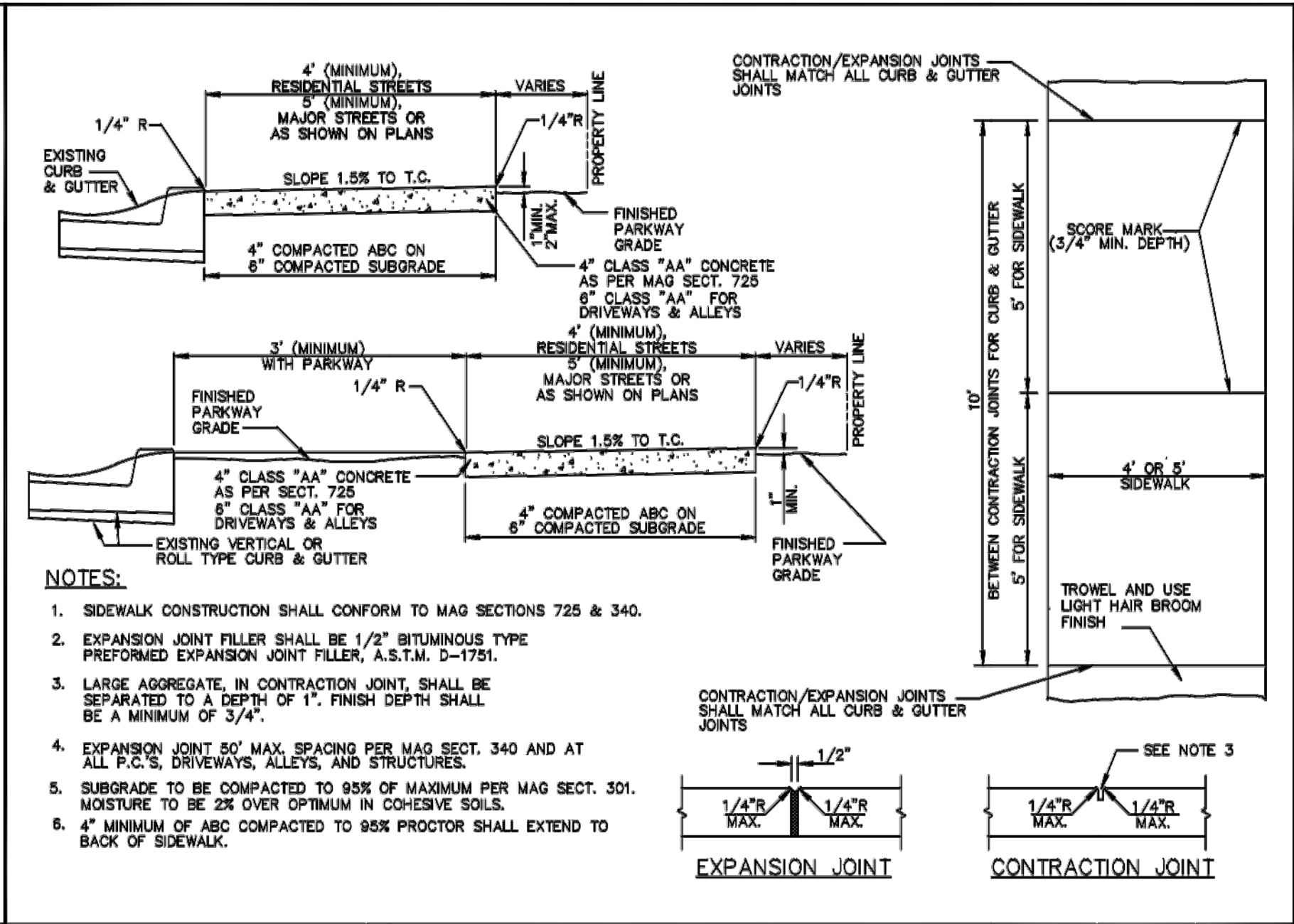
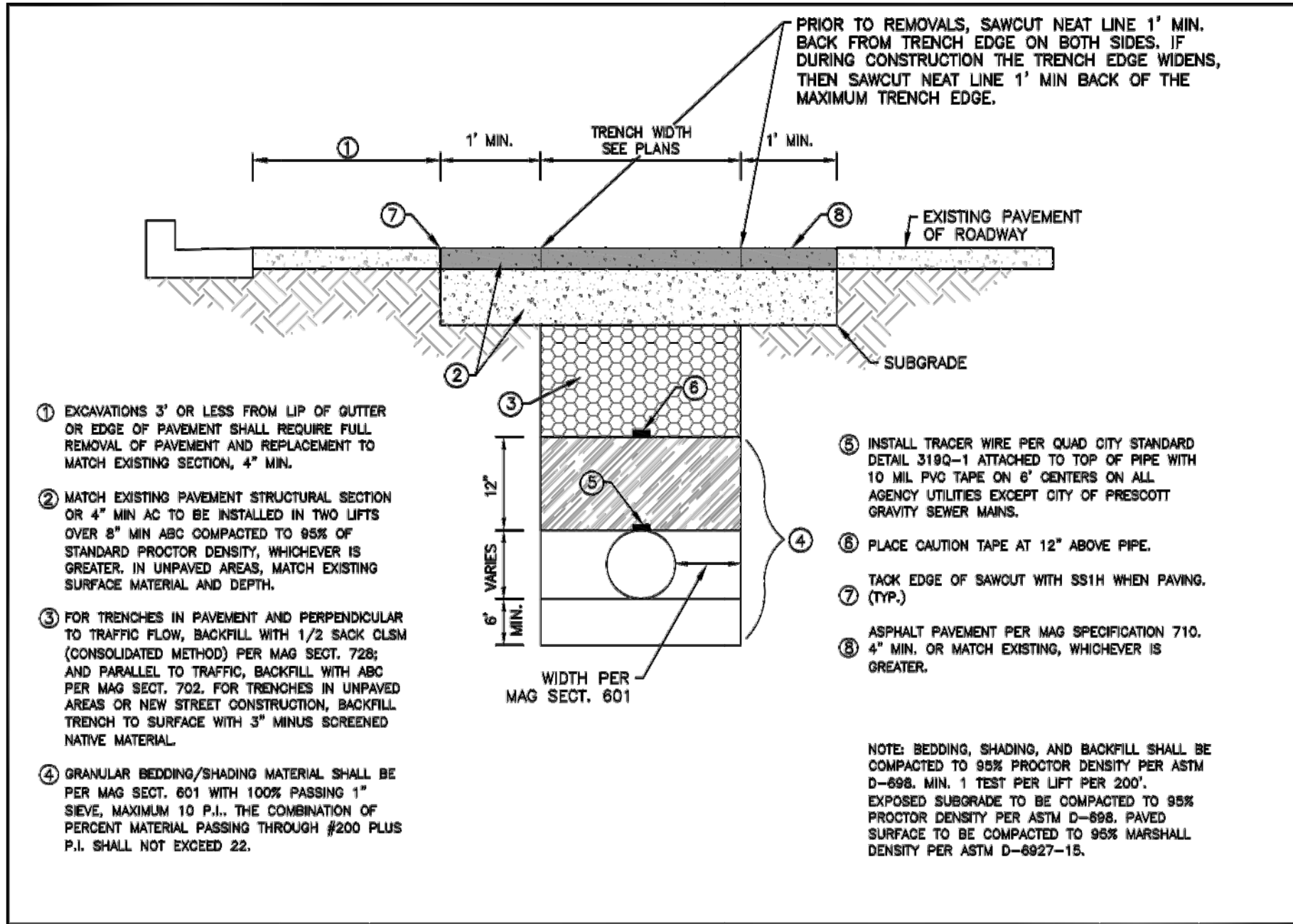
**DRAWING:** Utilities Site Plan

**PROJECT:** 2nd Hand Man on Granite Street  
535 S. Granite Street  
Prescott, AZ 86303

**APN:** 109-14-033

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE April 27th, 2018
JOB NO. 715
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# A1.0



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25646 W. ALAN KENSON, P.C. 25646 W. ALAN KENSON, P.C. 25646 W. ALAN KENSON, P.C.

ARCHITECTURE & PLANNING

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P.O. Box 11593 Prescott, AZ 86304

DRAWING: Utilities Site Details

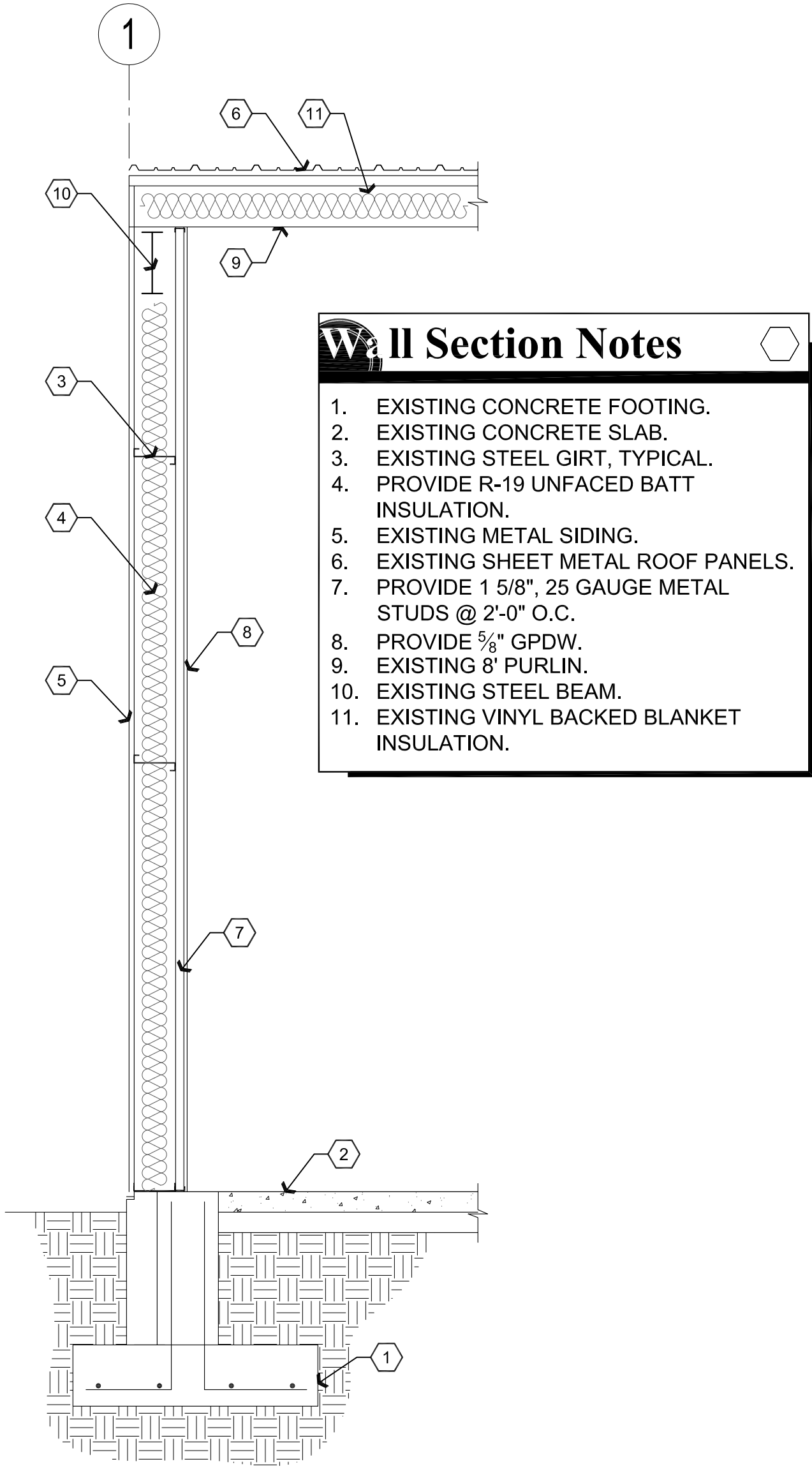
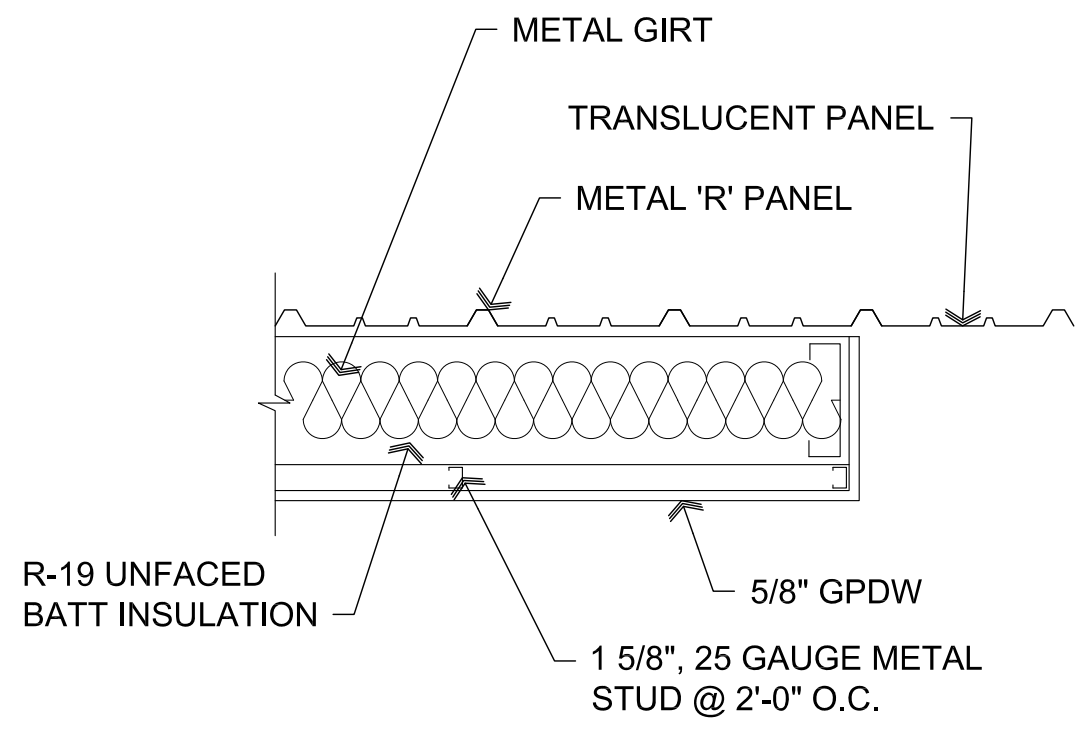
PROJECT: 2nd Hand Man on Granite Street 535 S. Granite Street Prescott, AZ 86303

APN: 109-14-033

DRAWN BY L.O. CHECKED BY W.A.K. DATE April 27th, 2018 JOB NO. 715 SHEET

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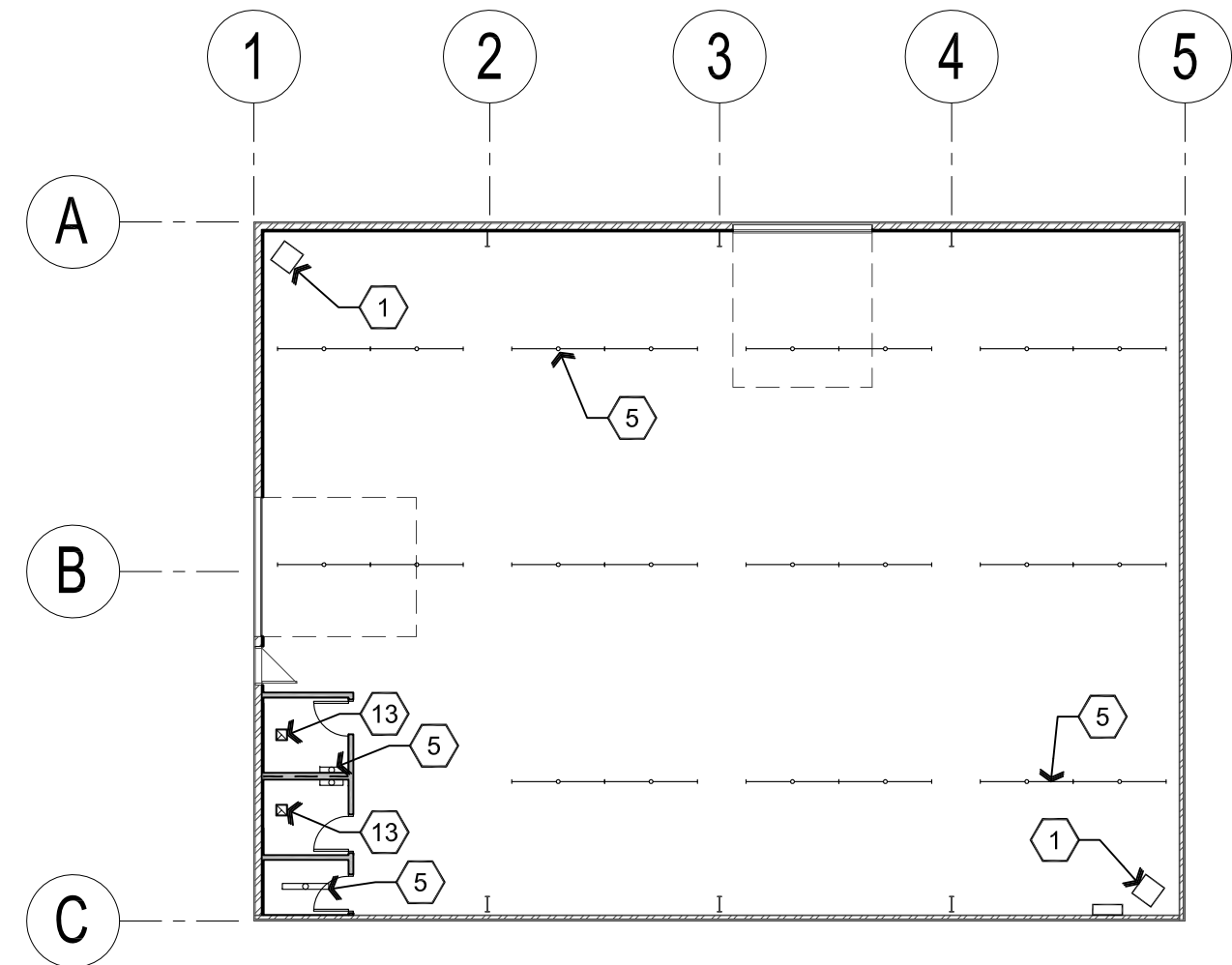
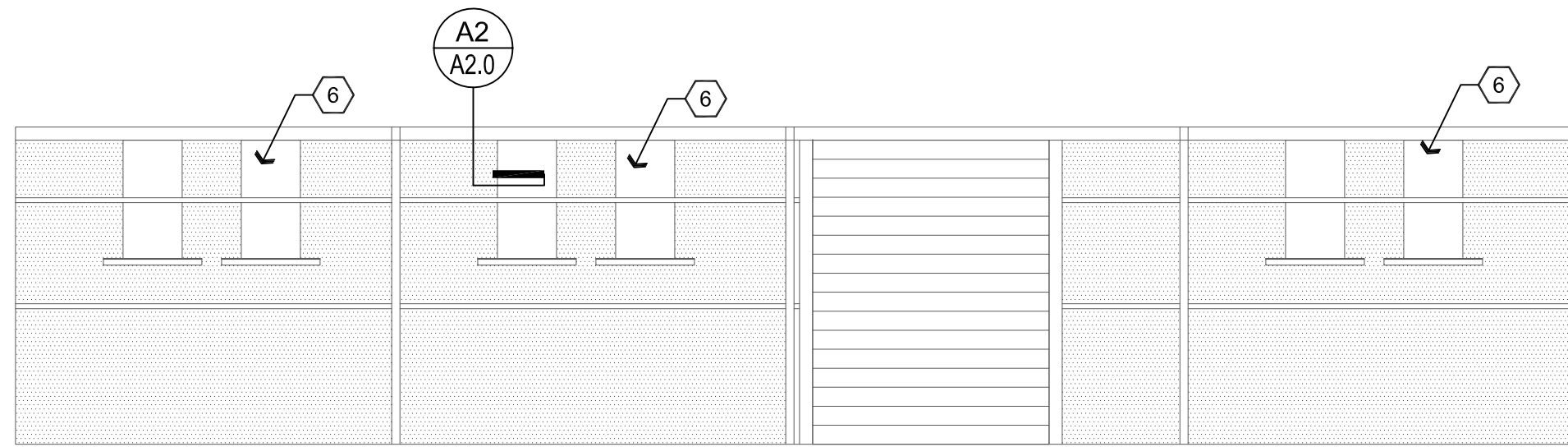
**A2** Wall Section at Translucent Panel  
SCALE: 1" = 1'-0"



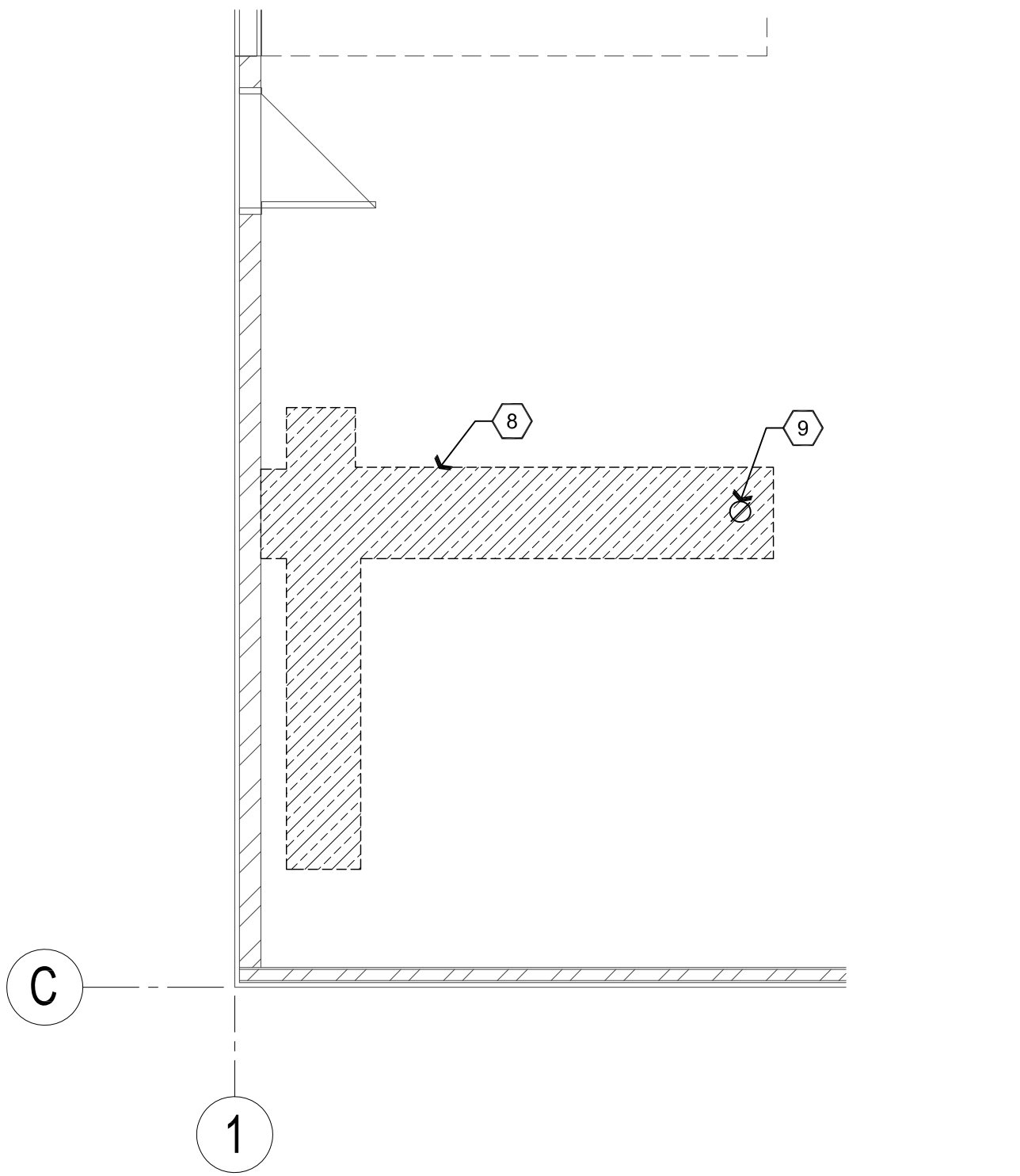
**A1** Wall Section  
Scale: 1/2"=1'-0"



**B2** North Interior Elevation  
Scale: 1/8"=1'-0"



**B2** Reflected Ceiling Plan  
Scale: 1/16"=1'-0"



**B1** Demolition Plan  
Scale: 1/4"=1'-0"

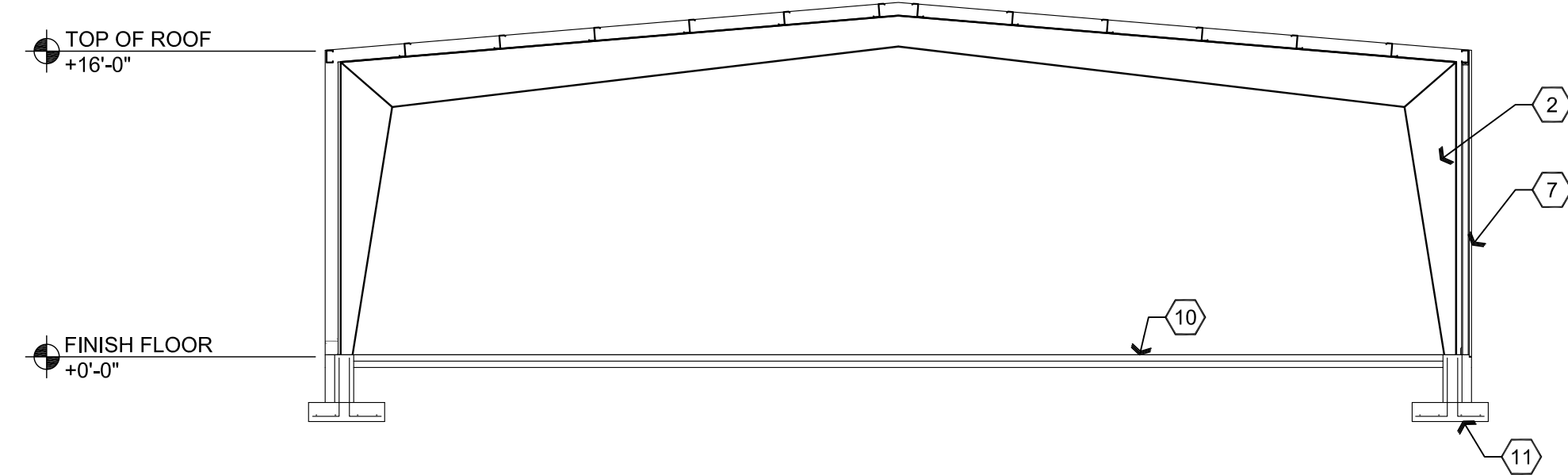


**Wall Types Legend**

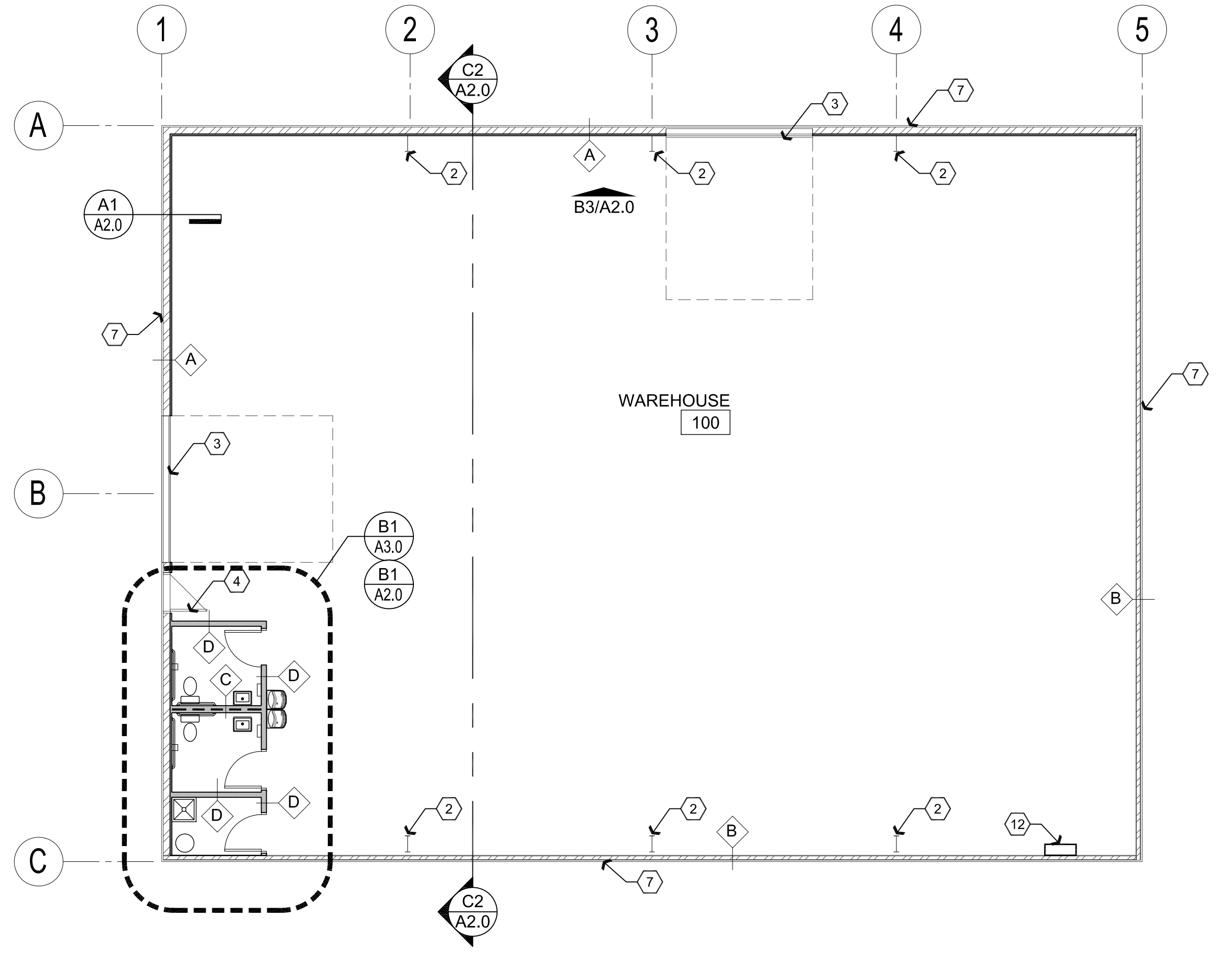
- A** EXTERIOR METAL BUILDING WALL: EXISTING EXTERIOR METAL BUILDING SIDING ON EXTERIOR SIDE OVER EXISTING 8" HORIZONTAL GIRTS BETWEEN STEEL COLUMNS. PROVIDE 5/8" GPDW ON EXPOSED INTERIOR SIDE OF VERTICAL 1-5/8", 25 GAUGE METAL STUDS AT 2'-0" O.C. PROVIDE R-19 BATT INSULATION.
- B** EXISTING EXTERIOR METAL BUILDING WALL WITH FIRE RATING. NO CHANGE
- C** 6" PLUMBING WALL: PROVIDE 6" 25 GA. STEEL STUDS AT 2'-0" O.C. WITH 5/8" GPDW ON EACH SIDE.
- D** 3-5/8" STUD WALL: PROVIDE 3-5/8" 25 GA. STEEL STUDS AT 2'-0" O.C. WITH 5/8" GPDW EACH SIDE.

**Descriptive Keynotes**

- PROVIDE UNIT HEATER, REFER TO MECHANICAL PLANS.
- EXISTING STEEL COLUMN.
- EXISTING OVERHEAD DOOR.
- EXISTING WALK DOOR.
- LIGHT FIXTURES SHOWN FOR QUANTITY AND LOCATION ONLY, REFER TO ELECTRICAL PLANS.
- EXISTING TRANSLUCENT FIBERGLASS PANEL, TYPICAL.
- EXISTING METAL BUILDING WALL.
- SAWCUT EXISTING CONCRETE SLAB FOR WATER AND SEWER SERVICES, REFER TO PLUMBING PLANS.
- SEWER FLOOR CLEAN OUT FOR POTENTIAL EXTENSION OF SEWER SERVICES IN THE FUTURE, REFER TO PLUMBING PLANS.
- EXISTING CONCRETE SLAB.
- EXISTING FOOTING.
- ELECTRICAL PANEL, REFER TO ELECTRICAL PLANS.
- PROVIDE EXHAUST FAN, REFER TO MECHANICAL PLANS.



**C2** Existing Building Section  
Scale: 1/8"=1'-0"



**C1** Reference Floor Plan / Wall Types Plan  
Scale: 1/8"=1'-0"



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W. Alan Kenson & Associates, P.C.

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W. ALAN KENSON  
Architect  
Arizona  
Date Signed: 04/27/18  
EXPIRES: 6/30/19

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ARCHITECTURE & PLANNING

**DRAWING:** Reference Floor Plan, Demolition Plan, and Sections  
Reflected Ceiling Plan and Interior Elevation

**PROJECT:** 2nd Hand Man on Granite Street  
535 S. Granite Street  
Prescott, AZ 86303

**APN:** 109-14-033

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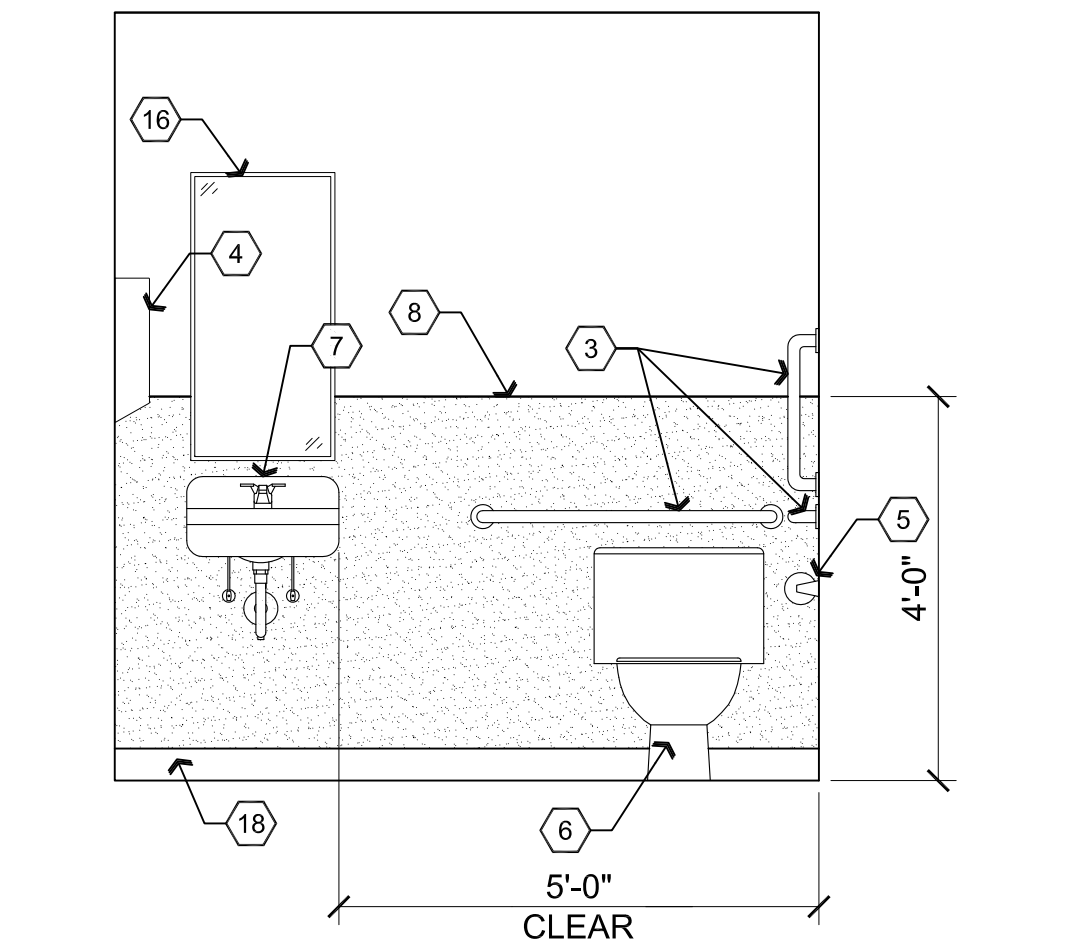
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DATE  
April 27th, 2018

JOB NO.  
715

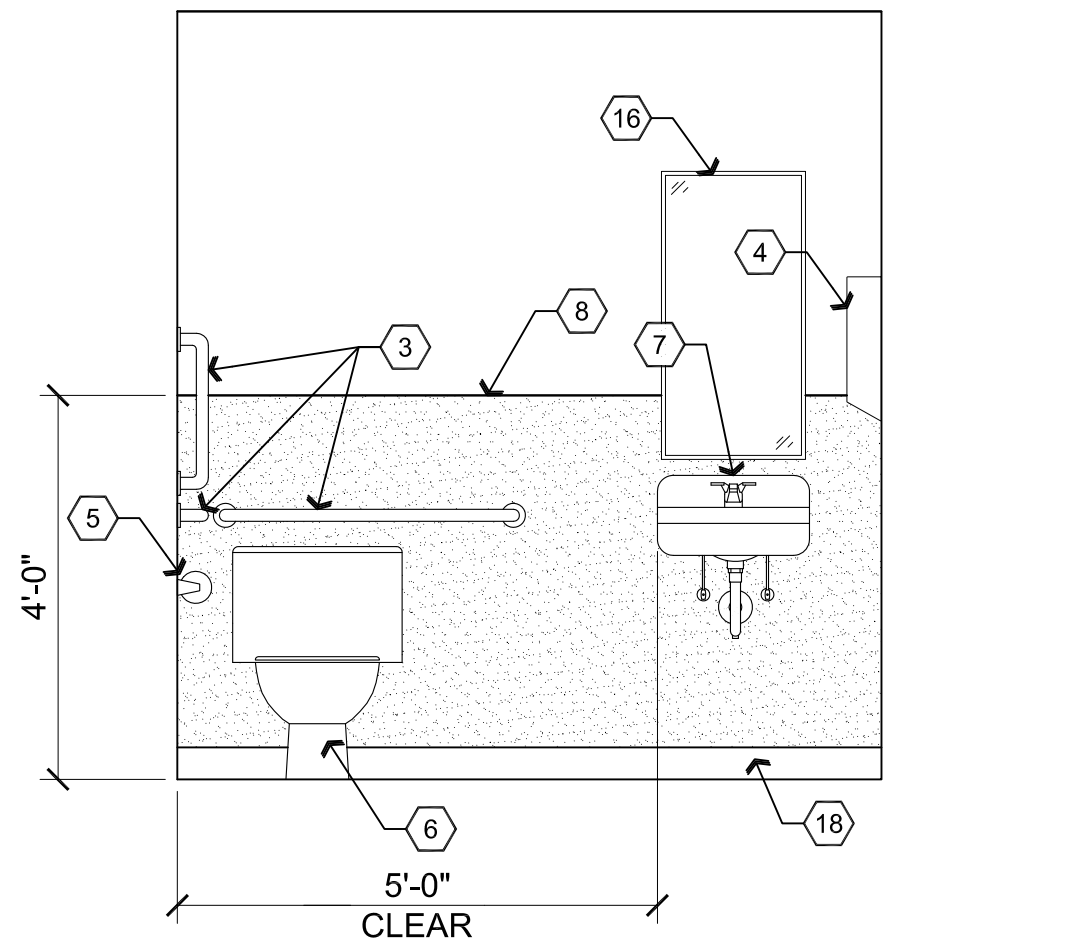
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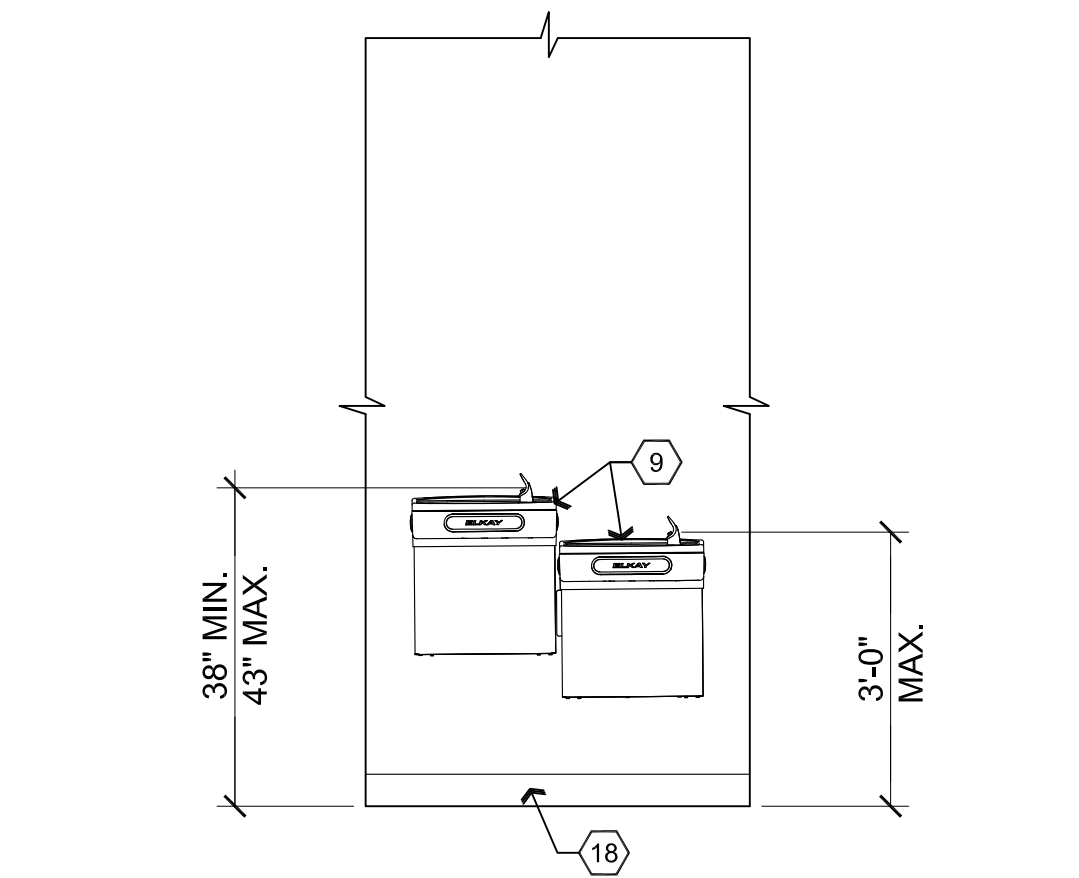
**A3** South Elevation

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



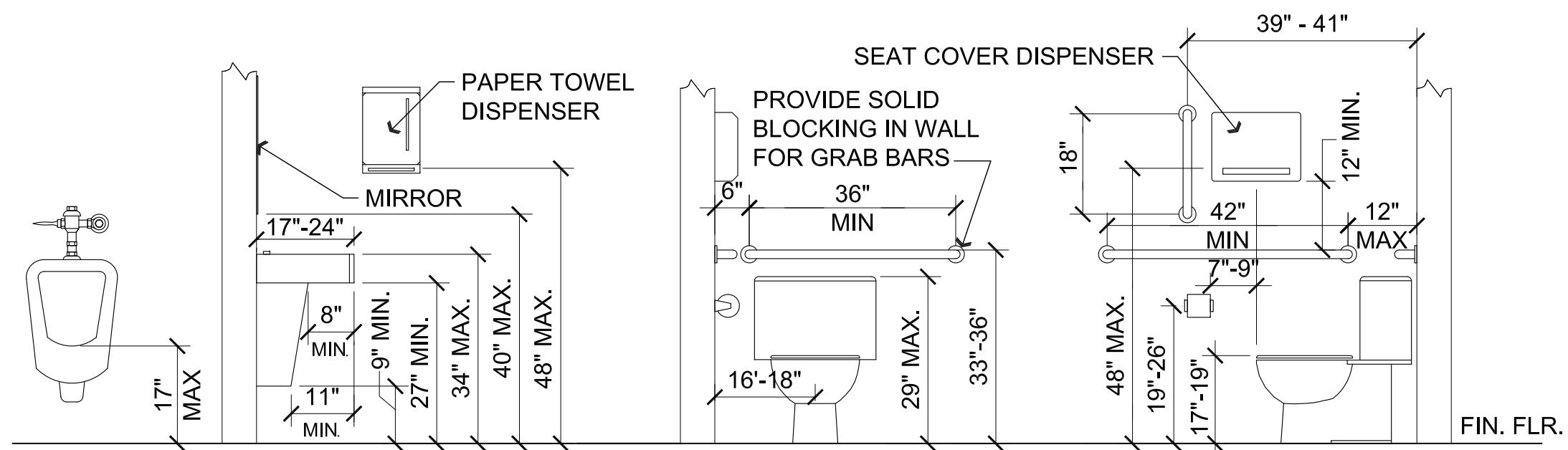
**A2** North Elevation

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



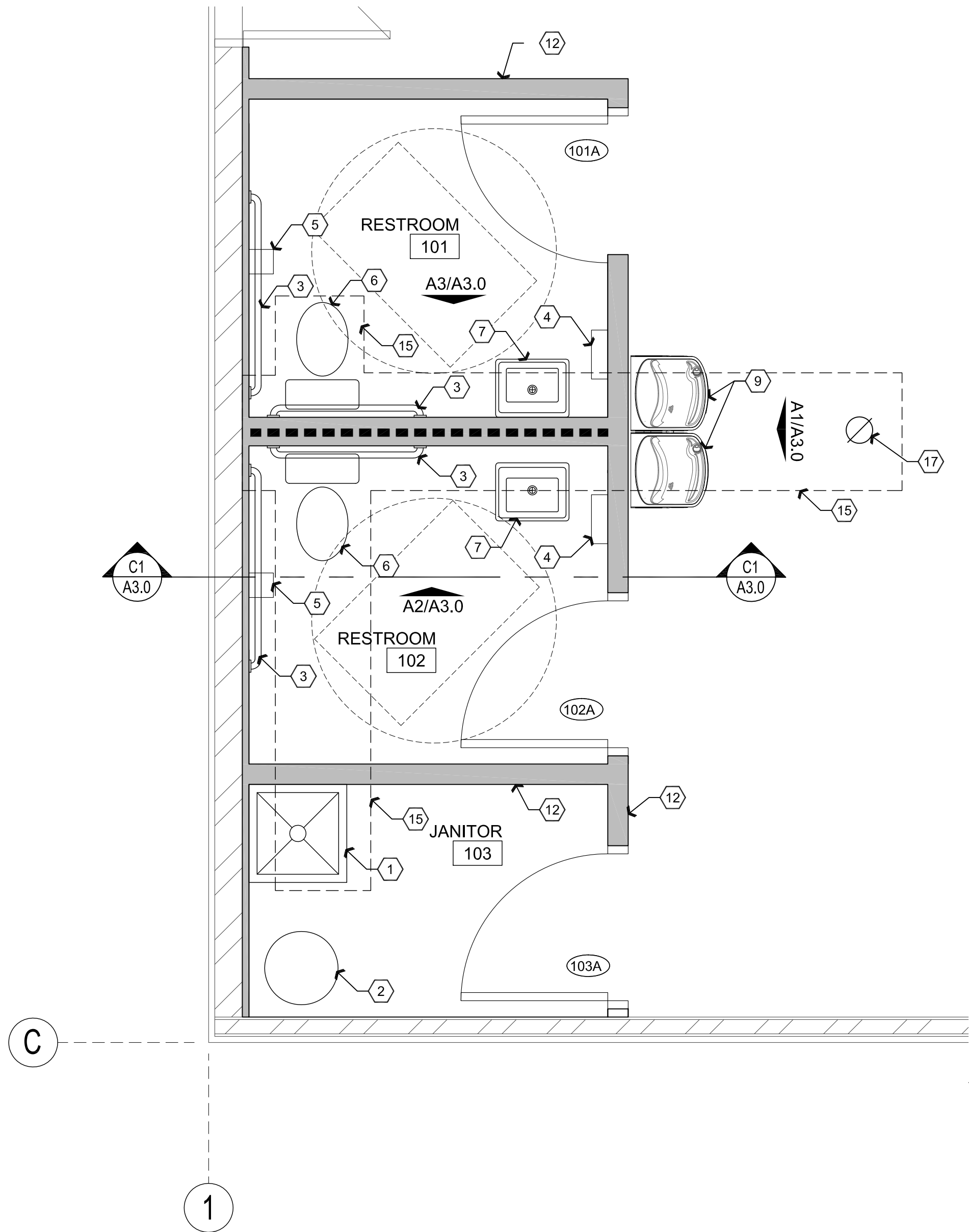
**A1** West Elevation

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



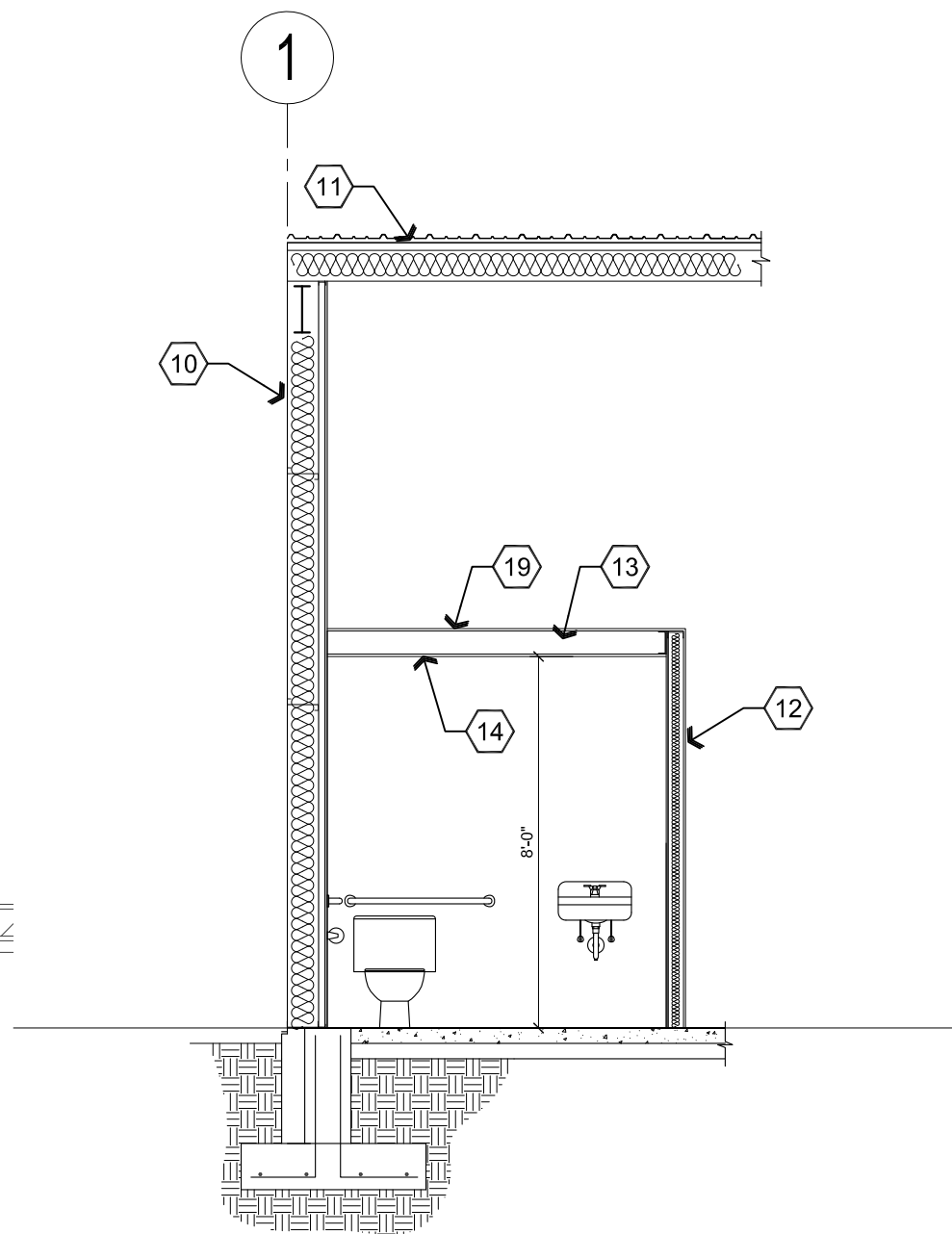
**B3** Typical Fixture Mounting Heights for ADA

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



**B1** Enlarged Plan

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



**C1** Section at Restroom

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

## Descriptive Keynotes

1. PROVIDE MOP SINK. REFER TO PLUMBING PLANS.
2. PROVIDE ELECTRIC WATER HEATER WITH EXPANSION TANK. REFER TO PLUMBING PLANS.
3. PROVIDE 1 1/2" DIAMETER GRAB BARS PER A.D.A. REQUIREMENTS. 42" LONG AT SIDE OF WATER CLOSET / 36" LONG AT REAR OF WATER CLOSET AND 18 VERTICAL. REFER TO TYPICAL FIXTURE MOUNTING HEIGHTS THIS SHEET.
4. PROVIDE PAPER TOWEL DISPENSER. REFER TO TYPICAL FIXTURE MOUNTING HEIGHTS THIS SHEET.
5. PROVIDE TOILET PAPER HOLDER. REFER TO TYPICAL FIXTURE MOUNTING HEIGHTS THIS SHEET.
6. PROVIDE TANK TYPE, HANDICAP HEIGHT WATER CLOSET. REFER TO PLUMBING PLANS AND TYPICAL FIXTURE MOUNTING HEIGHTS THIS SHEET.
7. PROVIDE LAVATORY. REFER TO PLUMBING PLANS AND TYPICAL FIXTURE MOUNTING HEIGHTS THIS SHEET.
8. PROVIDE 4" HIGH FRP WAINSCOT. REFER TO ROOM FINISH PLAN.
9. PROVIDE DUAL-LEVEL A.D.A ACCESSIBLE ELECTRIC DRINKING FOUNTAIN. REFER TO PLUMBING PLANS.
10. EXISTING METAL BUILDING WALL.
11. EXISTING METAL BUILDING ROOF.
12. PROVIDE NEW WALL, REFER TO REFERENCE FLOOR PLANS AND WALL TYPES.
13. PROVIDE 6", 20 GAUGE METAL JOISTS @ 24" O.C.
14. PROVIDE 5/8" GPDW.
15. INFILL TO MATCH EXISTING CONCRETE WHERE CONCRETE WAS REMOVED FOR WATER / SEWER INSTALLATION.
16. PROVIDE 18x36 MIRROR.
17. SEWER FLOOR CLEAN OUT FOR POTENTIAL EXTENSION OF SEWER SERVICES IN THE FUTURE. REFER TO PLUMBING PLANS.
18. PROVIDE 4" COVED RUBBER BASE.
19. PROVIDE 1/2" O.S.B. SHEATHING.

REVISIONS	BY

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[www.kenson-associates.com](http://www.kenson-associates.com)

**ARCHITECTURE & PLANNING**

**DRAWING:** Enlarged Plan, Interior Elevations and Section

**PROJECT:** 2nd Hand Man on Granite Street  
535 S. Granite Street  
Prescott, AZ 86303

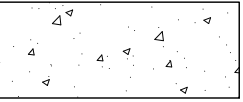
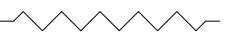
**APN:** 109-14-033

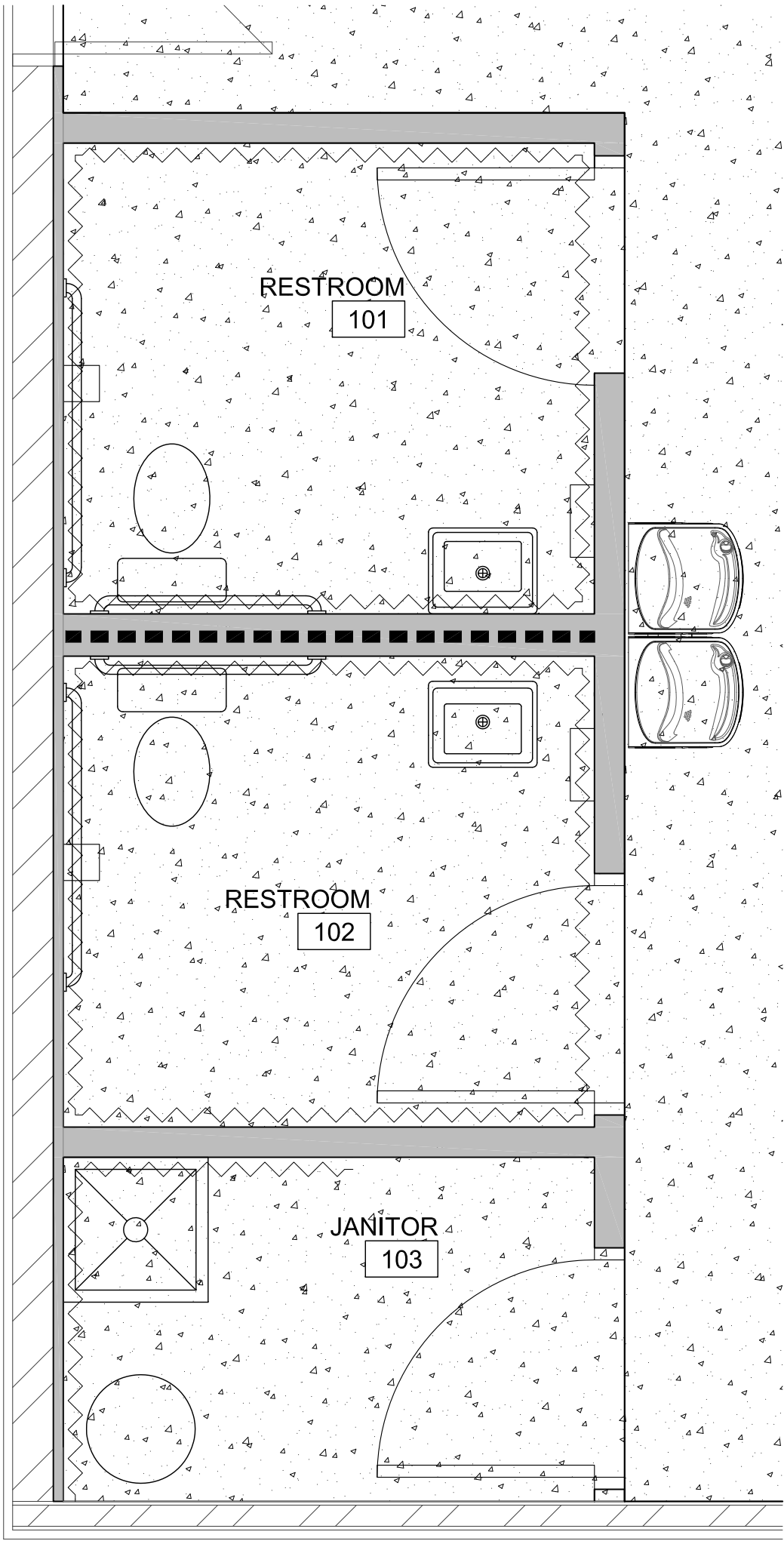
DRAWN BY L.O.
CHECKED BY W.A.K.
DATE April 27th, 2018
JOB NO. 715
SHEET

**A3.0**

Materials schedule				
XX- #				
D-1	DOOR		HALEY	SOLID CORE OAK PRE-FINISHED LEGACY WOOD WITH PRE-FINISHED BLACK STEEL TIMELY FRAME
FRP-1	FIBERGLASS REINFORCED PLASTIC	RESTROOM AND JANITOR CLOSET WALLS TO 4' HIGH		
PT-1	PAINT	INTERIOR WALLS	SHERWIN WILLIAMS	TO BE DETERMINED
RB-1	RUBBER BASE	RESTROOMS, JANITOR CLOSET	ROPPE	BLACK

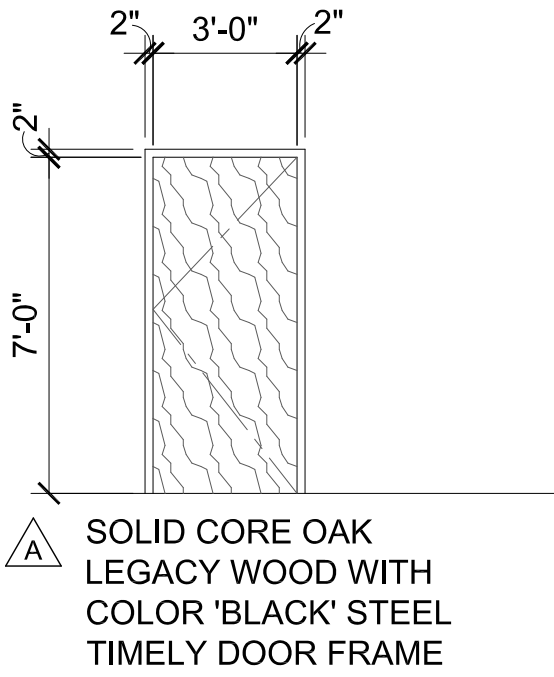
Room Finish Schedule						
NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING	HEIGHT
101	RESTROOM	F1	B1	W1/ W2	C1	8'-0"
102	RESTROOM	F1	B1	W1/W2	C1	8'-0"
103	JANITOR	F1	B1	W1/W2	C1	8'-0"
<div><div>FLOOR: F1    SEALED CONCRETE</div><div>BASE: B1    RUBBER BASE</div><div>WALLS: W1    PAINTED GPDW W2    FRP WAINSCOT 4' HIGH</div><div>CEILING: C1    GPDW</div></div>						

Legend	
	EXISTING SEALED CONCRETE
	FRP



**A1 Room Finish Plan**  
Scale: 1/2"=1'-0"  
Plan North

Door Schedule								
NO.	ROOM NAME	SIZE	TYPE	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	HARDWARE TYPE
101A	RESTROOM	3'-0"x7'-0"	A	SCWD	STAIN	STEEL	PAINT	01
102A	RESTROOM	3'-0"x7'-0"	A	SCWD	STAIN	STEEL	PAINT	01
103A	MECHANICAL	3'-0"x7'-0"	A	SCWD	STAIN	STEEL	PAINT	02
<b>DOOR NOTES:</b> <div><div>1. ALL EXIT DOORS &amp; HARDWARE SHALL COMPLY WITH THE 2012 I.B.C.</div><div>2. DOOR THRESHOLDS SHALL HAVE A MAX HEIGHT OF 1/2" FOR H.C. ACCESSIBILITY. THRESHOLD SHALL HAVE A MAXIMUM RISE OF 1/4" AND 1/2" RISE WHEN BEVELED WITH MAXIMUM 1:2 SLOPE.</div><div>3. ALL GLAZING IN DOORS SHALL BE SAFETY GLAZING.</div><div>4. ALL INTERIOR DOORS SHALL BE OPERABLE FOR EMERGENCY EXITING PURPOSES WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE NOR EFFORT.</div><div>5. ALL GLAZING WITHIN 24" OF OPENINGS SHALL BE SAFETY GLASS.</div><div>6. IF A DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.</div><div>7. DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. HARDWARE REQUIRED FOR DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAN 48" ABOVE FINISH FLOOR.</div><div>8. DOOR OPENING FORCE SHALL BE: 5lbf MAX INTERIOR HINGED, SLIDING OR FOLDING DOORS; FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY.</div></div>								



Hardware Schedule	
<b>HW-01:</b>	LEVER PRIVACY LOCK, WALL STOP
<b>HW-02:</b>	LEVER PASSAGE LOCK, WALL STOP

**B1 Door Type**  
Scale: 1/4"=1'-0"

REVISIONS	BY

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ARCHITECTURE & PLANNING

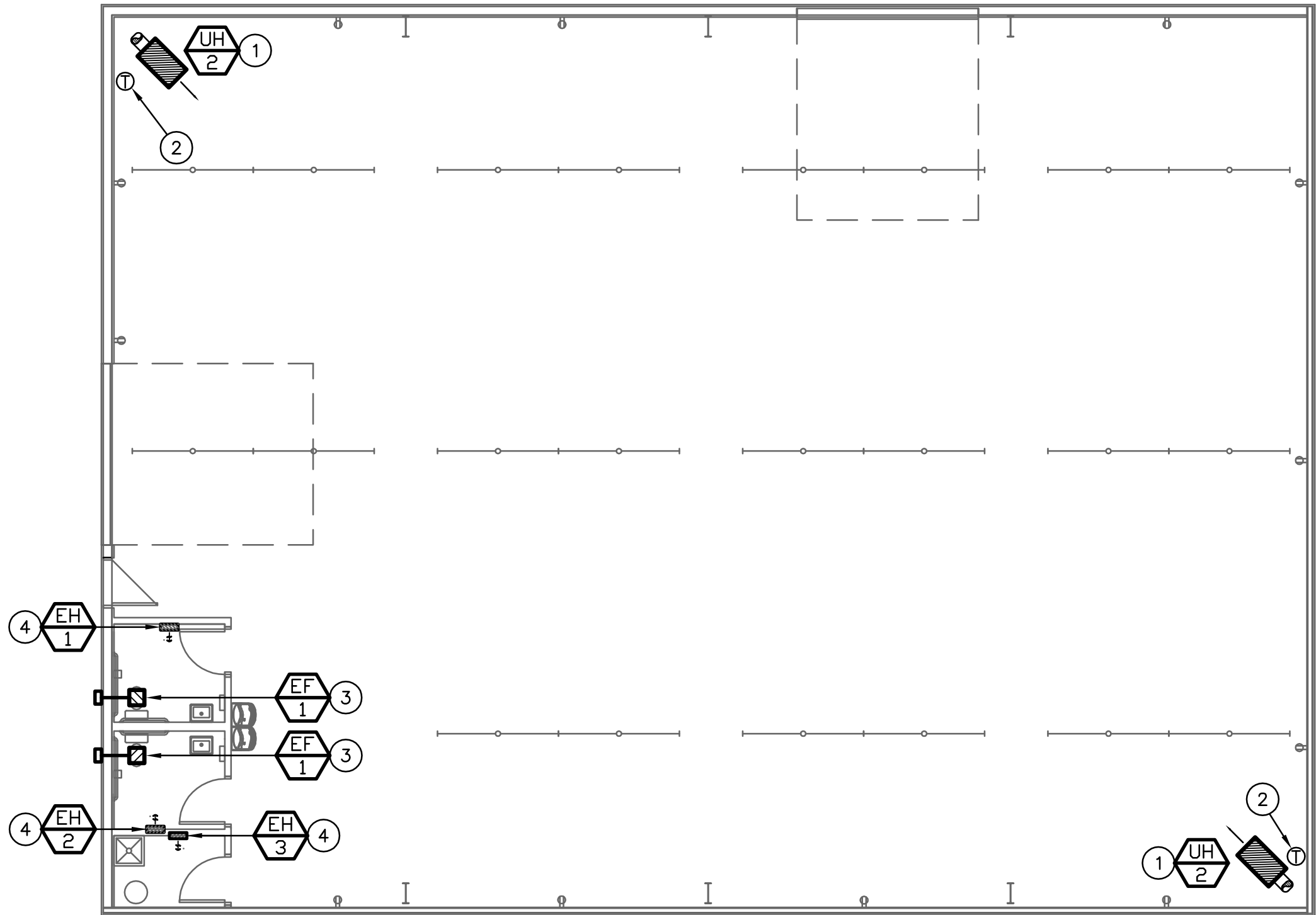
**DRAWING:** Room Finish Plan and Schedules


**PROJECT:** 2nd Hand Man on Granite Street  
535 S. Granite Street  
Prescott, AZ 86303

**APN:** 109-14-033

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DATE April 27th, 2018
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**A4.0**



**M1 Mechanical Plan** Scale: 1/8"=1'-0" 

**KEYNOTES**

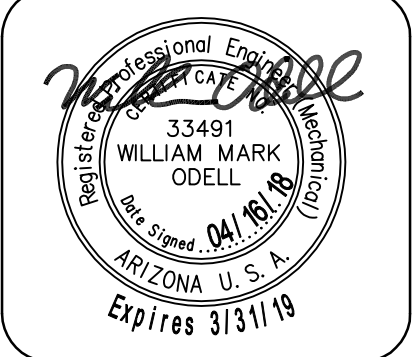
- ① GAS-FIRED UNIT HEATER SUPPORTED FROM STRUCTURE, WITH TYPE "B" FLUE UP THROUGH ROOF. COORDINATE UNIT HEATER MOUNTING HEIGHT.
- ② LOW VOLTAGE THERMOSTAT WITH INSULATED SUB-BASE.
- ③ CEILING MOUNTED EXHAUST FAN WITH BACK DRAFT DAMPER. TRANSITION EXHAUST DUCT FROM UNIT DISCHARGE AND ROUTE ABOVE CEILING AND TO MANUFACTURER'S WALL DISCHARGE CAP.
- ④ ELECTRIC HEATER WITH INTEGRAL THERMOSTAT.



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**ARCHITECTURE & PLANNING**

**DRAWING:** Mechanical Floor Plan

**PROJECT:** 2nd Hand Man on Granite Street  
535 S. Granite Street  
Prescott, AZ 86303

**APN:** 109-14-033

DRAWN BY
CHECKED BY
DATE March 21st, 2018
JOB NO. 715
SHEET

**M1.1**

# MECHANICAL SPECIFICATIONS

### GENERAL REQUIREMENTS

GENERAL PROVISIONS WHICH MAKE SPECIFIC REFERENCE TO ELECTRICAL DIVISION ONLY ARE ADDED HEREIN FOR CLARITY AND SIMPLIFICATION. SPECIFICATIONS WRITING AND ARE NOT PART OF THE MECHANICAL WORK. THE WORK OF DIVISION 15, MECHANICAL, IS SUBJECT TO THE CONDITIONS OF THE CONDITIONS OF THE CONTRACT, DIVISION 1, GENERAL REQUIREMENTS, AND APPLICABLE REQUIREMENTS OF OTHER PORTIONS OF THE CONTRACT DOCUMENTS. EXAMINE AND BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS AND COORDINATE THE MECHANICAL WORK ACCORDINGLY.

### INTENT

IT IS THE INTENTION OF THE SPECIFICATIONS AND DRAWINGS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. ANY APPARATUS, APPLIANCE, MATERIAL OR WORK NOT SHOWN ON THE DRAWINGS, BUT MENTIONED IN THE SPECIFICATIONS OR VICE VERSA, OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE WORK COMPLETE AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SPECIFIED, SHALL BE PROVIDED WITHOUT ADDITIONAL EXPENSE TO THE OWNER. SHALL THERE APPEAR TO BE DISCREPANCIES OR QUESTIONS OF INTENT IN THE CONTRACT DOCUMENTS, REFER THE MATTER TO THE ARCHITECT FOR HIS DECISION BEFORE ORDERING ANY MATERIALS OR EQUIPMENT OR BEFORE THE START OF ANY RELATED WORK. THE DECISION OF THE ARCHITECT SHALL BE FINAL, CONCLUSIVE AND BINDING.

### DRAWINGS AND DATA

DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE OF WORK AND TO INDICATE GENERAL ARRANGEMENT OF EQUIPMENT, DUCTS, CONDUITS, PIPING AND FIXTURES. THEY ARE NOT INTENDED TO SHOW EVERY OFFSET OR FITTINGS OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING INSTALLATION OF THE WORK. LOCATION OF ALL ITEMS NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. EXACT LOCATIONS NECESSARY TO SECURE BEST CONDITIONS AND RESULTS MUST BE DETERMINED AT PROJECT AND SHALL HAVE APPROVAL OF ARCHITECT BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS. IF SO DIRECTED BY ARCHITECT, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF WORK. INCLUDE MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION OF A SYSTEM OR PIECE OF EQUIPMENT IN BID PRICE.

### CODES

INCLUDE IN WORK, WITHOUT EXTRA COST TO OWNER, LABOR, MATERIALS, SERVICES, APPARATUS, DRAWINGS (IN ADDITION TO CONTRACT DRAWINGS AND DOCUMENTS) REQUIRED TO COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES AND REGULATIONS. DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT THAN CODES, ORDINANCES, STANDARDS AND STATUTES. CODES, ORDINANCES, STANDARDS AND STATUTES TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH DRAWINGS OR SPECIFICATIONS. FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS AND CODES ARE MINIMUM REQUIREMENTS:

A. APPLICABLE CITY, COUNTY, AND STATE MECHANICAL, ELECTRICAL, GAS, PLUMBING, HEALTH AND SANITARY CODES, LAWS AND ORDINANCES.  
B. 2012 INTERNATIONAL MECHANICAL CODE WITH LOCAL AMENDMENTS.

### GENERAL

MATERIALS AND EQUIPMENT STANDARD PRODUCTS OF A REPUTABLE MANUFACTURER REGULARLY ENGAGED IN MANUFACTURE OF THE SPECIFIED ITEMS. WHERE MORE THAN ONE UNIT IS REQUIRED OF ANY ITEM, FURNISHED BY THE SAME MANUFACTURER, EXCEPT WHERE SPECIFIED OTHERWISE. INSTALL MATERIAL AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SHOULD VARIANCE BETWEEN PLANS AND SPECIFICATIONS OCCUR WITH THESE, CONTACT ARCHITECT IMMEDIATELY SO THAT VARIATIONS IN INSTALLATION CAN BE KNOWN BY ALL PARTIES CONCERNED. PROVIDE EQUIPMENT FROM MANUFACTURER WHOSE PRODUCTS HAVE LOCAL REPRESENTATION.

### EXECUTION

PROTECT EXISTING ACTIVE SERVICES (WATER, GAS, SEWER, ELECTRIC) WHEN ENCOUNTERED, AGAINST DAMAGE FROM CONSTRUCTION WORK. DO NOT PREVENT OR DISTURB OPERATION OF ACTIVE SERVICES WHICH ARE TO REMAIN. IF WORK MAKES TEMPORARY SHUTDOWNS OF SERVICES UNAVOIDABLE, CONSULT WITH OWNER AS TO DATES, PROCEDURES, AND ESTIMATED DURATION OF AT LEAST 10 WORKING DAYS IN ADVANCE OF DATE WHEN WORK IS TO BE PERFORMED. ARRANGE WORK FOR CONTINUOUS PERFORMANCE TO ASSURE THAT EXISTING OPERATING SERVICES WILL BE SHUT DOWN ONLY DURING THE TIME REQUIRED TO MAKE NECESSARY CONNECTIONS. IF A SYSTEM CANNOT SHUT DOWN, INSTALL TEMPORARY BYPASSES OR JUMPERS UNTIL CONNECTIONS ARE COMPLETE. CONTRACTOR RESPONSIBLE FOR ALL COSTS INCURRED BY ABOVE SHUTDOWNS, INCLUDING BYPASS OR JUMPER INSTALLATIONS, FOR WORK PERFORMED UNDER THIS SECTION. IF EXISTING ACTIVE UTILITY SERVICES ARE ENCOUNTERED WHICH REQUIRE RELOCATION, MAKE REQUEST TO PROPER AUTHORITIES FOR DETERMINATION OF PROCEDURES. PROPERLY TERMINATE EXISTING SERVICES TO BE ABANDONED IN CONFORMANCE WITH REQUIREMENTS OF AUTHORITIES. WHERE CONNECTIONS OR DISRUPTIONS ARE MADE TO EXISTING SYSTEMS, REACTIVATE, REFILL, AND RECHARGE ALL COMPONENTS AND RESTORE SYSTEMS TO OPERATING CONDITIONS AT TIME OF DISRUPTION.

### GUARANTEE

EACH COMPLETE SYSTEM GUARANTEED BY CONTRACTOR FOR A PERIOD OF ONE YEAR, FROM DATE OF ACCEPTANCE OF WORK BY OWNER IN WRITING, TO BE FREE OF DEFECTS OF MATERIALS AND WORKMANSHIP, AND TO PERFORM SATISFACTORILY UNDER ALL CONDITIONS OF LOAD OR SERVICE. THE GUARANTEES PROVIDE THAT ANY ADDITIONAL CONTROLS, PROTECTIVE DEVICES, OR EQUIPMENT BE PROVIDED AS NECESSARY TO MAKE THE SYSTEM OF EQUIPMENT OPERATE SATISFACTORILY, AND THAT ANY FAULTY MATERIALS OR WORKMANSHIP BE REPLACED OR REPAIRED ON FAILURE OF GUARANTOR TO DO THE ABOVE AFTER WRITTEN NOTICE FROM OWNER, THE OWNER MAY HAVE THE WORK DOWN AT THE COST OF GUARANTOR. LOSS OF REFRIGERANT IS CONSIDERED A DEFECT IN WORKMANSHIP AND/OR EQUIPMENT, TO BE CORRECTED AS REQUIRED AT NO EXTRA COST TO THE OWNER.

PROVIDE EXTENDED FIVE (5) YEAR FACTORY PARTS & LABOR WARRANTY ON ALL AIR CONDITIONING COMPRESSORS.

### AIR CONDITIONING, HEATING AND VENTILATING

#### SCOPE

WORK UNDER THIS SECTION INCLUDES FURNISHING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE REMODELING, INSTALLATION AND PLACING INTO OPERATION THE HEATING, VENTILATING AND AIR CONDITIONING WORK AS SPECIFIED HEREIN AND INDICATED ON THE DRAWINGS.

#### VERIFICATION OF DIMENSIONS:

SCALED AND FIGURED DIMENSIONS ARE APPROXIMATE ONLY. BEFORE PROCEEDING WITH WORK, CAREFULLY CHECK AND VERIFY AT THE SITE, AND RESPONSIBLE FOR PROPERLY FITTING EQUIPMENT AND MATERIALS TOGETHER AND TO THE STRUCTURE IN SPACES PROVIDED. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND MANY OFFSETS, BENDS, SPECIAL FITTINGS AND EXACT LOCATIONS ARE NOT INDICATED. CAREFULLY STUDY DRAWINGS AND PREMISES I ORDER TO DETERMINE BEST METHODS, EXACT LOCATIONS, ROUTES AND BUILDING OBSTRUCTIONS, PRESERVE HEADROOM, AND KEEP OPENINGS AND PASSAGEWAYS CLEAR.

#### CUTTING AND PATCHING:

CUT EXISTING WORK AND PATCH AS NECESSARY TO PROPERLY INSTALL THE NEW WORK. AS THE WORK PROGRESSES, LEAVE NECESSARY OPENINGS, HOLES AND CHASES, ETC., IN THEIR CORRECT LOCATIONS. IF THE REQUIRED OPENINGS, HOLES AND CHASES ETC., ARE NOT IN THEIR CORRECT LOCATIONS, MAKE THE NECESSARY CORRECTIONS AT NO COST TO THE OWNER. AVOID EXCESSIVE CUTTING AND DO NOT CUT STRUCTURAL MEMBERS WITHOUT CONSENT OF ARCHITECT.

#### REGULATIONS, PERMITS & INSPECTIONS

COMPLY WITH ALL APPLICABLE CODES, RULES AND REGULATIONS. ALL MATERIALS, EQUIPMENT AND WORK MUST CONFORM TO THE INTERNATIONAL MECHANICAL CODE. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES. WHEN REQUIRED BY CODE, ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES.

#### ACCEPTABLE MANUFACTURERS

THE FOLLOWING IS A LIST OF MANUFACTURERS WHOSE EQUIPMENT AND HVAC MATERIALS ARE ACCEPTABLE, SUBJECT TO CONFORMANCE WITH CONTRACT DOCUMENTS. VERIFY THAT THE EQUIPMENT WILL MEET ALL CAPACITIES SPACE ALLOCATIONS, AND THAT THE WEIGHTS WILL NOT EXCEED STRUCTURAL DESIGN LOADS.

UNIT HEATERS: SILERLING, MODINE, REZNOR.  
EXHAUST FANS: GREENHECK, LOREN COOK AND PENN VENTILATOR. CERTAIN--TEED, PPG.

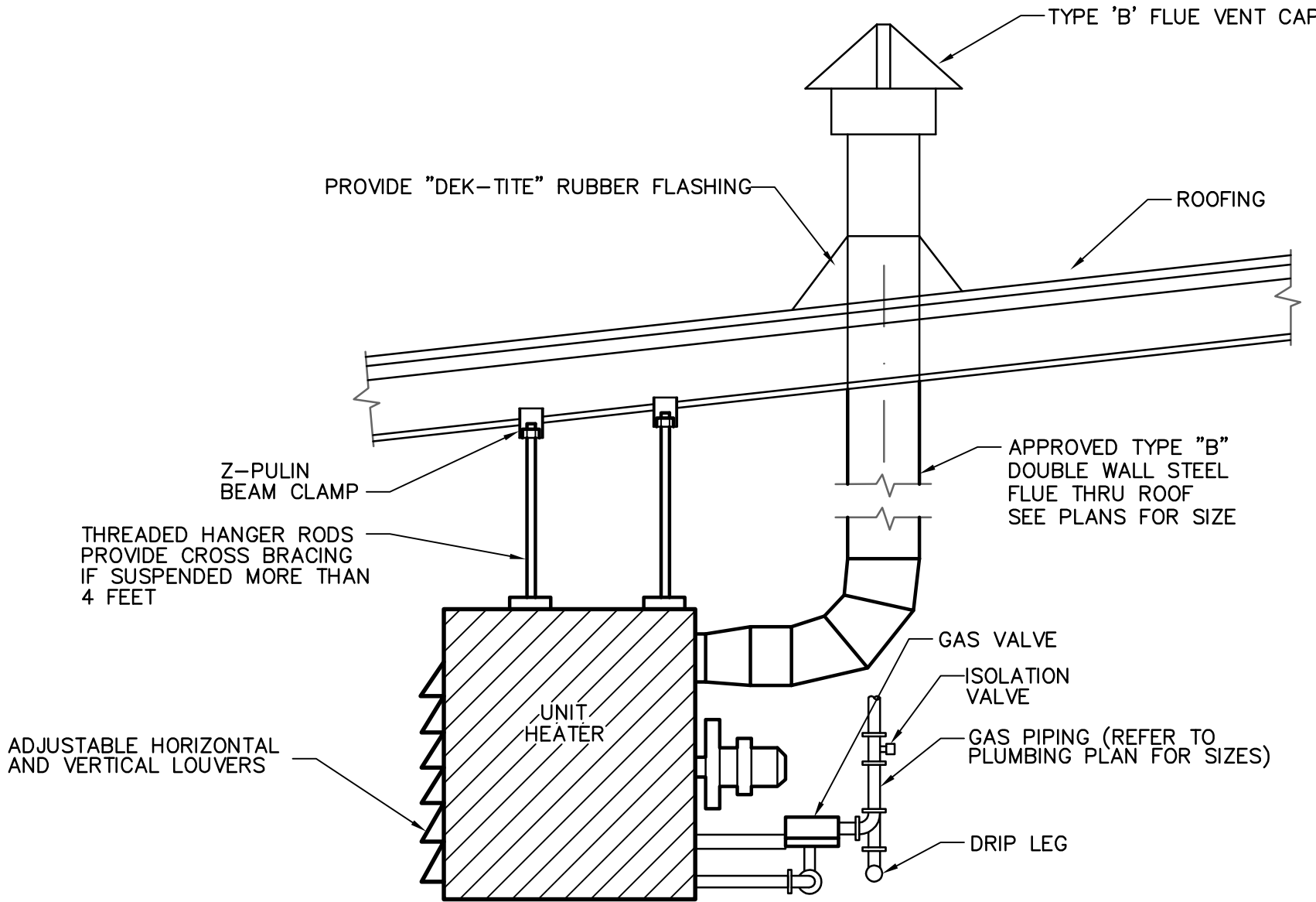
EXHAUST FANS

SIZE, CAPACITIES, AND TYPE AS INDICATED ON THE DRAWINGS. FURNISH COMPLETE WITH FACTORY CURBS/ROOF CAPS, BAROMETRIC DAMPER, SPEED CONTROL, DISCONNECT, STARTER (IF REQUIRED), AND BIRDSCREEN. FURNISH ROOF MOUNTED FANS WITH INSULATED ROOF CURB; PROVIDE CEILING MOUNTED FANS WITH WALL/ROOF CAP.

EQUIP. NO.	MANUFACTURER	MODEL NO.	SERVICE/ LOCATION	BLOWER			MOTOR		HEATER			FLUE (DIA.)	WT. (LBS)	REMARKS
				CFM	ESP	MIN. THROW	HP	VOLTS/ PHASE	FUEL	MAX. INPUT MBH	MIN. OUTPUT MBH			
1	REZNOR	F-165	WAREHOUSE	2200	0	78'	1/20	120/1	N. GAS	165	132	8" OVAL	149	① ② ③
2	REZNOR	F-165	WAREHOUSE	2200	0	78'	1/20	120/1	N. GAS	165	132	8" OVAL	149	① ② ③
① PROVIDE UNIT HEATER WITH LOW VOLTAGE THERMOSTAT WITH INSULATED SUB-BASE. ② PROVIDE UNIT WITH ELECTRONIC SPARK IGNITION. ③ PROVIDE UNIT WITH 2-POINT SUSPENSION KIT.														

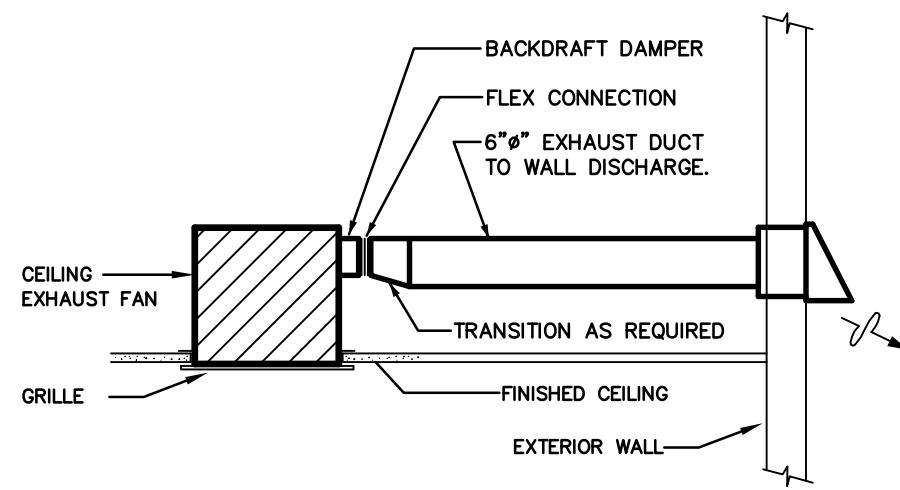
EQUIP. NO.	MANUFACTURER	MODEL NO.	TYPE	SERVICE/ LOCATION	BLOWER CFM	HEATER KW	VOLTS/ PHASE	AMPS	REMARKS
1	QMARK	QFG15122M	RECESSED WALL HEATER	RISER ROOM	150	1.5	120/1	12.5	① ②
2	QMARK	QFG15122M	RECESSED WALL HEATER	RISER ROOM	150	1.5	120/1	12.5	① ②
3	QMARK	QFG15122M	RECESSED WALL HEATER	RISER ROOM	150	1.5	120/1	12.5	① ②
① PROVIDE REMOTE 24V SINGLE STAGE THERMOSTAT. ② INTEGRAL THERMOSTAT.									

MARK	SERVES	MANUF.	MODEL	CFM	E.S.P. (in. wg)	MOTOR		DRIVE	SONES	WEIGHT LBS	REMARKS
						HP OR WATTS	V/PH				
1	MEN	GREENHECK	SP-B90	75	0.25"	49.7 WATTS	120/1	DIRECT	2.5	10	① ②
2	WOMEN	GREENHECK	SP-B90	75	0.25"	49.7 WATTS	120/1	DIRECT	2.5	10	① ③
① UNIT TO OPERATE VIA WALL SWITCH ② PROVIDE ROOF DISCHARGE CAP.											



GAS FIRED UNIT HEATER

1  
M2.1



CEILING MOUNTED EXHAUST FAN DETAIL

NOT TO SCALE

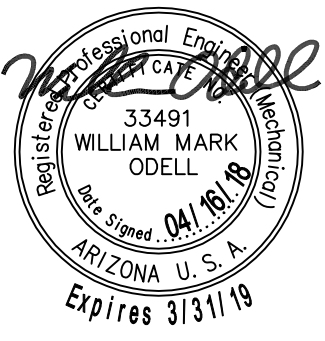
2  
M2.1



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ARCHITECTURE & PLANNING

DRAWING: Mechanical Schedules and Details

PROJECT: 2nd Hand Man on Granite Street 535 S. Granite Street Prescott, AZ 86303

APN: 109-14-033

DRAWN BY
CHECKED BY
DATE March 21st, 2018
JOB NO. 715
SHEET

M2.1

WATER CALCULATION:

FIXTURE UNITS = 36 FU / 23 GPM

PIPE LENGTH TAP TO METER 60 FT.  
PIPE LENGTH METER TO FARTHEST FIXTURE 105 FT.  
VERTICAL PIPE LENGTH TO HIGHEST FIXTURE 5 FT.  
TOTAL PIPE LENGTH 170 FT.  
FITTING LOSS 43 FT.

TOTAL DEVELOPED LENGTH 213 FT.

WATER PIPE SIZING CRITERIA

STREET PRESSURE 65.00 PSI\*  
WATER METER LOSS (5/8") 6.50 PSI  
BACKFLOW PREVENTER LOSS (3/4") 12.00 PSI  
STATIC LOSS (5' x 0.43) 2.15 PSI  
FIXTURE LOSS 20.00 PSI  
PRESSURE AVAILABLE FOR PIPING 24.35 PSI

24.35 PSI / 213 FEET x 100 = 11.4 PSI MAXIMUM ALLOWABLE DROP PER 100 FEET PIPE LENGTH

PIPING SIZED AT 10 PSI ALLOWABLE DROP PER 100 FT.

\*ASSUMED WATER PRESSURE- CONTRACTOR TO VERIFY ACTUAL PRESSURE PRIOR TO CONSTRUCTION. IF PRESSURE IS LESS THAN 65 PSI CONTRACTOR SHALL CONTACT ENGINEER FOR PIPE SIZING EVALUATION.

BRANCH PIPE SIZING CHART FOR 10 PSI LOSS

PIPE SIZE	G.P.M.	F.U.(TANK)
1/2"	4	4
3/4"	10	13
1"	20	30

FIXTURE UNIT CALCULATIONS

DESCRIPTION	QTY	F.U. EACH		TOTAL F.U.	
		WASTE	WATER	WASTE	WATER
WATER CLOSET (FT)	2	4	5	8	10
LAVATORY	2	1	2	2	4
ELECTRIC WATER COOLER	1	1	1	1	1
MOP SINK	1	2	3	2	3
FUTURE FIXTURES					18
TOTAL FU =				36	

PLUMBING GENERAL NOTES:

- ALL PLUMBING WORK SHALL COMPLY WITH THE MOST STRINGENT OF APPLICABLE CODES, ORDINANCES, OR THE SPECIFICATIONS.
- ALL FIXTURES SHALL BE PROPERLY VENTED TO THE ATMOSPHERE.
- COORDINATE LOCATION OF ALL PLUMBING LINES WITH DUCTWORK AND ELECTRICAL SERVICES.
- WATER PIPING INSTALLED UNDER CONCRETE SLAB SHALL BE LOOPED IN PARTITION WALLS WITH NO JOINTS UNDER SLAB & WITH PLASTIC SLEEVE FOR EACH PENETRATION THROUGH SLAB.
- ALL WATER PIPING TO BE CONTROLLED BY FULL FLOW BALL VALVE.
- LOCATE ALL VENTS THROUGH ROOF 10'-0" FROM ALL AIR INTAKES, EVAPORATIVE COOLERS, ETC.
- VERIFY INVERT ELEVATIONS (WASTE LINES), SIZES, & LOCATIONS OF ALL EXISTING GAS, WATER & WASTE LINES TO WHICH NEW PIPING CONNECTS PRIOR TO MAKING-UP OR INSTALLATION OF PIPING.
- NOT USED.
- LOCATE ALL VALVES, UNIONS, THERMOMETERS, GAUGES, OR OTHER EQUIPMENT REQUIRING FREQUENT READING, REPAIRS, ADJUSTMENTS, INSPECTION, REMOVAL OR REPLACEMENT SO AS TO BE ACCESSIBLE WITH REFERENCE TO THE FINISHED BUILDING.
- FULL WAY VALVE IS REQUIRED ON THE DISCHARGE SIDE OF EACH METER AND AT THE COLD WATER SUPPLY TO EACH WATER HEATER.
- INSTALL APPROVED DIELECTRIC ISOLATORS AT ALL CONNECTIONS OF DISSIMILAR METALS.
- REFER TO PLUMBING FIXTURE SCHEDULE FOR INDIVIDUAL LINE SIZES.
- WHERE POSSIBLE, TIE VENTS TOGETHER SO THAT A MINIMUM NUMBER TERMINATE THROUGH ROOF.
- PRIOR TO SUBMITTING BID, CONTRACTOR SHALL REVIEW THE ARCHITECTURAL DRAWINGS & INCLUDE IN HIS BID AN AMOUNT TO FURNISH & INSTALL ANY FIXTURES SHOWN IN ADDITION TO PLUMBING DRAWINGS.
- SOLDERS AND FLUX HAVING A LEAD CONTENT IN EXCESS OF TWO-TENTHS OF ONE PERCENT SHALL NOT BE USED IN THE INSTALLATION OR REPAIR OF PLUMBING PROVIDING WATER FOR HUMAN CONSUMPTION.
- CONTRACTOR SHALL NOT CUT HOLES IN STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN APPROVAL FROM THE ARCHITECT.
- ROUGH-IN ALL WATER & WASTE PIPING TO SPECIAL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS' SHOP DRAWINGS. VALVE ALL SUPPLIES AND MAKE FINAL CONNECTIONS.

GAS PIPING NOTES:

- MINIMUM DEPTH OF GAS PIPING TO BE 18" BELOW GRADE.
- GAS PIPING SHALL NOT BE INSTALLED IN OR ON THE GROUND UNDER ANY BUILDING.
- GAS PIPING SHALL NOT RUN IN HOLLOW CORE OF BLOCK.
- PROVIDE SHUT-OFF COCK, UNION AND 6" LONG DIRT LEG WITH CAP AT EACH GAS LINE DROP TO APPLIANCE.
- ALL GAS USING EQUIPMENT TO BE NATURAL FUEL.
- DO NOT USE FLEXIBLE PIPE CONNECTIONS TO EQUIPMENT.
- ALL GAS PIPING UNDER ASPHALT OR CONCRETE PAVING ADJOINING BUILDING MUST BE SLEEVED IN GAS TIGHT PIPE (SCHEDULE 40 PVC PIPE), SLEEVE SIZE SHALL (MINIMUM) 2 PIPE SIZES LARGER THAN THE GAS PIPE.
- ALL GAS PIPING, MATERIALS, VALVES, FITTINGS, INSTALLATION AND TESTING SHALL COMPLY WITH CHAP. 4, INTERNATIONAL FUEL GAS CODE.
- VERIFY ALL GAS BTU/H INPUTS WITH ACTUAL BTU/H INPUT OF APPLIANCE SUPPLIED.
- ALL GAS LINES INSTALLED THROUGH CMU WALLS, ETC., SHALL BE SLEEVED WITH STEEL PIPE A MINIMUM OF (2) (TWO) PIPE SIZES LARGER THAN THE GAS PIPE.

PLUMBING NOTE:

ALL PLUMBING FIXTURES SHALL BE OF A LOW-FLOW DESIGN WHICH LIMITS THE WATER FLOW NOT TO EXCEED THE FOLLOWING:

WATER CLOSETS: 1.6 GALLONS PER FLUSH  
LAV FAUCETS: .5 GALLONS PER MINUTE

PLUMBING NOTES:

- WATER PIPING LOCATED IN EXTERIOR WALLS SHALL BE INSTALLED ON THE BUILDING INTERIOR SIDE OF THE BLDG. INSULATION.
- EXTERIOR WATER PIPING SHALL BE INSTALLED BELOW FROST LINE.

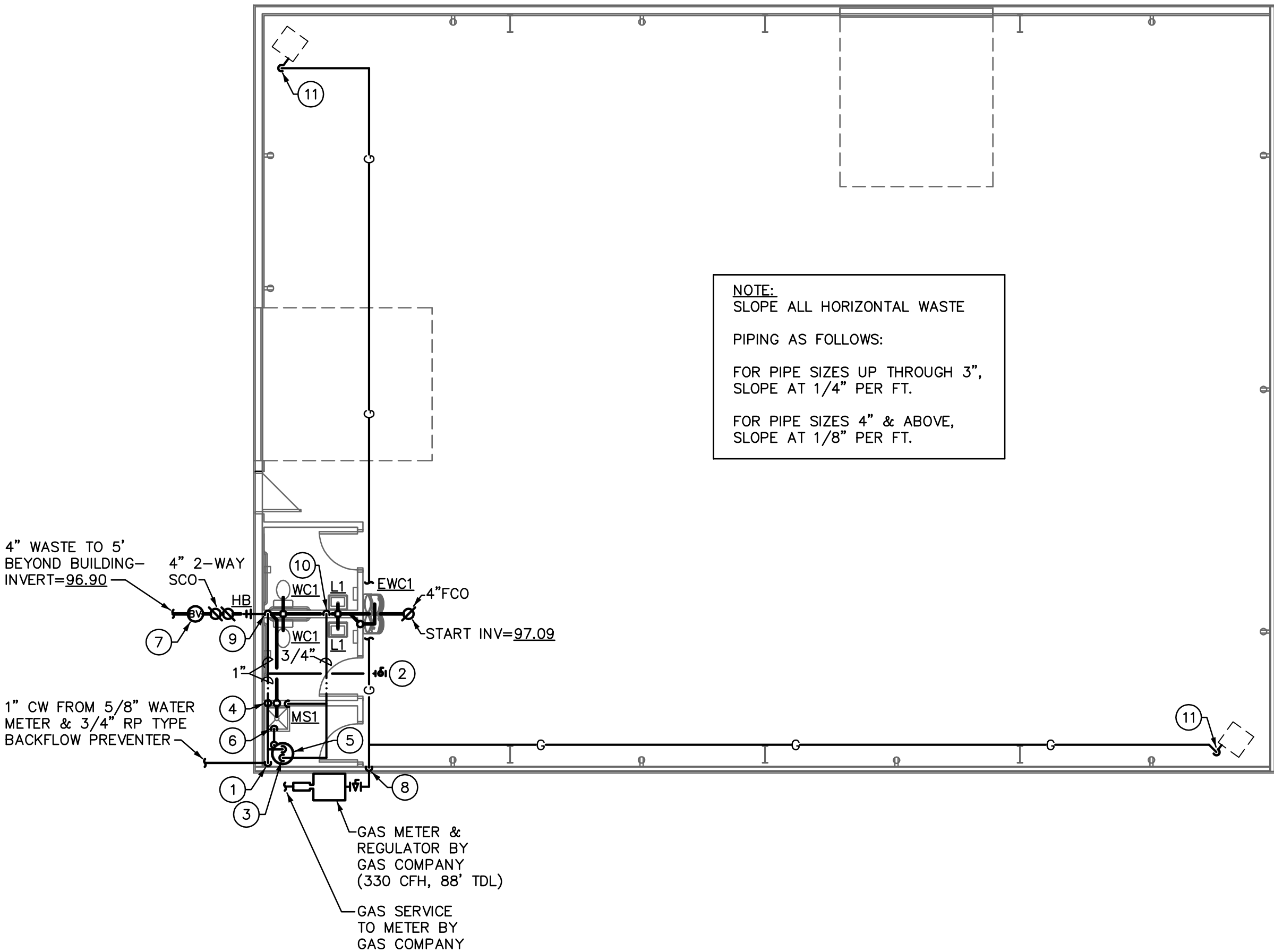
PLUMBING LEGEND

SYMBOL	ABBR.	DESCRIPTION
— — — — —	W	WASTE PIPING
- - - - -	V	VENT PIPING
— — — — —	CW	COLD WATER PIPING
— — — — —	HW	HOT WATER PIPING
— — — — —	G	NATURAL GAS PIPING
— — — — —	BV	BALL VALVE
— — — — —	FCO, SCO	FLOOR OR SURFACE CLEANOUT
— — — — —	WCO	WALL CLEANOUT
— — — — —	VTR	VENT THRU ROOF
— — — — —	HB	HOSE BIBB

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Plumbing Plan

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



KEYNOTES:

- 1" CW RISE FROM BELOW GRADE TO ROUTE ABOVE CEILING. PROVIDE BALL VALVE (BLDG. SHUTOFF) ON RISER AT +6" A.F.F.; PROVIDE PRESSURE REDUCING VALVE (PRV) SET AT 80 PSI ON RISER AT +12" A.F.F.
- PROVIDE 1" CAPPED CW STUBOUT AT CEILING FOR FUTURE TENANT IMPROVEMENT.
- 3/4" H & CW DOWN TO WATER HEATER.
- 1/2" H & CW DOWN TO MOP SINK.
- ELECTRIC WATER HEATER- SEE DETAIL & SCHEDULE, SHEET P3.0.
- FULL SIZE P&T RELIEF DRAIN LINE DOWN TO TERMINATE +2" ABOVE MOP SINK RIM WITH 90° ELBOW DOWN.
- PROVIDE BACKWATER VALVE TO COMPLY WITH CITY OF PRESCOTT REQUIREMENTS.
- GAS OUT OF METER & ENTER BLDG; RISE TO ROUTE AT CEILING.
- 1" CW DOWN TO 1" HEADER, WITH 3/4" TO NON-FREEZE HOSE BIBB, 1/2" TO EACH WC, 1/2" TO EACH LAV, & 1/2" TO ELECTRIC WATER COOLER.
- 3/4" HW DOWN TO 3/4" HEADER, WITH 1/2" TO EACH LAV.
- GAS DOWN TO VALVED CONNECTION TO UNIT HEATER.

REVISIONS	BY

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ARCHITECTURE & PLANNING

DRAWING: Plumbing Floor Plan

PROJECT: 2nd Hand Man on Granite Street  
535 S. Granite Street  
Prescott, AZ 86303

APN: 109-14-033

DRAWN BY

CHECKED BY

DATE  
March 21st, 2018

JOB NO.  
715

SHEET

P2.0

PLUMBING SPECIFICATIONS:

1. GENERAL

1.1 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.

1.2 Submittals: Within 15 days after award of contract, submit 8 copies of all items.

1.3 Record Drawings: Provide a set to the Architect at completion of project.

1.4 Instructions: Provide maintenance manual and instruct Owner in the proper operation and maintenance of the equipment.

1.5 Guarantee: One year on labor, material and equipment.

2. PRODUCTS

2.1 Piping:

2.1.1 Water Lines:

2.1.1.1 Copper: Type "L" hard drawn, conforming to ASTM B88, for all water pipe not set under concrete or in the ground.

2.1.1.2 Copper: Type "K" soft drawn, conforming to ASTM B88, for water pipe set in or under concrete or in the ground. Wrap lines below concrete floors with 20 mils of polykon tape.

2.1.1.3 Fittings: Wrought copper conforming to ANSI B16.22.

2.1.1.4 Plastic: If permitted by Administrative Authority, IAPMO approved, NSF-61 listed, crosslinked polyethylene (PEX) tubing, equal to Wirsbo "AQUAPEX" system is acceptable for potable water piping.

2.1.2 Sanitary Waste and Vent Lines:

2.1.2.1 Cast Iron conforming to CISPI Standard 301-95 and ASTM A-888 for all no-hub pipe and fittings installed above and below grade.

2.1.2.2 Galvanized Iron: Standard weight, Schedule 40 galvanized iron conforming to ASTM A-120 for all vent lines 2-1/2" or smaller.

2.1.2.3 Fittings (Waste and Vent System, no-hub cast iron): No-hub cast iron drainage pattern fittings conforming to CISPI #301-95.

2.1.2.4 Fittings (Waste and Vent, galvanized steel): Threaded cast iron fittings conforming to ANSI B16.4.

2.1.2.5 Couplings (Waste and Vent, above and below grade): Double band, stainless steel couplings conforming to CISPI 310-95, with neoprene gasket conforming to ASTM Standard C564 (NOTE: Screened stainless shield is not approved).

2.1.2.6 Plastic: Subject to Owner approval, PVC piping conforming to ASTM D-2665-88 is acceptable for sanitary waste piping installed below grade or slab. Fittings: Drainage fittings to match pipe.

2.1.3 Gas Piping:

2.1.3.1 Gas Piping, interior above slab: Schedule 40 black steel conforming to ASTM A53. Fittings shall conform to the following:

2.1.3.1.1 Pipe 1-1/2" and Smaller: 150 psi, black malleable iron, conforming to ANSI B16.3, 150 psi SWP.

2.1.3.1.2 Pipe 2" and Larger: Black steel seamless welding fittings conforming to ANSI B16.9 and USAS B16.25, 150 psi SWP.

2.1.3.1.3 Unions: Black malleable iron screwed connections, ground iron-to-bronze seat, conforming to ASTM A47, 250 psi SWP.

2.1.3.1.4 Flanges: Black forged steel with weld neck flanges conforming to ANSI B16.5, 150 psi SWP.

2.1.3.2 Gas Piping, above grade or slab, exterior: Schedule 40 galvanized steel, conforming to ASTM A53. Fittings: 150# galvanized steel screwed fittings.

2.2 Pipe Hangers and Supports: Fee & Mason Figure 103 clevis hanger for insulated pipe and Figure 104 clevis hanger for cast iron pipe. Install #500 Trisolators on uninsulated copper lines at all hangers and wall penetrations.

2.3 Pipe Insulation: Use fiberglass premoiled insulation with all-service jacket, minimum density of 3.5 pcf. Provide an additional 8-ounce canvas jacket with Arabol finish around all exposed pipe insulation. Cover fittings and valves (except unions) with insulation cement worked on in two applications to a smooth, hard surface, flush with pipe covering. Provide 8" long, 20 gauge, galvanized iron metal insulation guards at locations of hanger rods and supports. Provide 12" long rigid insulation blocks on bottom half of pipe 1" and larger at hangers. Insulation wall thickness shall conform to the following schedule:

Domestic Hot Water Lines:

Mains and horizontal branches - 1" thickness.  
Drops in walls and partitions - 1/2" thickness.

2.4 Valves:

2.4.1 Gate Valves: Milwaukee #115, 125#, bronze body, solder type gate valve with nonrising stem for all lines up through 3" size.

2.4.2 Check Valves: Milwaukee #1509, 125#, bronze body, solder joint check valve with horizontal bronze disc for all valves up to 2" size. Milwaukee #2974, 125#, iron body, bronze trimmed, flanged horizontal check valve for all valves larger than 2" size.

2.4.3 Shutoff Valve: Milwaukee BB1-350 bronze body, solder joint valve for all lines up through 2".

2.4.4 Gas Valves, 3/4" and Smaller: Milwaukee BB-1-102.

2.4.5 Gas Valves, 1" to 1-1/2": Rockwell-Nordstrom #142 with #555 lubricant for natural gas service.

2.4.6 Gas Valves, 2" and Larger: Rockwell-Nordstrom #143 with #555 lubricant for natural gas service.

2.5 Cleanouts:

2.5.1 Concrete and Tile Floors: J.R. Smith 4023, with scoriated nickel-bronze top.

2.5.2 Cleanouts (exposed vertical piping): J.R. Smith 4512 cast iron branch cleanout tee with bronze plug.

2.5.3 Interior Finished Walls: J.R. Smith 4532.

2.5.4 Exterior Surface Cleanouts: J.R. Smith 4253. Provide 18" x 18" x 6" concrete pad at landscape areas; provide concrete ring below grade at asphalt areas.

2.5.5 Provide all cleanouts with heavy threaded bronze plugs.

2.6 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:

Plumbing Fixtures: American Standard, Kohler, Eljer.

Mop Sinks: Fiat, Swan, Mustee.

Water Heaters: Rheem, A.O. Smith, American Mor-Flo.

Electric Water Coolers: Oasis, Elkay, Halsey Taylor.

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

P-Traps: Crane, Kohler, Eljer, Frost, McGuire.

Supply Fittings: Chicago, American Standard, Eljer, Speakman, Kohler.

Supply Stops: Eastman, Kohler, Eljer, Brasscraft, McGuire.

Closet Seats: Sperzel, Olsonite, Beneke, Bemis.

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

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

2.7 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 Sediart white silicone caulking compound. See Plumbing Fixture Specification Schedule for complete fixture specifications.

3. EXECUTION

3.1 Tests and Inspections:

3.1.1 All work to be tested and approved before covering as directed by Architect. Remake all leaking joints.

3.1.2 Water System: 125 psi hydrostatic pressure held for four hours.

3.1.3 Sanitary Waste and Vent System: Fill with water to highest point in the system and let stand without loss for two hours.

3.1.4 Gas System: Hold at 50 psi pneumatic for four hours with no pressure loss.

3.1.5 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-8-120 or hypochlorite conforming to Fed. Spec. Q-C-114, Type II, Grade C, or Fed. Spec. Q-S-602, Grade A or B. The chlorinating material shall provide a dosage of not less than 50 parts per million and shall be introduced into the system in an approved manner, and retained in the system for 8 hours before flushing.

3.2 Flashing, Sleeves and Escutcheon Plates:

3.2.1 Flashing: Supply flashing for all vent pipe and other types of piping through roof to be installed with roofing. Flash vents with Stoneman S1300-4 or with sheet lead weighing not less than 4 pounds per square foot or equal. Extend flashing into roofing at least 10" from vent and turn flashing over and down into vent opening.

3.2.2 Sleeves: Use 20 gauge galvanized steel sleeves around pipes passing through masonry walls and concrete slabs.

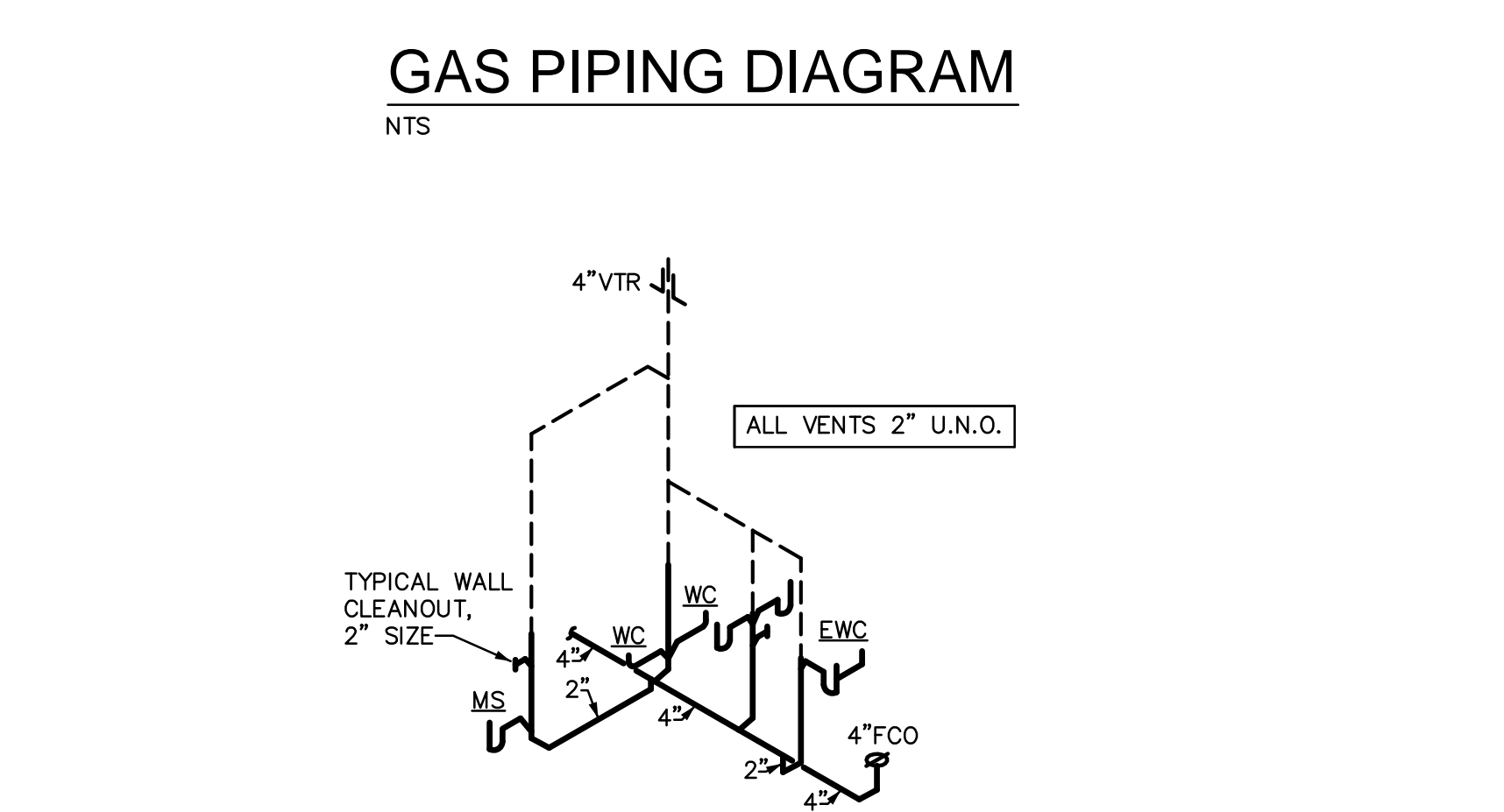
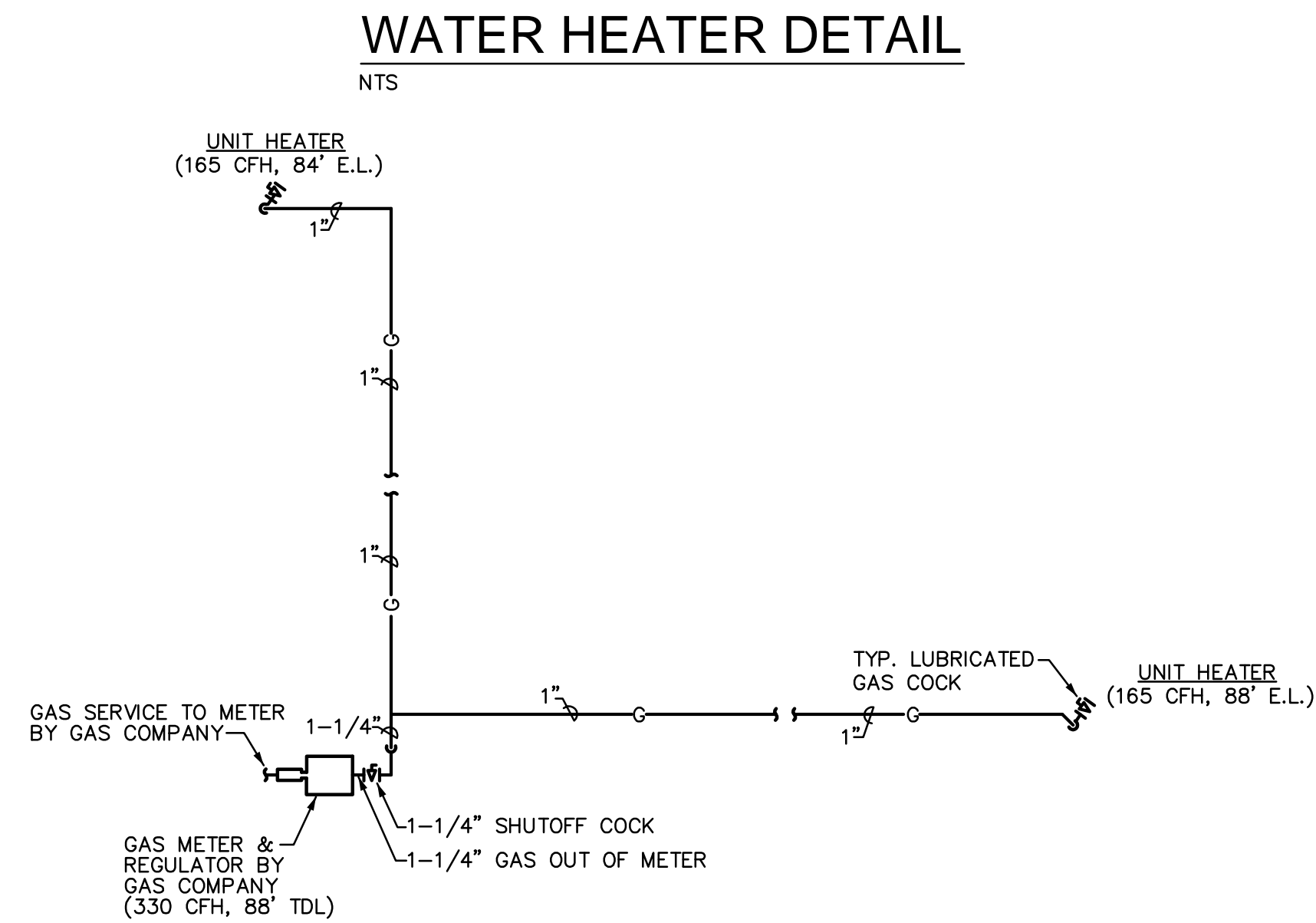
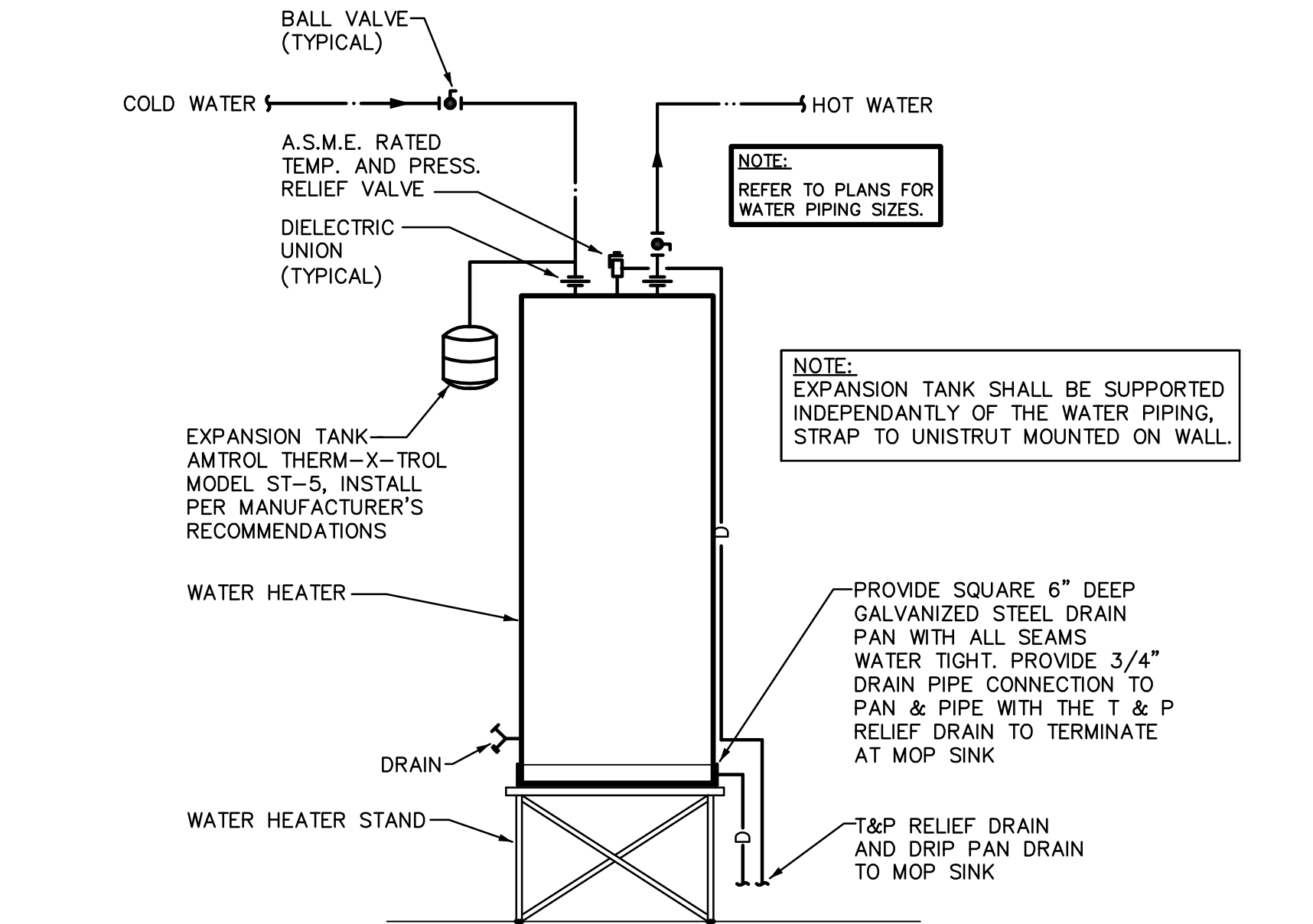
3.2.3 Escutcheon Plates: Install cast brass split ring with setscrew at all locations where exposed pipes pass through walls, floors and/or ceilings. Provide polished chrome-plated escutcheons in finished rooms, all others polished brass.

3.3 Electrical: Wiring by Electrical Contractor.

PLUMBING FIXTURE SPECIFICATIONS	
SYMBOL	DESCRIPTION
WC-1	WATER CLOSET (ADA COMPLIANT): FIXTURE: AMERICAN STANDARD "CADET PRO" 215AA-104, 1.28 GALLONS PER FLUSH, 16-1/2" HIGH RIM, FLOOR MOUNTED, VITREOUS CHINA, ELONGATED BOWL. SEAT: CHURCH 9500 WHITE OPEN FRONT SEAT WITH CONCEALED CHECK HINGE AND WITHOUT COVER. SUPPLIES: EASTMAN C5CR-20-LK, 1/2" x 3/8" ANGLE STOP WITH FLEXIBLE TUBE RISER.
L-1	LAVATORY (WALL HUNG- ADA COMPLIANT): FIXTURE: AMERICAN STANDARD, MODEL No. 0355.012, WALL HUNG 20" x 18" VITREOUS CHINA, FRONT OVERFLOW. FAUCET: AMERICAN STANDARD "RELIANT 3" MODEL 7385.050, 4" CENTERSET FAUCET WITH CERAMIC DISC CARTRIDGE, METAL SINGLE LEVER ADA HANDLE, ADJUSTABLE HOT LIMIT SAFETY STOP, CAST BRASS WATERWAY, 0.5 GPM MAXIMUM FLOW RATE. AERATOR. WATTS DRAINAGE #CA-411 FLOOR MOUNTED CONCEALED ARM LAVATORY CARRIER. SUPPLIES: EASTMAN C5RC-15-LK, ANGLE STOPS WITH FLEXIBLE TUBE RISERS. WASTE: MCGUIRE 155WC, OFFSET WHEELCHAIR LAVATORY STRAINER WITH GRID DRAIN, CAST BRASS ELBOW AND OFFSET TAILPIECE. TRAP: MCGUIRE 8902, 1-1/4" x 1-1/2" CAST BRASS P TRAP. INSULATE EXPOSED WATER AND WASTE PIPING WITH TRUEBRO LAV-GUARD INSULATION KIT, MODEL 102, WITH ACCESSORY #105.
EW-1	ELECTRIC DRINKING FOUNTAIN (HIGH-LOW TYPE): FIXTURE: OASIS MODEL No. PB8MSL, WALL MOUNTED BARRIER FREE SPUT-LEVEL. ELECTRIC WATER COOLER WITH CAPACITY OF 7.8 GPH AT 90° F AMBIENT AT 80° F INLET AND 50° F OUTLET. COMPRESSOR: 1/5 HP, 120 VOLT, HERMETICALLY SEALED WITH CAPACITOR AND OVERLOAD PROTECTION. COOLER MANUFACTURER SHALL PROVIDE A 5-YEAR, 100% REPLACEMENT WARRANTY ON THE COMPRESSOR, CONTROLS, TANK AND INTEGRAL PIPING. SUPPLY: EASTMAN C5RC-15-LK, 1/2" x 3/8" ANGLE STOP WITH FLEXIBLE TUBE RISER. TRAP: MCGUIRE 8902 1-1/4" x 1-1/2" CAST BRASS P TRAP. REFER TO ARCHITECTURAL DRAWINGS FOR UNIT MOUNTING HEIGHTS.
MS-1	MOP SINK: FIXTURE: FIAT MODEL MSB-2424, 24" x 24" x 10", FLOOR MOUNTED, MOLDED STONE WITH INTEGRAL STAINLESS STEEL STRAINER EXTENSION. FAUCET: CHICAGO FAUCET 897 CHROME-PLATED SUPPLY FITTING WITH INTEGRAL STOPS, VACUUM BREAKER, 3/4" HOSE THREAD, FLEXIBLE 3/4" RUBBER HOSE AND HOSE BRACKET; MOP HANGER: SILICONE SEALANT INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. TRAP: PROVIDE 2" P TRAP.
WH-1	ELECTRIC WATER HEATER: PPROVIDE UL LISTED ELECTRIC WATER HEATER OF SIZE, CAPACITY AND MAKE AS SCHEDULED. HEATER SHALL BE WARRANTED FOR A MINIMUM OF 5 FULL YEARS AFTER FINAL ACCEPTANCE OF THE BUILDING. FURNISH HEATER WITH THE FOLLOWING ACCESSORIES: 1. ASME COMBINATION TEMPERATURE AND PRESSURE RELIEF VALVE RATED IN EXCESS OF HEATER INPUT, RUN FULL SIZE DRAIN TO TERMINATE AS SHOWN ON DRAWINGS. 2. AUTOMATIC THERMOSTAT ACTUATED CONTROLS WITH 100% SHUTOFF. 3. HIGH-LIMIT CONTROLS. 4. TANK DRAIN. 5. BRASS NIPPLES FOR PIPE CONNECTIONS. 6. HEATER SHALL BE FACTORY INSULATED AND SHEET METAL JACKETED.
HB	HOSE BIBB: WOODFORD MODEL No. 65, NON-FREEZE TYPE, CHROME PLATED FINISH, 3/4" HOSE CONNECTION WITH INTEGRAL VACUUM BREAKER, LOOSE TEE KEY HANDLE.

FIXTURE CONNECTION SCHEDULE							
MARK	DESCRIPTION	TRAP SIZE	WASTE	VENT	COLD WATER	HOT WATER	REMARKS
WC-1	WATER CLOSET (ADA)	INT.	3"	2"	1/2"	-	FLUSH TANK, FLOOR MOUNT
L-1	LAVATORY	1-1/4" x 1-1/2"	2"	1-1/2"	1/2"	1/2"	ADA COMPLIANT, WALL MOUNTED
EW-1	ELECTRIC WATER COOLER	1-1/4" x 1-1/2"	2"	1-1/2"	1/2"	1/2"	SPLIT LEVEL ADA COMPLIANT
MS-1	MOP SINK	2"	2"	1-1/2"	1/2"	1/2"	FLOOR TYPE
HB-1	HOSE BIBB	-	-	-	3/4"	-	FREEZE PROOF WITH INTEGRAL VACUUM BREAKER

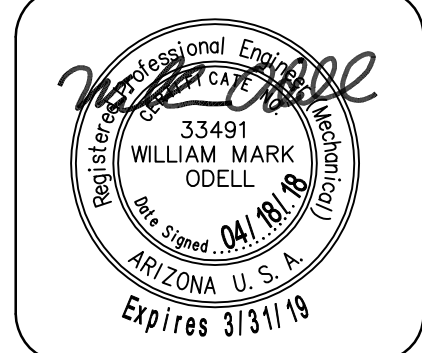
ELECTRIC WATER HEATER SCHEDULE								
MARK	MANUFAC.	MODEL	STORAGE CAPACITY IN GALS.	KW INPUT	VOLTAGE/ PHASE	GALLON PER HR. REC. AT 100° F T.R.	WATER OUTLET TEMP °F	REMARKS
WH-1	RHEEM	EGSP10	10	2	120/1	8.0	140	



WASTE AND VENT SCHEMATIC

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**ARCHITECTURE & PLANNING**

**DRAWING:** Plumbing Schedules and Details  
**PROJECT:** 2nd Hand Man on Granite Street  
535 S. Granite Street  
Prescott, AZ 86303  
**APN:** 109-14-033

DRAWN BY
CHECKED BY
DATE March 21st, 2018
JOB NO. 715
SHEET

**P3.0**

## ELECTRICAL SYMBOLS

NOTE: NOT ALL SYMBOLS ARE USED ON THIS PROJECT

	FLUORESCENT FIXTURE, WITH FIXTURE DESIGNATED BY LETTER. SMALL LETTER INDICATES SWITCH LEG
	NIGHT LIGHT- NOT SWITCHED
	FLUORESCENT STRIP FIXTURE.
	CEILING OR WALL MOUNTED FIXTURE.
	PORCELAIN PULL CHAIN FIXTURE
	JUNCTION BOX
	JUNCTION BOX WITH FLEX CONNECTION.
	SINGLE FACE EXIT SIGN- NOT SWITCHED
	DOUBLE FACED EXIT SIGN- NOT SWITCHED.
	TWO HEAD EMERGENCY LIGHT WITH BATTERY.
	POLE-MOUNTED FIXTURE - No. OF LUMINAIRES AS SHOWN & SCHEDULED
	S SINGLE POLE SWITCH, + 48" A.F.F. (20A-120/277V)
	S3 THREE WAY SWITCH, + 48" A.F.F. (20A-120/277V)
	S4 4-WAY SWITCH +48" AFF (20A-120/277V)
	S <sub>P</sub> SWITCH AND PILOT LIGHT (20A-120-/277V)
	S <sub>K</sub> SINGLE POLE SWITCH, KEY OPERATED (20A)
	ⓓ DIMMER CONTROL, + 48" A.F.F. EQUAL TO LUTRON "NOVA" SERIES, SIZED TO MATCH LOAD SERVED
	Ⓢ VARIABLE SPEED FAN CONTROL, +48" A.F.F.
	Ⓛ DUPLEX RECEPTACLE, + 18" A.F.F. (20A)
	Ⓛ DUPLEX RECEPTACLE ABOVE COUNTER, VERIFY HEIGHT. (20A)
	Ⓛ FOURPLEX RECEPTACLE, + 18" A.F.F. (20A)
	Ⓛ SPECIAL RECEPTACLE - SIZE & TYPE AS NOTED
	Ⓛ POWER FLUSH FLOOR OUTLET
	▽ TELEPHONE OUTLET PLASTER RING AT + 18" A.F.F. HUBBELL #12 COVERPLATE. 3/4" C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUN, + 18" A.F.F.
	▽ DATA SYSTEM OUTLET, 4" SQUARE BOX AND COVERPLATE. 3/4" C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUN, + 18" A.F.F.
	▽ TELE/DATA COMBO OUTLET, 4" SQUARE BOX AND COVERPLATE. 3/4" C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUN, + 18" A.F.F.
	▽ CABLE TELEVISION (CATV) OUTLET PLASTER RING AT + 18" A.F.F. U.N.O. HUBBELL COVERPLATE. 3/4" C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUNS.
	— T TELEPHONE SYSTEM CONDUIT HOMERUN WITH NYLON PULLWIRE (1" MIN UNO)
	Ⓛ CLOSED CIRCUIT TV (CCTV) OUTLET SAME AS CATV OUTLET
	Ⓛ DOOR CHIME
	Ⓛ REMOTE CONTROL STATION @ +48" AFF
	Ⓛ DISCONNECT SWITCH, FUSE PER EQUIPMENT MANUFACTURERS RECOMMENDATION. OUTSIDE NEMA 3R - N.F. = NON-FUSED.
	Ⓛ COMBINATION STARTER AND FUSIBLE DISCONNECT SWITCH SIZE AS NOTED
	Ⓛ EQUIPMENT TERMINATION CONNECTION POINT VERIFY EXACT LOCATION LOAD AND VOLTAGE AS NOTED
	Ⓛ MOTOR
	Ⓛ THERMAL PROTECTED SWITCH
	Ⓛ MOTOR STARTER - SHADING INDICATES F.B.O.
	Ⓛ DISTRIBUTION PANELBOARD.
	Ⓛ BRANCH CIRCUIT PANELBOARD.
	— CONDUIT BELOW FLOOR OR UNDERGROUND
	— CONDUIT IN WALL OR ABOVE CEILING
	— HOMERUN TO PANEL, NEUTRAL AND PHASE WIRING DESIGNATION (SEE GROUNDING NOTE)
	— CONDUIT TURNING UP
	— CONDUIT TURNING DOWN
	— CONDUIT STUB-OUT, MARK AND CAP AS DIRECTED
	— GROUND WIRE (SIZE AS NOTED) EXTENDED AND CONNECTED TO APP'D GROUND

## ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR ( Ⓛ OF OUTLET )
A.F.G.	ABOVE FINISHED GRADE ( Ⓛ OF OUTLET )
E.C.	EMPTY CONDUIT
G.F.I.	GROUND FAULT INTERRUPTER
WP	WEATHERPROOF
UNO	UNLESS OTHERWISE NOTED
NL	NIGHT LIGHT
TYP	TYPICAL
EDF	ELECTRIC DRINKING FOUNTAIN
TMB	TELEPHONE MOUNTING BOARD

## OUTLET MOUNTING HEIGHTS PER AMERICAN DISABILITY ACT

SWITCHES	+48" (MAX)
RECEPTACLES	+18" (MAX)
TELEPHONE	+18" (MAX)
SIDE REACH	+54" (MAX)

ALL WIRING #6 AWG AND LARGER SHALL BE XHHW COPPER. #8 AWG AND SMALLER SHALL BE THHN/THWN COPPER

## OUTLETS INSTALLED IN FIREWALLS

OUTLETS (SWITCHES, RECEPTACLES, ETC.) MOUNTED IN FIRE RATED WALLS SHALL NOT OCCUPY THE SAME WALL CAVITY WITH OTHER OUTLETS WHETHER ON SAME SIDE OR BACK-TO-BACK. RECOMMENDED SPACING IS 24 INCHES HORIZONTAL (MIN).

## SITE RELATED WORK

PRIOR TO COMMENSING WORK AND/OR SUBMITTING BASE BID, THE CONTRACTOR SHALL VISIT THE SITE AND SATISFY HIMSELF TO EXISTING WORK RELATED CONDITIONS WITH REGARDS TO THE FOLLOWING:

- TRENCH AND BACKFILL FOR CONDUITS PER UTILITY CO. REQUIREMENTS. (FIELD VERIFY)
- TRANSFORMER MOUNTING PAD PER UTILITY CO. REQUIREMENTS.
- PROVIDE SECONDARY AND/OR PRIMARY CONDUITS. (SEE ONE LINE DIAGRAM).
- SERVICE ENTRANCE SECTION (SES). VERIFY PROPOSED EQUIPMENT WILL FIT THE SPACE ALLOTTED PRIOR TO ORDERING AND/OR CONSTRUCTION.
- P.V.C. TELEPHONE CONDUIT WITH PULL WIRE AND RIGID FACTORY STEEL BENDS PER TELEPHONE CO. REQUIREMENTS. (SIZE AS NOTED OR REQUIRED BY UTILITY VERIFY PRIOR TO INSTALLATION).
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND COMPLIANCE WITH ALL UTILITY COMPANIES REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO ANY AND ALL ADDITIONAL COSTS FOR MATERIAL AND LABOR FOR WORK WHETHER SHOWN ON THE PLANS OR NOT. ACTUAL ROUTING, CONDUIT, TRENCH AND PAD REQUIREMENTS SHALL BE AS SPECIFIED BY UTILITY COMPANIES. VERIFY REQUIREMENTS WITH UTILITIES PRIOR TO INSTALLATION.
- WHERE APPLICABLE, PROVIDE EQUIPMENT GROUNDING (BOND) CONDUCTOR FOR METALLIC PROCESSING AND FIRE SPRINKLER PIPING PER NEC 250-80 AND SIZED PER NEC 250-95 TABLE.

## FIRE WALL/FLOOR PENETRATION

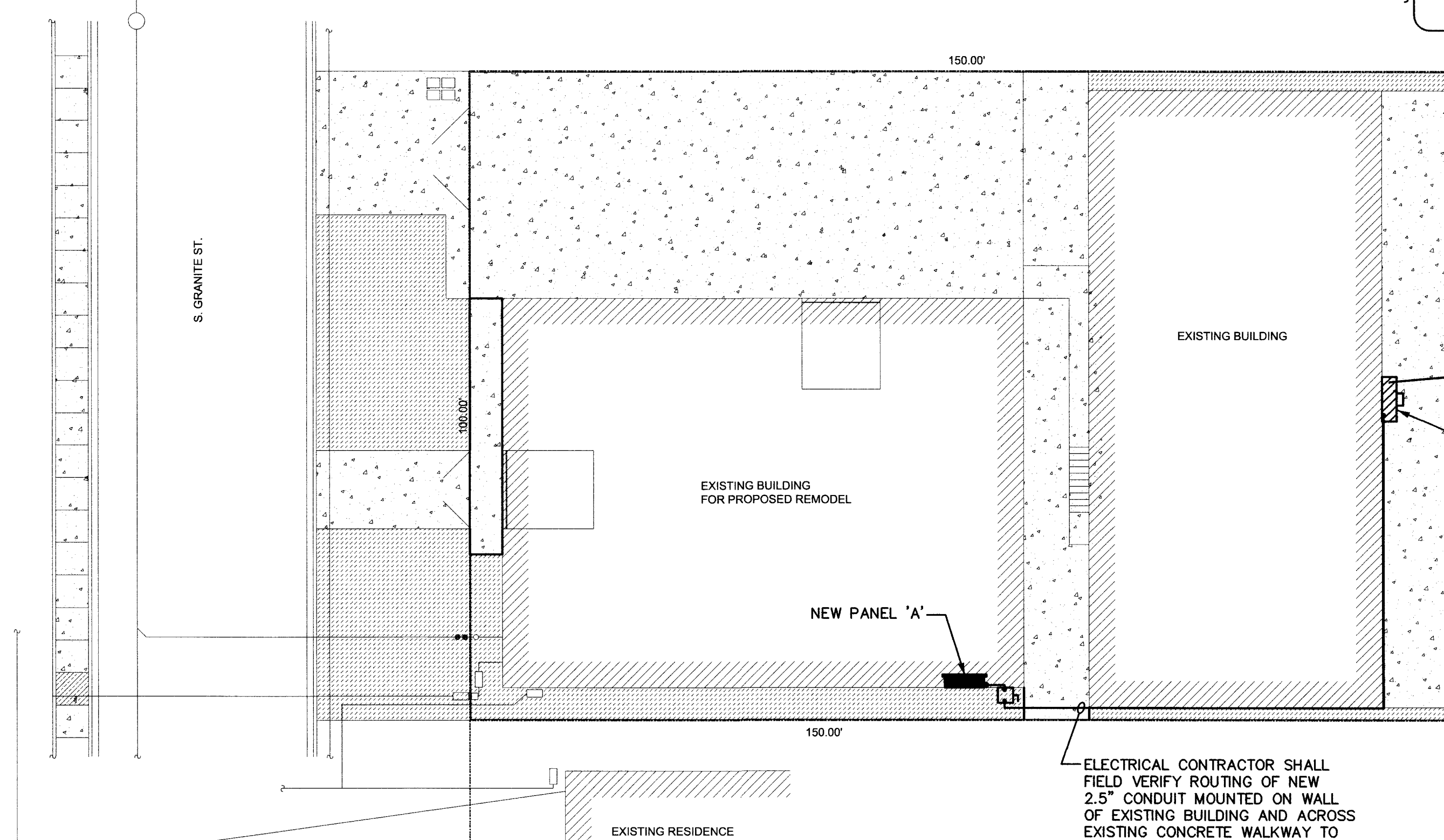
ALL PENETRATIONS OF FIRE RESISTIVE FLOORS OR SHAFT WALLS SHALL BE PROTECTED BY MATERIALS AND INSTALLATION DETAIL THAT CONFORM TO UNDERWRITERS LABORATORY'S LISTINGS FOR THROUGH PENETRATION FIRESTOP SYSTEMS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING DETAILS WHICH SHOW COMPLETE CONFORMANCE WITH THE LISTING TO THE ARCHITECT AND SUCH DRAWINGS SHALL BE AVAILABLE TO THE LOCAL GOVERNING INSPECTORS. THE DRAWINGS SHALL BE SPECIFIC FOR EACH PENETRATION WITH ALL VARIABLES DEFINED.

## SPECIFICATIONS

- PRIOR TO SUBMITTING BID, SUBCONTRACTORS SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH IN ANY WAY AFFECTS THE WORK UNDER HIS CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.
- THE SUBCONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRING PATCHING, PLASTERING, PAINTING AND /OR OTHER REPAIR DUE TO THE INSTALLATION OF ELECTRICAL WORK UNDER THE TERMS OF THE CONTRACT. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED.
- SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS AND BUILDING DETAILS. VERIFY LOCATION OF ALL OUTLETS, SWITCHES, AND WALL MOUNTED LIGHTING FIXTURES WITH ARCHITECTURAL DRAWINGS AND ACTUAL CONDITIONS. VERIFY ALL CEILING TYPES WITH ARCHITECTURAL DRAWINGS BEFORE ORDERING FIXTURES.
- PRIOR TO ROUGH-IN AND FINAL CONNECTION, VERIFY ELECTRICAL CHARACTERISTICS AND EXACT LOCATION OF EQUIPMENT.
- GROUT AND SEAL ALL CONDUIT PENETRATIONS OF WALLS AND FLOOR SLABS TO PRESERVE FIRE RATING AND WATERTIGHT INTEGRITY.
- BRANCH CIRCUIT WIRING SHALL BE THHN/THWN INSULATION. PANEL FEEDERS SHALL BE TYPE XHHW. ALL WIRE SHALL BE COPPER. MINIMUM WIRE SIZE SHALL BE #12.
- ALL WIRING TO BE INSTALLED IN RACEWAYS. TYPE OF RACEWAY SHALL BE AS REQUIRED BY CODE. MINIMUM CONDUIT SIZE SHALL BE 1/2".
- PROVIDE CODE SIZED BOND WIRE IN ALL EMT, FLEXIBLE CONDUIT, OR NM CABLES.
- ALL ELECTRICAL EQUIPMENT SHALL BE NEW, U.L. APPROVED AND COMMERCIAL GRADE.
- WIRE RATED FOR 150° CENTIGRADE SHALL BE USED FOR ALL INCANDESCENT LIGHTING FIXTURES.
- ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST NATIONAL CODE, (N.E.C.), AND ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.
- PROVIDE TYPEWRITTEN DESCRIPTIVE PANEL DIRECTORIES

## NOTE:

TIME CLOCK SHALL BE SEVEN DAY, PROGRAMMABLE, 8-CIRCUIT MIN. W/BATTERY BACK-UP, SET EACH INDIVIDUAL CIRCUIT AS DIRECTED BY ARCHITECT/OWNER.



## Electrical Site Plan

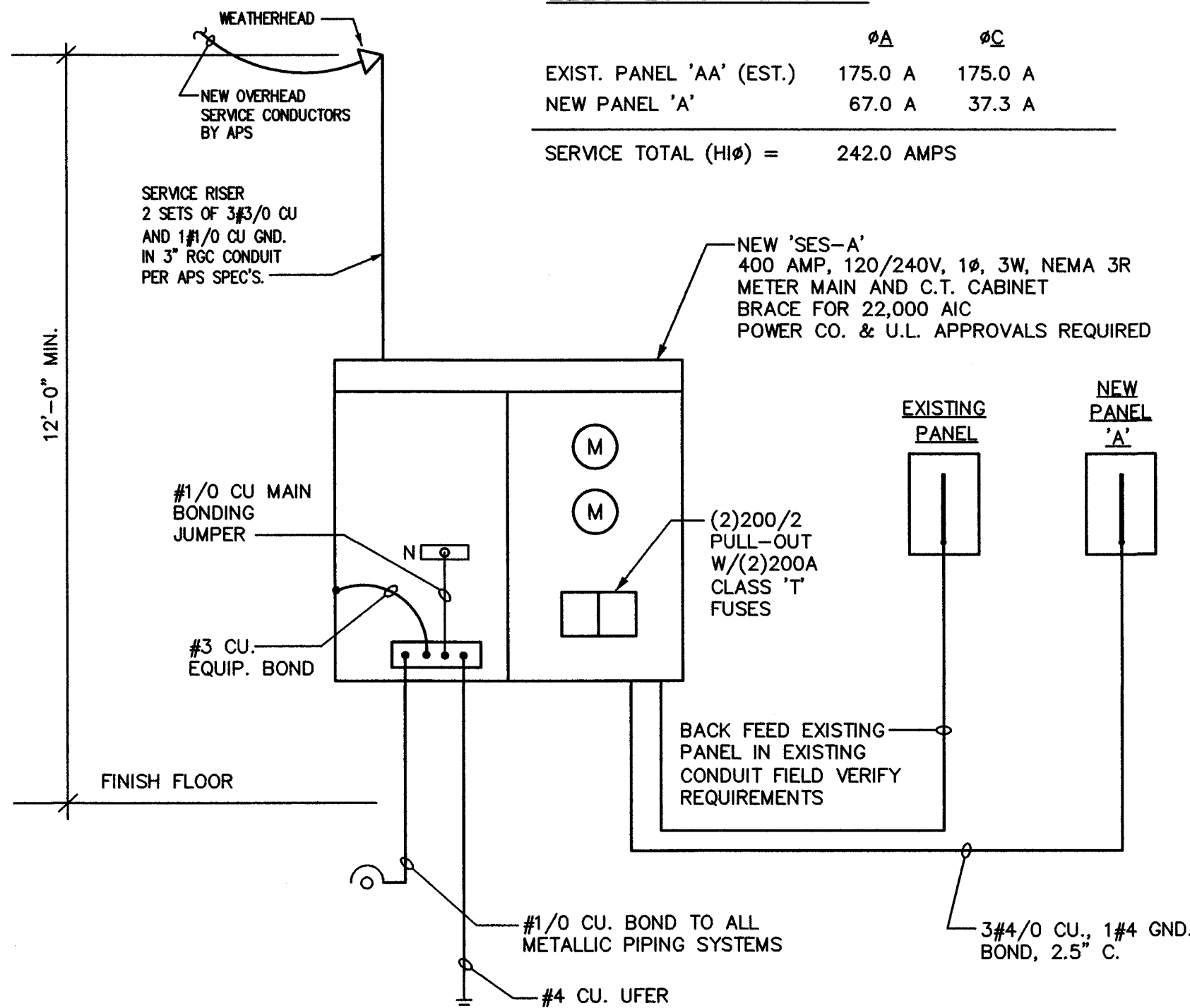
Scale: 1"=20'-0"

MAXIMUM AVAILABLE FAULT CURRENT = 20,955 AMPS SYMM (VERIFY WITH UTILITY COMPANY PRIOR TO ORDERING EQUIPMENT)

## ELEC. LOAD RE-CAP:

	ⓁA	ⓁC
EXIST. PANEL 'AA' (EST.)	175.0 A	175.0 A
NEW PANEL 'A'	67.0 A	37.3 A

SERVICE TOTAL (H10) = 242.0 AMPS



## ELEC. ONE-LINE DIAGRAM - 'SES-A'

NOTE: ALL CONDUCTOR SIZES ARE BASED ON 'XHHW', 'THHN'/'THWN' COPPER.

N.T.S.

## NOTE:

- ALL SUB-PANELS, SERVICE EQUIPMENT, AND EQUIPMENT DISCONNECTS SHALL BE PROVIDED WITH THE WORKING CLEARANCES REQUIRED BY THE LATEST ADOPTED NEC.

ELECTRICAL DESIGN & CADD SERVICES INC.  
1600 LAMB LANE  
PRESCOTT, AZ. 86305  
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REVISIONS	BY

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DRAWING: ELECTRICAL SITE PLAN, ONE-LINE DIAGRAM, PANEL SCHEDULE &amp; NOTES

PROJECT: 2nd Hand Man on Granite Street  
535 S. Granite Street  
Prescott, AZ 86303

APN: 109-14-033

DRAWN BY

CHECKED BY

DATE  
March 21st, 2018JOB NO.  
715

SHEET

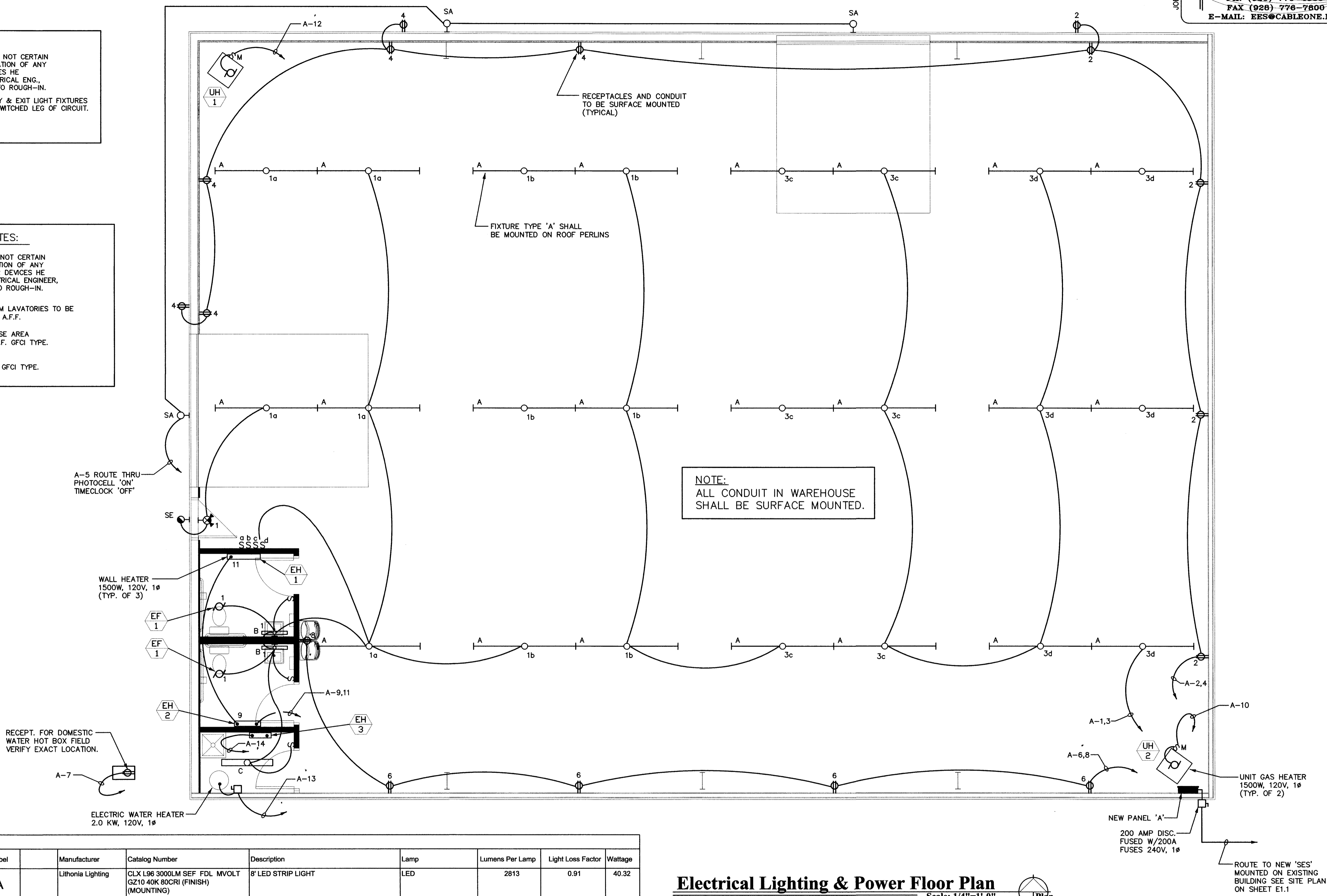
E1.1







GENERAL LIGHTING NOTES:

1. IF ELECTRICAL CONTRACTOR IS NOT CERTAIN OF MOUNTING HEIGHT OR LOCATION OF ANY LIGHTING FIXTURES OR SWITCHES HE IS TO VERIFY ITEMS WITH ELECTRICAL ENG., ARCHITECT OR OWNER PRIOR TO ROUGH-IN.
2. NIGHT LIGHTS (NL), EMERGENCY & EXIT LIGHT FIXTURES SHALL BE CONNECTED TO UNSWITCHED LEG OF CIRCUIT.

GENERAL POWER NOTES:

1. IF ELECTRICAL CONTRACTOR IS NOT CERTAIN OF MOUNTING HEIGHT OR LOCATION OF ANY ELECTRICAL EQUIPMENT AND OR DEVICES HE IS TO VERIFY ITEMS WITH ELECTRICAL ENGINEER, ARCHITECT OR OWNER PRIOR TO ROUGH-IN.
2. ALL RECEPTACLES AT RESTROOM LAVATORIES TO BE GFCI TYPE INSTALLED AT +48" A.F.F.
3. ALL RECEPTACLES IN WAREHOUSE AREA TO BE INSTALLED AT +48" A.F.F. GFCI TYPE.
4. EXTERIOR RECEPTS. TO BE WP, GFCI TYPE.



Schedule									
Symbol	Label		Manufacturer	Catalog Number	Description	Lamp	Lumens Per Lamp	Light Loss Factor	Wattage
	A		Lithonia Lighting	CLX L96 3000LM SEF FDL MVOLT GZ10 40K 80CRI (FINISH) (MOUNTING)	8' LED STRIP LIGHT	LED	2813	0.91	40.32
	B		Lithonia Lighting	WL2 30L LP835	2' WALL MOUNTED LINEAR	LED	3095	0.91	28.19
	C		Lithonia Lighting	CLX L48 3000LM SEF FDL MVOLT GZ10 40K 80CRI (FINISH) (MOUNTING)	4' LED STRIP LIGHT	LED	2813	0.91	20.32
	SA		Lithonia Lighting	DSXW1 LED 20C 1000 40K T4M MVOLT (FINISH)	DSXW1 LED WITH (2) 10 LED LIGHT ENGINES, TYPE T4M OPTIC, 4000K, @ 1000mA.	LED	6909	0.91	73.2
	SE		Lithonia Lighting	AFN (FINISH) PREM WL	DIE-CAST ARCHITECTURAL EMERGENCY LIGHT WITH CAST ALUMINUM HOUSING, TWO LAMPS, POLYCARBONATE PRISMATIC LENS, AND STANDARD WIDE-THROW OPTICS	TWO 6-WATT FROSTED T3-1/4 WEDGE BASE XENON	104	0	12
			Lithonia Lighting	LHQM LED R HO	QUANTUM LED EMERGENCY COMBO	LED			

Electrical Lighting & Power Floor Plan  
Scale: 1/4"=1'-0"

