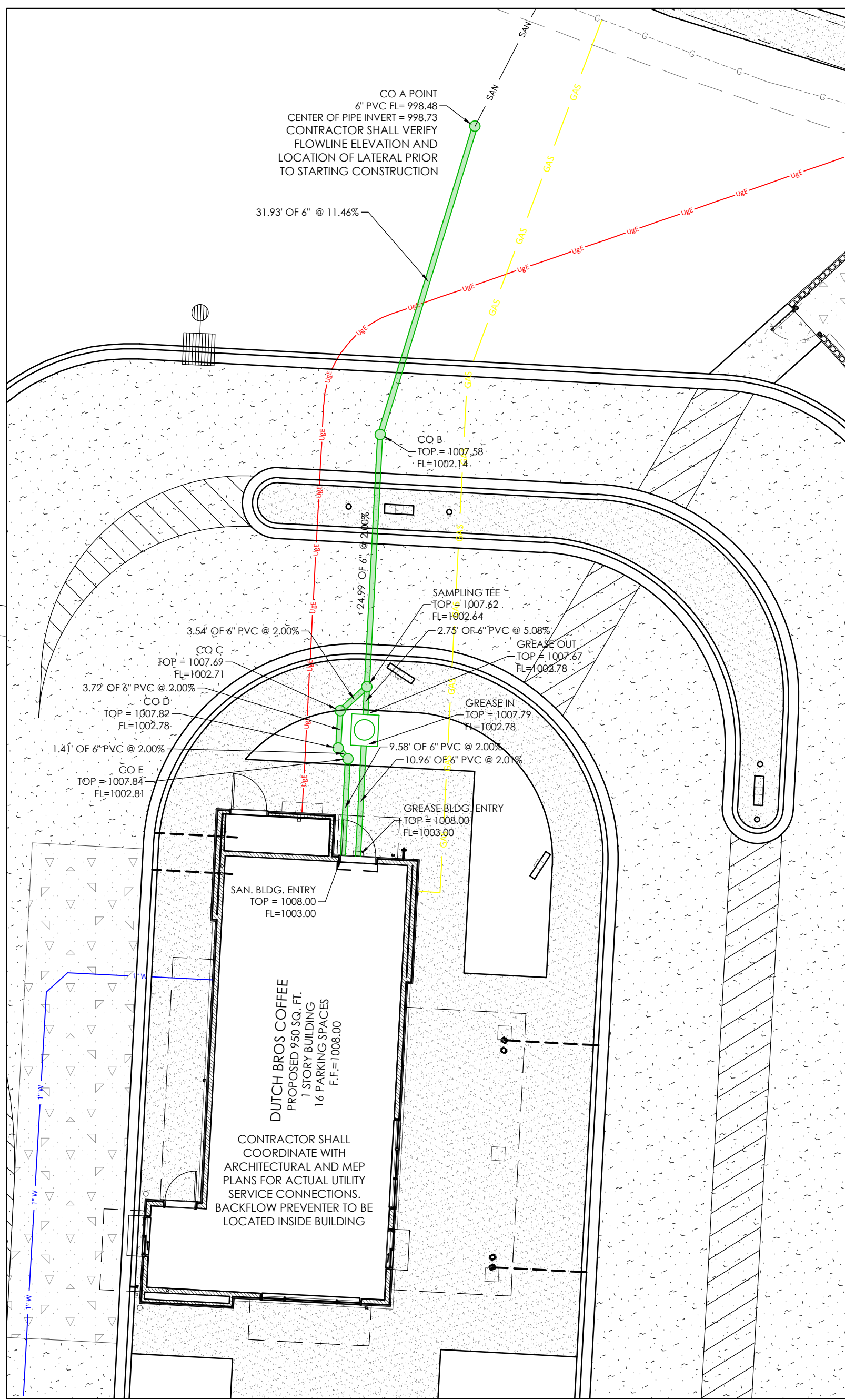
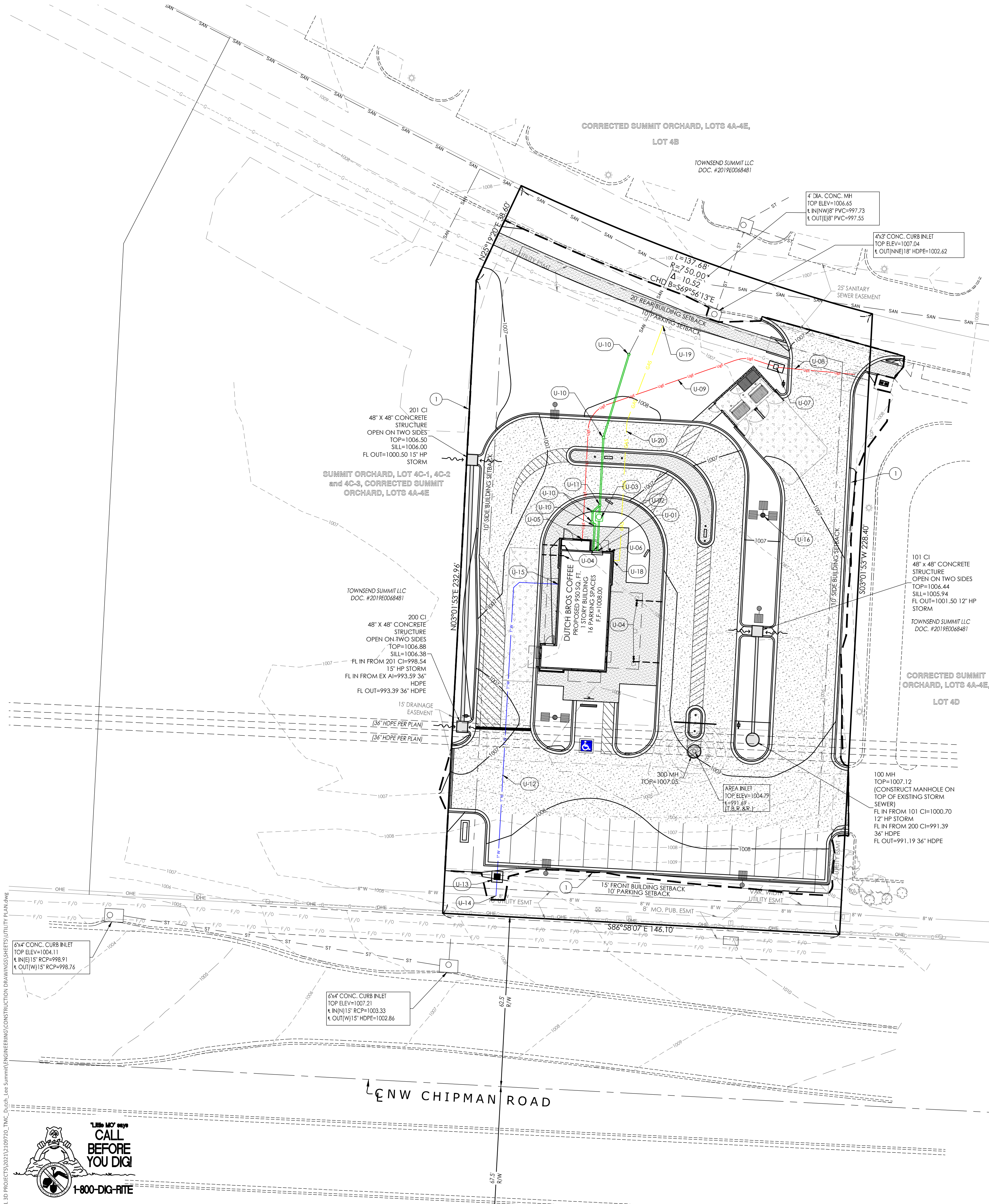




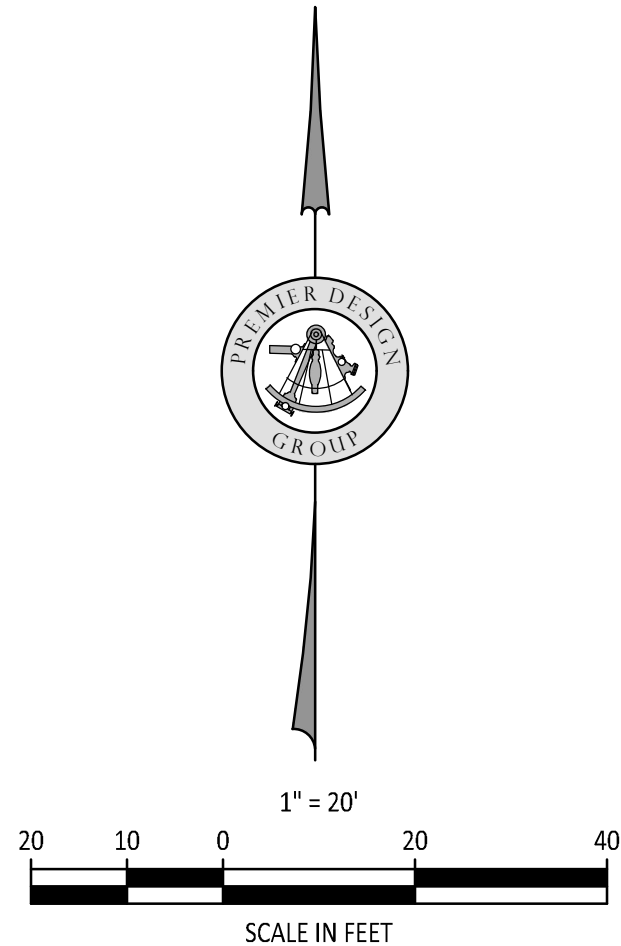
BUILDING AREA INSET
SCALE: 1" = 10'

REFERENCE NOTES SCHEDULE	
CODE	DESCRIPTION
1	LAND DISTURBANCE LIMITS
UTILITY PLAN	
CODE	DESCRIPTION
U-01	PROPOSED 6" GREASE WASTE CONNECTION, INVERT=1003.00, REFERENCE MEP PLANS
U-02	PROPOSED 6" SANITARY SEWER CONNECTION, INVERT=1003.00, REFERENCE MEP PLANS
U-03	PROPOSED GB-50 GREASE TRAP, REFER TO ARCHITECTURAL PLANS
U-04	ROOF DRAINS, REFER TO ARCH. PLANS FOR EXACT LOCATION AND DISCHARGE DETAIL
U-05	PROPOSED ELECTRIC ENTRY, REFERENCE MEP PLANS FOR CONTINUATION
U-06	PROPOSED WALL HYDRANT, REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION
U-07	RELOCATED GROUND MOUNTED TRANSFORMER PER EVERY MISSOURI WEST STANDARDS
U-08	PROPOSED PRIMARY UNDERGROUND ELECTRIC SERVICE
U-09	PROPOSED SECONDARY UNDERGROUND ELECTRIC SERVICE
U-10	PROPOSED SANITARY LATERAL CLEANOUT
U-11	PROPOSED SANITARY LATERAL SAMPLING TEE
U-12	PROPOSED 1" DOMESTIC WATER LINE - TYPE K COPPER LINE PER CITY OF LEE'S SUMMIT SPECIFICATIONS
U-13	PROPOSED 1" DOMESTIC WATER METER AND PIT PER THE CITY OF LEE'S SUMMIT WATER SPECIFICATIONS
U-14	P.O.C. CONNECTION TO EX. 8" WATER MAIN INSTALL: (1) 1" TAP (1) 1" DOMESTIC METER PER CITY OF LEE'S SUMMIT WATER SPECIFICATIONS
U-15	PROPOSED 1" DOMESTIC WATER ENTRY, REFERENCE MEP PLANS FOR CONTINUATION
U-16	PROPOSED LIGHT STANDARDS, REFERENCE PHOTOGRAPHIC PLAN ED-01
U-17	EXISTING FIRE HYDRANT
U-18	PROPOSED GAS METER LOCATION
U-19	CONNECT TO EX. GAS MAIN PER SPIRE SPECIFICATIONS
U-20	PROPOSED 1" GAS LINE

THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF HIS/HER BIDS TO CONFIRM THAT THE SITE CONDITIONS ARE AS SHOWN ON THESE PLANS. ANY CONDITION THAT IS DIFFERENT THAN WHAT IS SHOWN ON THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO SUBMITTAL OF BIDS.

UTILITY PLAN NOTES:

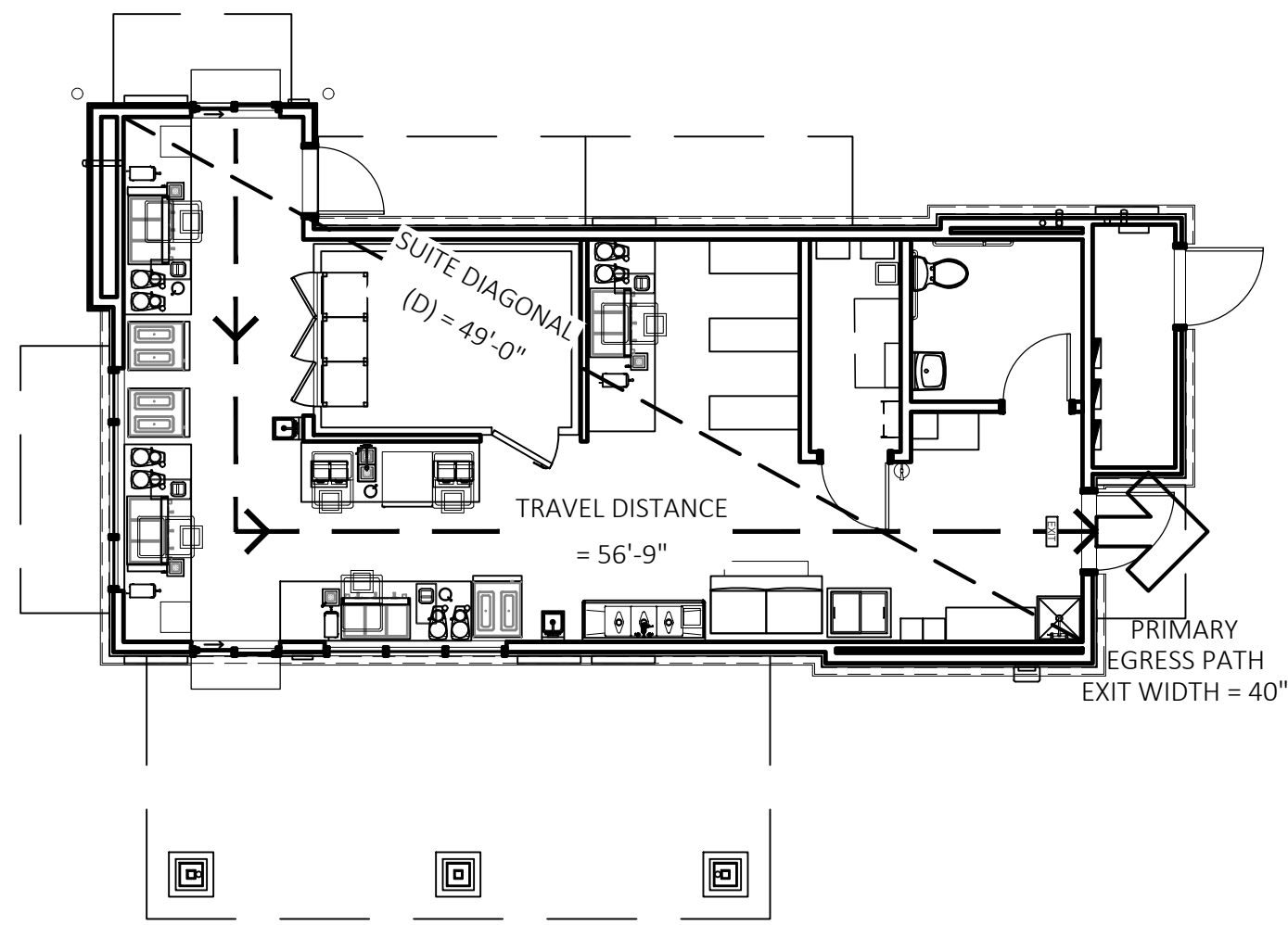
- ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3'-6" COVER ON ALL WATERLINES AND 3'-6" ON ALL SANITARY SEWER LINES.
- CONTRACTOR SHALL COORDINATE WITH BUILDING ARCHITECT AND TELEPHONE COMPANY FOR EXACT LOCATIONS OF TELEPHONE ENTRY TO THE BUILDING. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONDUITS, PULL WIRES, TRENCHING, BACKFILL, ETC., REQUIRED BY TELEPHONE COMPANY.
- CONNECTION FROM THE METER TO SITE UTILITY LINES SHALL BE MADE BY BUILDING CONTRACTOR.
- EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- REFER TO INTERIOR MECHANICAL, ELECTRIC AND PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
- CONTRACTOR SHALL COORDINATE WITH BUILDING ARCHITECT AND SPIRE FOR EXACT LOCATION OF GAS ENTRY, G.C., TO INCLUDE IN BID FOR CONTRACTOR ANY GAS PIPING, CONDUITS, TRENCHING, BACKFILLING, CABLES, ETC., REQUIRED BY SPIRE.
- CONTRACTOR SHALL COORDINATE WITH BUILDING ARCHITECT AND EVERYGY FOR EXACT LOCATION OF ELECTRIC ENTRY. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONDUITS, TRENCHING, BACKFILLING, CABLES, ETC., REQUIRED BY SPIRE.
- REFER TO MEP PLANS FOR GAS SERVICE SIZING.
- ALL UTILITY SEWER TRENCH BACKFILL SHALL HAVE GRANULAR BACKFILL AND BE MECHANICALLY COMPACTED.
- THE CONTRACTOR SHALL VERIFY THE LOCATION, CONDITION AND ELEVATION OF ALL PROPOSED SEWER CONNECTION POINTS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT WOULD INTERFERE WITH THE PROPOSED SEWER DESIGN SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- ALL PERMIT FEES AND COSTS ASSOCIATED WITH BRINGING UTILITY, SEWER AND WATER SERVICES TO THE BUILDING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL FEES AND COSTS SHALL BE INCLUDED IN THE CONTRACTORS BID.
- ALL CONSTRUCTION MATERIALS USED SHALL CONFORM TO THE CURRENT VERSION OF THE CITY OF LEE'S SUMMIT AND STATE OF MISSOURI SPECIFICATIONS.
- G.C. IS TO PROVIDE TRENCH PULL WIRE AND CONDUIT FOR TELEPHONE AND ELECTRICAL SERVICES. BACKFILL AND GRADE SMOOTH FOR A COMPLETE TELEPHONE AND ELECTRIC INSTALLATION SHALL BE BY THE GENERAL CONTRACTOR.
- GENERAL CONTRACTOR IS TO PROVIDE TRENCH, BACKFILL AND GRADE SMOOTH FOR A COMPLETE WATER LINE INSTALLATION.
- ANY DISTURBED SIDEWALK OR CONCRETE PAVEMENT SHALL BE FULL SLAB REPLACEMENT.
- EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
- ALL WATER LINES GREATER THAN 3" SHALL BE C-900 PVC PIPE. WATER LINES SMALLER THAN 3" SHALL BE TYPE "K" COPPER.
- ALL CONNECTIONS TO PUBLIC WATER SHALL BE AS REQUIRED BY CITY OF LEE'S SUMMIT WATER CODES. WATER TAP AND METERS UNDER 2" SHALL BE INSTALLED BY CITY OF LEE'S SUMMIT WATER UP TO THE RIGHT-OF-WAY LINES. WATER TAP AND METERS OVER 2" SHALL BE INSTALLED BY THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING CITY OF LEE'S SUMMIT TO SCHEDULE CONNECTION TO PUBLIC WATER.
- SANITARY LINES SHALL BE PVC MEETING ASTM D-3034 SDR 26 EXCEPT FOR PIPES THAT CROSS ABOVE WATER MAINS. THIS PIPE SHALL BE AWA C900 UNLESS WATER MAIN IS CAVED. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING CITY OF LEE'S SUMMIT SEWER TO SCHEDULE CONNECTION TO PUBLIC SEWER.
- CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNERS FOR ANY DISRUPTIONS TO EXISTING UTILITY SERVICES.
- CONTRACTOR IS RESPONSIBLE FOR PAVEMENT REPAIR AND REPLACEMENT REQUIRED FOR ALL UTILITY CONNECTIONS AND INSTALLATIONS.
- THE OWNER/DEVELOPER WILL BE RESPONSIBLE FOR ANY AND ALL APPLICABLE TAP-AND-SERVICE FEES AS LISTED IN THE MOST CURRENT EDITION OF CITY OF LEE'S SUMMIT RULES AND REGULATIONS FOR CUSTOMER SERVICE.
- COORDINATION WITH THE ELECTRIC, TELEPHONE AND CATV COMPANIES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND SHALL BE CONDUCTED IN A MANNER THAT RESULTS IN AN EFFICIENT AND TIMELY RELOCATION AND REMOVAL OF THE EXISTING FACILITIES.
- GROUND ELEVATIONS SHALL BE WITHIN 6" OF THE FINAL PROPOSED ELEVATIONS PRIOR TO THE START OF ELECTRIC, TELEPHONE AND CATV RELOCATIONS OR INSTALLATIONS OF NEW SERVICE.
- CONTRACTOR SHALL REFERENCE ELECTRICAL PLANS FOR FURTHER INFORMATION AND FOR CONDUIT ROUTING TO LIGHT STANDARDS AND ANY GROUND MOUNTED SIGNS.
- ALL UTILITY IMPROVEMENTS (SERVICES, EXTENSIONS, CONNECTIONS, ETC.) TO BE "PRIVATE".
- BUILDING SEWER STUBS BEING DISCONNECTED FROM THE SEWER MAIN SHALL BE DISCONNECTED BY THE WATER UTILITIES DEPARTMENT. AFTER THE CONTRACTOR HAS PROVIDED ACCESS TO THE SEWER MAIN VIA AN OSHA COMPLIANT EXCAVATION WITH PROPER SHORING AS NECESSARY, WATER UTILITIES STAFF RESERVE THE RIGHT TO NOT ENTER ANY TRENCH DETERMINED TO BE UNSAFE.



ENGINEERS AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the act of plans authorized by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after the date stated hereunder.
STEVEN D. MARION P.E.
PROFESSIONAL ENGINEER
PE 2006007195

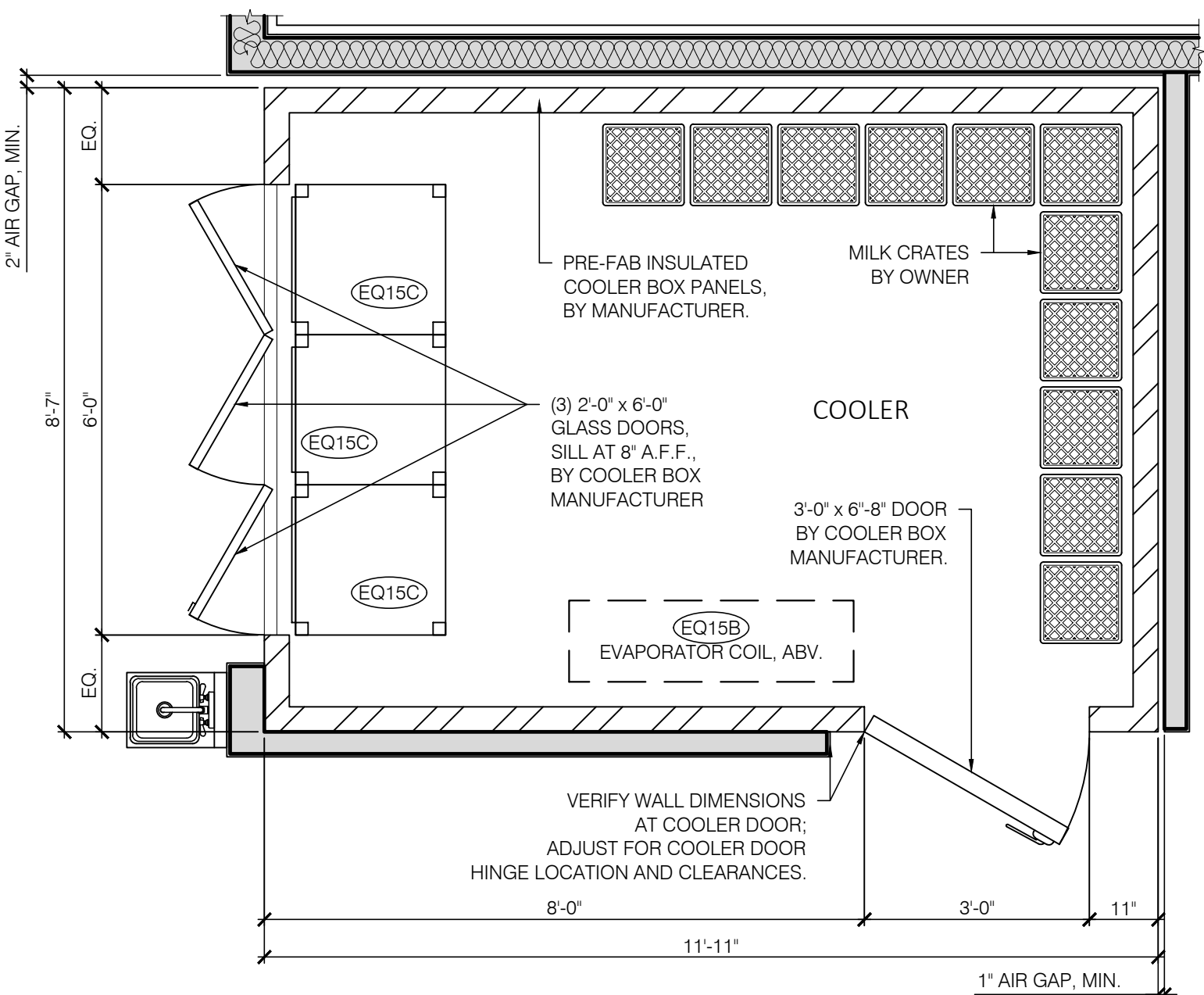
DUTCH BROS
LEE'S SUMMIT, MO
500 NW CHIPMAN RD.
LEE'S SUMMIT, MO 64086
TM'S CROWLEY
501 PENNSYLVANIA PARKWAY SUITE 160
INDIANAPOLIS, IN 46280

Project		Date	
		9-30-2021	
Description of Changes			
#	Revision Date	Revisions Per City Comments	UTILITY PLAN
1.	10-21-2021	REVISIONS PER CITY COMMENTS	
2.	03-17-2022	REVISIONS - ADDED GAS SERVICE	
Sheet Title			
Sheet Number		C-300	
Project No.		2109720	
Drawn By		A. JONES	
Checked By		M. FOGARTY	
ISSUED FOR CONSTRUCTION			



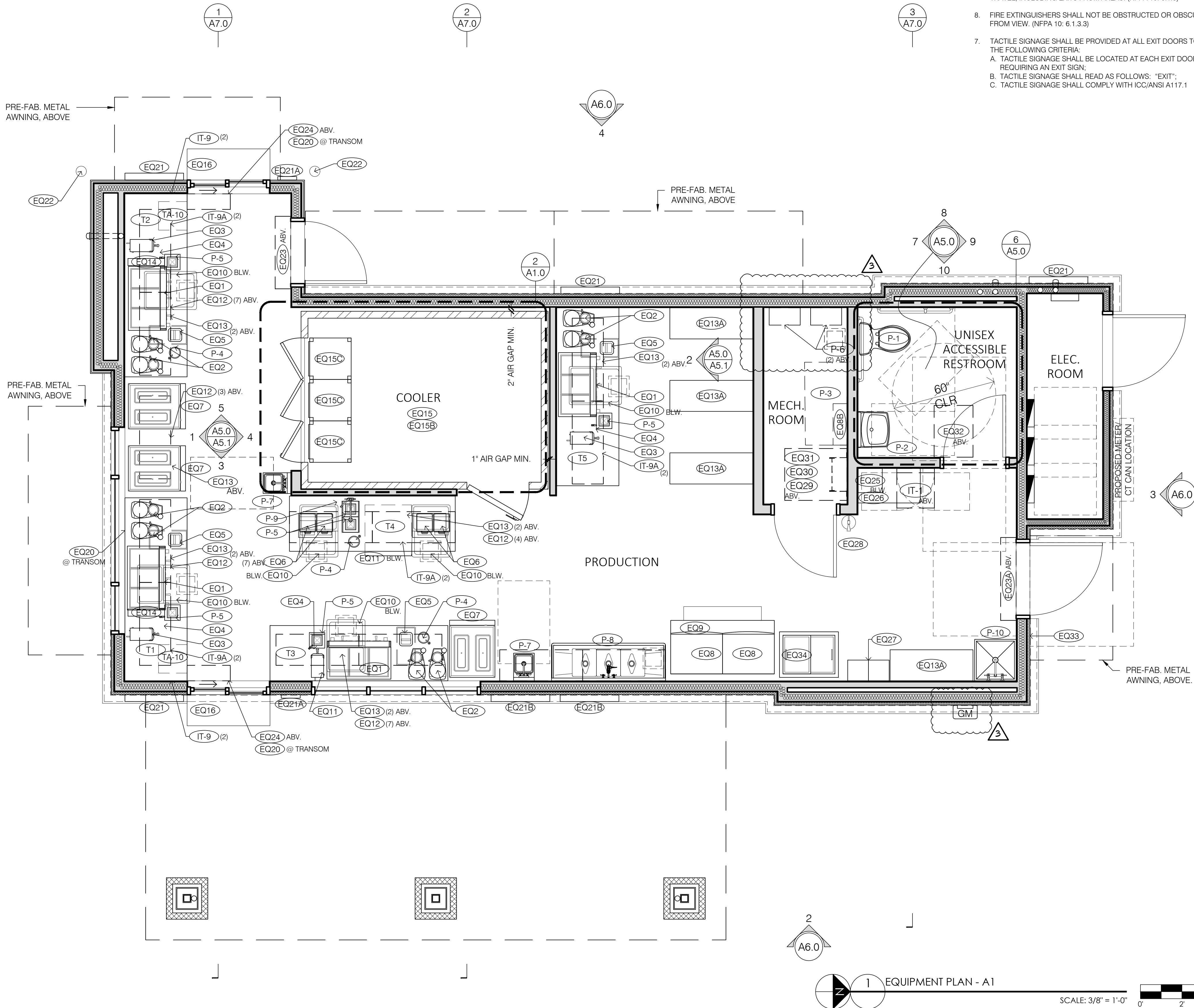
3 FIRE/LIFE SAFETY PLAN

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



2 ENLARGED COOLER PLAN

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



COOLER GENERAL NOTES:

1. COOLER INSULATION VALUES FOR WALLS, CEILING, AND DOORS SHALL BE MIN. R-25
2. AUTOMATIC DOOR CLOSERS SHALL BE PROVIDED THAT FULLY CLOSE WALK-IN DOORS THAT HAVE BEEN CLOSED TO WITHIN 1 INCH OF FULL CLOSURE
3. DOORWAYS SHALL HAVE STRIP DOORS, CURTAINS, SPRING-HINGED DOORS OR OTHER METHOD OF MINIMIZING INFILTRATION WHEN DOORS ARE OPEN

GENERAL NOTES:

1. THIS DRAWING IS FOR EQUIPMENT LAYOUT PURPOSES ONLY. PLEASE SEE FLOOR PLAN FOR FULLY DIMENSIONED PARTITION LOCATIONS AND ASSEMBLIES.
2. NOTE: PLEASE SEE SHEET G1.0, COVER SHEET, FOR CODE SUMMARY, BUILDING DATA AND EXIT ACCESS REQUIREMENTS.
3. G.C. TO VERIFY ALL DIMENSIONS IN THE FIELD BEFORE COMMENCING CONSTRUCTION.
4. ALL FIRE EXTINGUISHERS SHALL BE STATE OF MISSOURI CERTIFIED. ALL FIRE EXTINGUISHERS SHALL BE PROPERLY MOUNTED AT THE HEIGHT REQUIREMENTS OF NO HIGHER THAN 4'-6" A.F.F. TO THE TOP OF THE EXTINGUISHER AND AT LEAST 6" FROM FLOOR TO THE BOTTOM OF EXTINGUISHER. (NFPA 10: 6.1.3.8)
5. ALL PROPERLY MOUNTED FIRE EXTINGUISHERS SHALL NOT EXCEED 75' OF TRAVEL DISTANCE APART. (NFPA 1: 6.1)
6. FIRE EXTINGUISHERS SHALL BE CONSPICUOUSLY LOCATED WHERE THEY ARE READILY ACCESSIBLE AND IMMEDIATELY AVAILABLE IN THE EVENT OF FIRE. (NFPA 10: 6.1.3)
7. FIRE EXTINGUISHERS SHALL BE LOCATED ALONG NORMAL PATHS OF TRAVEL, INCLUDING EXITS FROM AREAS. (NFPA 10: 6.1.3)
8. FIRE EXTINGUISHERS SHALL NOT BE OBSTRUCTED OR OBSCURED FROM VIEW. (NFPA 10: 6.1.3.3)
7. TACTILE SIGNAGE SHALL BE PROVIDED AT ALL EXIT DOORS TO MEET THE FOLLOWING CRITERIA:
A. TACTILE SIGNAGE SHALL BE LOCATED AT EACH EXIT DOOR REQUIRING AN EXIT SIGN;
B. TACTILE SIGNAGE SHALL READ AS FOLLOWS: "EXIT";
C. TACTILE SIGNAGE SHALL COMPLY WITH ICC/ANSI A117.1



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EDIN CORALIC ARCHITECT
A-2013031004 - EXP. 12-31-2021



MISSOURI CERTIFICATE OF
AUTHORITY NO. 2013041393

Project No: MO0102
Dutch Bros Coffee - New Freestanding Store
500 NW Chipman Road, Lee's Summit, Missouri 64086
for: Dutch Bros Coffee
110 SW 4th St.
Grants Pass, OR 97526

ISSUED FOR PERMIT:
10.11.2021

REV.	DATE:	DESCRIPTION:
3	3/18/22	OWNER REVISIONS

SHEET NAME:

EQUIPMENT/ ENLARGED
COOLER/ FIRE-LIFE
SAFETY PLANS

SHEET NUMBER:

A1.0

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LIGHTING SCHEDULE

PLUMBING SCHEDULE					
CONTRACTOR TO PROVIDE UNLESS NOTED OTHERWISE					
	ID TAG	FIXTURE DESCRIPTION	MANUFACTURER	MODEL	REMARKS
RESTROOM	P-1	LAVATORY TOILET	KOHLER	K-3619 CIMARRON	COLOR: WHITE, NOTE: FLUSH CONTROLS LOCATED ON OPEN SIDE OF W.C.
	P-2	LAVATORY SINK	KOHLER	K-2030	INSTALL WITH ACCESSORIES TO MEET ADA REQUIREMENTS
		LAVATORY SINK FAUCET	DELTA	501LF-HGMHDF	
"WORKSTATION"	P-3	WATER FILTRATION SYSTEM	HEATHCO/ EVERPURE	LOCATION SPECIFIC	CONTACT TOM RUGGLES 714.910.9805 FOR PROJECT SPECIFIC WATER FILTRATION SYSTEM.
	P-4	DIPPER WELL	FISHER	3041	PROVIDED & INSTALLED BY KES; INSTALLED IN STAINLESS STEEL TABLE; PROVIDE NON-FILTERED COLD WATER, DRAIN LINE TO FLOOR SINK BELOW
	P-5	RAPID RINSE STATION	BLENDETEC	JRE-610	PROVIDED & INSTALLED BY KES; PROVIDE NON-FILTERED COLD WATER; IN STAINLESS STEEL TABLE DUMP SINK, GRAINGER 3MRL4 RUBBER GROMMET FOR RINSER SUPPLY LINE.
	P-6A	WATER HEATER - TANKLESS	RINNAI	CU199i (2 UNITS)	TANKLESS - GAS; BOT. @ 60" A.F.F.
	P-7	HAND SINK	BK RESOURCES	BKHS-D-SS-SS	PROVIDED & INSTALLED BY KES; PROVIDED W/ SPLASH GUARDS BOTH SIDES; PROVIDE NON-FILTERED WATER CONNECTIONS
		HAND SINK FAUCET	FISHER	53872	
	P-8	3-COMP SINK	BK RESOURCES	BKS-3-1416-12-12TS	PROVIDED & INSTALLED BY KES; 1.5" DRAIN; TIE ALL DRAINS TOGETHER AND ROUTE TO NEAREST FLOOR SINK. LEVEL FRONT TO BACK AND SIDE TO SIDE AND CAULK TO WALL WITH CLEAR SILICONE; PROVIDE STRAINERS AND NON-FILTERED WATER CONNECTIONS
		3-COMP SINK FAUCET	FISHER	34371	
		LEVER WASTE DRAIN	FISHER	24090	
	P-9	PULL-OUT SPRAYER HANDLE	T&S	MPZ-4DLN-06	PROVIDED & INSTALLED BY KES; ON STAINLESS STEEL TABLE @ DUMP SINK; 8" RISER & 6" SWING SPOUT; PROVIDE NON-FILTERED WATER CONNECTIONS
	P-10	MOP SINK	ZURN	Z1996-24	COLOR: WHITE 10" WALLS, 3" DRAIN. MOP HANGER ABOVE.
		MOP SINK FAUCET	FIAT	830-AA	SERVICE FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS AND HOSE WITH HOSE BRACKET
		MOP HANGER	ULINE	H-2841	MOUNT AT 60" A.F.F., AT SIDE OF MOP SINK
	P-11	FLOOR SINK	ZURN (BASIS OF DESIGN)	Z1900	12"x12"x6" DEEP SQUARE, CAST IRON BODY, WHITE ACID RESISTING PORCELAIN ENAMEL, INTERIOR AND TOP W/ BASKET STRAINERS & HALF-GRATES
	P-12	FLOOR DRAIN	ZURN (BASIS OF DESIGN)	EZ-5	5" ROUND FLOOR DRAIN
	P-13	GREASE INTERCEPTOR	SCHIER (BASIS OF DESIGN)	GB-50	50 GPM, BELOW-GRADE AT EXTERIOR, VENTED THROUGH BUILDING, PROVIDE HI TRAFFIC COVER AND ACCESS, FINAL SIZE TO BE COORDINATED WITH LOCAL AUTHORITY
	P-14	ROOF DRAIN	ZURN (BASIS OF DESIGN)	Z165	COMBINATION MAIN AND OVERFLOW ROOF DRAIN.
		DOWNSPOUT NOZZLE	ZURN (BASIS OF DESIGN)	Z199	NO-HUB DOWNSPOUT NOZZLE, 18" A.F.F., NICKEL BRONZE BODY
	P-15	WALL HYDRANT	WATTS	HY-420	6" NON-FREEZE WALL HYDRANT, MOUNT AT 24" A.F.F. AT REAR ELEVATION.
P-16	YARD HYDRANT	WATTS	HY-800	FROST PROOF, 2FT. BURY DEPTH	
P-17	RECIRCULATION PUMP	TACO	0010	115V, 3.250 RPM, PROVIDE W/ AQUASTAT AND/ OR TIMER	
P-18	BOOSTER PUMP	AQUAVAR	1151AB25HM03	115V, 30 GPM @ 35 PSI BOOST, 1 HP VARIABLE SPEED CONTROLLER; PROVIDE ALL NECESSARY VALVES AND ACCESSORIES RECOMMENDED BY MFR. FOR A COMPLETE SYSTEM.	
P-19	BACKFLOW PREVENTER	WATTS	LF009	MOUNT ABOVE MOP SINK; ROUTE RELIEF PIPES TO DISCHARGE INDIRECTLY TO MOP SINK	
RESTROOM ACCESSORIES					
PA-51	ADA GRAB BAR	BOBRICK	B-5806	SIZE DEPENDANT ON INSTALLATION LOCATION	
PA-52	MIRROR	BOBRICK	B-165-1836	MOUNTED W/ BOTTOM OF REFLECTIVE SURFACE AT 40" MAX A.F.F.	
PA-61	SOAP DISPENSER	TORK	466100	PROVIDED & INSTALLED BY G.C.	
PA-62	TOILET PAPER DISPENSER	TORK	59TR	PROVIDED & INSTALLED BY G.C.	
PA-63	PAPER TOWEL DISPENSER	TORK	461002	PROVIDED & INSTALLED BY G.C.	
PA-64	SANITARY NAPKIN DISPOSAL	BOBRICK	B-254	PROVIDED & INSTALLED BY G.C.	
PA-65	TOILET SEAT COVER DISPENSER	BOBRICK	B-221	PROVIDED & INSTALLED BY G.C.	

PROJECT NO. M00102
Dutch Bros Coffee - New Freestanding Store
500 NW Chipman Road, Lee's Summit, Missouri 64086
for: Dutch Bros Coffee
110 SW 4th St.
Grants Pass, OR 97526

A1.2

2020 DB Franchising USA, LLC

WINDOW SCHEDULE

A

B

C

NOTES:

- U-FACTOR - FIXED: 0.38
- U-FACTOR - OPERABLE: 0.48
- STOREFRONT SYSTEMS SHALL HAVE A CLEAR ANODIZED ALUMINUM FACTORY FINISH
- PROVIDE IMPACT GLASS (HURRICANE GLASS OR SIM.), SEE SPECS.

DOOR NOTES

1. THIS PLAN IS ISSUED SO THAT THE CONTRACTOR CAN MAINTAIN FULL COMPLIANCE WITH THE INTERNATIONAL BUILDING CODE FOR WHEELCHAIR MANEUVERABILITY AT DOORS. THIS DETAIL INDICATES PARTIAL REQUIREMENTS OF THE CODE. IT IS ADVISED THAT THE CONTRACTOR OBTAIN A COMPLETE COPY OF THESE CODES FOR REFERENCE.
2. THE DIMENSIONS SHOWN ARE CRITICAL FOR COMPLIANCE WITH THE CODES. IT IS THE CONTRACTORS RESPONSIBILITY TO INSURE PROPER CLEARANCES FOR WHEELCHAIR MANEUVERABILITY. IF CONFLICTS OCCUR, BRING TO DESIGNERS ATTENTION IMMEDIATELY.
3. FOR FULL SWING DOORS A MINIMUM 2'-0" WIDE DOOR IS REQUIRED FOR CLEARANCE. FOR 90° SWING DOORS A MINIMUM 3'-0" WIDE DOOR IS REQUIRED FOR CLEARANCE.
4. IN ORDER TO ACHIEVE THE REQUIRED 12" OR 18" MINIMUM CLEARANCES AT DOOR AND A MINIMUM PASSAGE WIDTH, THE DOOR FRAME AT HINGE SIDE MAY HAVE TO BE AGAINST THE ADJACENT WALL.
5. THE MAXIMUM EFFORT FOR BOTH INTERIOR AND EXTERIOR DOORS IS 5 LBS. CLOSING SPEED IS 5 SEC MIN. FROM 90° TO 12°.
6. 1/2" MAXIMUM HIGH THRESHOLD (ABOVE FLOOR AND LANDINGS ON BOTH SIDES) AT BUILDING ENTRANCES AND ALL DOORS.
7. DOOR HARDWARE AT ALL EXITS DOORS TO ALLOW DOORS TO BE OPENED FROM THE INSIDE WITHOUT KEY, SPECIAL KNOWLEDGE OR ENTRY PER APPROPRIATE CODE.
8. SIGNAGE FOR ONLY MAIN ENTRANCE DOORS ALLOWED TO HAVE KEY LOCKING DEVICES TO STATE, "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED"
9. 10" HIGH KICK PLATE AT BOTTOM OF GLAZED AND STRENGTHEN DOORS.
10. ALL DOORS EQUIPPED WITH SINGLE-EFFECT, NON-GRASPING TYPE HARDWARE BETWEEN 34" MIN. AND 44" MAX. ABOVE THE FINISHED FLOOR.
11. WIDTH OF DOORS TO BE A MINIMUM OF 36" TO PROVIDE REQUIRED 32" NET CLEARANCE WIDTH BETWEEN THE FACE OF THE DOOR AND THE JAMB.
12. ALL DOORS TO BE KEYED ALIKE. GC TO PROVIDE A TOTAL OF 6 KEYS.

DOOR SCHEDULE									
#	SIZE		TYPE		GLASS	MATERIAL		HARDWARE	NOTES:
	WIDTH	HEIGHT	DR.	FR.		DR.	FR.		
01	3'-6"	7'-0"	A	1	TEMP.	HM	HMD	GROUP 1	A,B,C,D,E,F
02	3'-0"	7'-0"	B	2	TEMP.	HM	HMD	GROUP 2	A,B,C,D,E,F
03	3'-0"	7'-0"	C	2	-	HM	HMD	GROUP 3	B,D,F
04	3'-6"	7'-0"	D	1	-	HM	HMD	GROUP 4	B
05	3'-0"	7'-0"	E	1	-	HM	HMD	GROUP 5	B
06	3'-0"	3'-0"	F	3	-	HM	HMD	GROUP 6	B
NOTES:									
HM: HOLLOW METAL, 16 GA.									
HMD: HOLLOW METAL WELDED & DIMPLED									
A ENSURE EMERGENCY HARDWARE IS IN WORKING CONDITION.									
B	DOOR & FRAME SHALL BE PAINT GRADE & PAINTED PT-2								
C	DOOR TO HAVE SIGN POSTED ABOVE THAT STATES: "THIS DOOR TO REMAIN UNLOCKED WHILE BUILDING IS OCCUPIED."								
D	CLOSER SHALL BE BOLTED THROUGH DOOR LEAF & ARM MOUNTED USING HEAD-JAMB MOUNT.								
E	PROVIDE ADA COMPLIANT THRESHOLD SET IN SILICONE SEALANT.								
F	THE MAX PULL/ PUSH EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS. W/ EFFORT APPLIED TO RIGHT ANGLES TO HINGED DOORS.								

Figure 1 illustrates six door schedule examples (A through F) with their dimensions and hardware. The dimensions are in feet and inches.

- A:** Standard door with a push bar and panic bar. Dimensions: 3'-0" wide, 7'-0" high. Hardware: PUSH BAR, PANIC BAR, 3'-7 1/4" MAX. 6'-0" H.
- B:** Door with a push bar and panic bar, different handle. Dimensions: 3'-0" wide, 7'-0" high. Hardware: PUSH BAR, PANIC BAR, 3'-7 1/4" MAX. 6'-0" H.
- C:** Door with a handle. Dimensions: 3'-0" wide, 7'-0" high. Hardware: HANDLE.
- D:** Door with a handle. Dimensions: 3'-0" wide, 7'-0" high. Hardware: HANDLE.
- E:** Door with a handle. Dimensions: 3'-0" wide, 7'-0" high. Hardware: HANDLE.
- F:** Door with a handle. Dimensions: 3'-0" wide, 7'-0" high. Hardware: HANDLE.

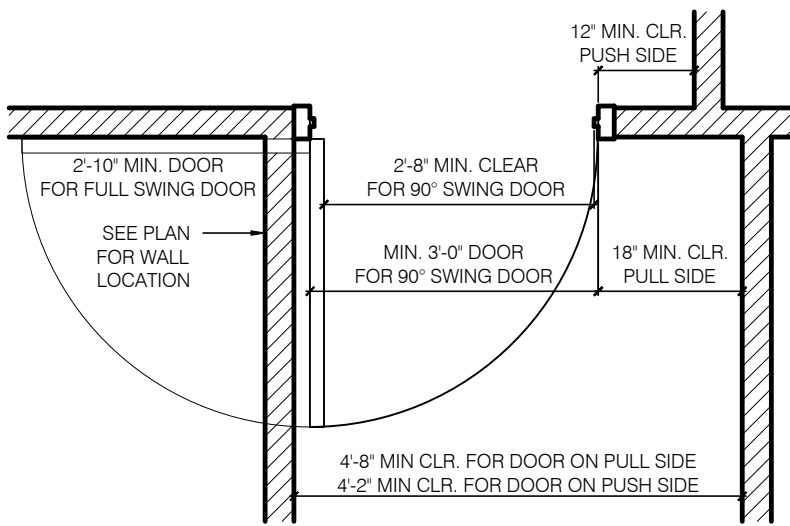
Diagram illustrating three types of door frames and their dimensions:

- 1**: Standard door frame. Dimensions: L (width), H (height).
- 2**: Door frame with a transom window above the door. Dimensions: L (width), H (height), L_1 (transom width).
- 3**: Small square door frame. Dimensions: L (width), H (height).

Technical drawing of the 100 Series Single Hung Window. The drawing includes a front elevation and a side elevation with the following dimensions:

- Front Elevation:**
 - Overall width: 4'-0"
 - Overall height: 4'-0"
 - Top horizontal dimensions: 1 3/4" (left), 3'-8 1/2" (center), 1 3/4" (right)
 - Bottom horizontal dimensions: 1 3/4" (left), 3'-8 1/2" (center), 1 3/4" (right), 4 1/2" (right side)
 - Right vertical dimensions: 4'-0" (overall), 3'-5" (to top of frame), 1/2" (bottom offset)
- Side Elevation:**
 - Overall height: 4'-0"
 - Top horizontal dimensions: 1 3/4" (left), 3'-8 1/2" (center), 1 3/4" (right)
 - Right vertical dimensions: 4'-0" (overall), 3'-5" (to top of frame), 1/2" (bottom offset)

QUIK-SERV - IFSC-4040
(LEFT & RIGHT - FULLY AUTOMATIC)
NOTES:
- ROUGH OPENING: 48-3/8"(W) x 48-3/8"(H)
- ACTUAL DIMENSIONS: 48"(W) x 48"(H)
- SERVICE OPENING: 20-1/4"(W) x 41"(H)



TAG	FIN. DESCRIPTION	MFR.	MODEL	REMARKS
FLOOR				
FF-1	FLOOR TILE - TEXTURED	BEDROSANS	6"x6" DOTTI DIAMOND - ANTHRACITE R9 - MATTE	PRODUCTION AREA FIELD TILE
FF-2	FLOOR TILE - SMOOTH	BEDROSANS	6"x6" DOTTI DIAMOND - ANTHRACITE R12 - MATTE	PROVIDE UNDER EQUIPMENT
TILE SUBSTRATE	EPOXY GROUT	LATICRETE	IG 2000 IND. EPOXY GROUT #2 KIT BLACK	JOB PACK
		LATICRETE	STECTRALOCK IG 2000 PART A/B EPOXY GROUT	
		LATICRETE	STECTRALOCK PART C COLOR PACKET	
		LATICRETE	PERMACOLOR GROUT	
	BOND COAT	LATICRETE	4-XLT GRAY	
	CAULKING	LATICRETE	LATASIL CAULKING	
	WATERPROOFING	LATICRETE	HYDRO BAN WATERPROOF/ ANTIFRACTURE	
FF-3	CONC. SLAB	-	-	-
BASE				
BF-1	WALL BASE - COVE	BEDROSANS	4"x8" SMOOTH COVE - ANTHRACITE	SANITARY COVE
WALL				
WF-1	(FRP) FIBERGLASS REINFORCED PANEL	MARLITE	S 100G - 4'x10' PANELS	COLOR: WHITE; PROVIDE ALL NECESSARY TRIM PIECES
WF-2	1/2" CDX	-	-	COLOR: OUTDOOR LATEX WHITE PAINT
GUARDS				
CG	CORNER GUARD	AIS INDUSTRIES	CUSTOM	120" LONG W/ 2" WINGS, DRILLED, 90 DEGREE SHARP CORNER, BRUSHED FINISH
WG	WALL GUARD	AIS INDUSTRIES	CUSTOM	48" WIDE, WRAP FROM SERVICE WINDOW SILL TO TOP OF COVE BASE, BRUSHED FINISH
CEILING				
CLG-1	VINYL FACED ACT	USG	3260 - SHEETROCK BRAND LAY-IN CEILING PANEL	FLAT WHITE, SMOOTH
CLG-2	FRP OVER 1/2" CDX	MARLITE	S 100G - 4'x10' PANELS	COLOR: WHITE; PROVIDE ALL NECESSARY TRIM PIECES, PROVIDE ADHESIVE AND PAN HEAD SCREWS AT 24" O.C., E.W.
PAINT				
PT-1	BLDG DB LIGHT GRAY	SHERWIN-WILLIAMS	TBD	-
PT-2	BLDG DB DARK GRAY	SHERWIN-WILLIAMS	TBD	-
PT-3	BLDG DB BLUE	SHERWIN-WILLIAMS	TBD	-
PT-4	-	SHERWIN-WILLIAMS	SW-7006 - EXTRA WHITE	SEMI-GLOSS

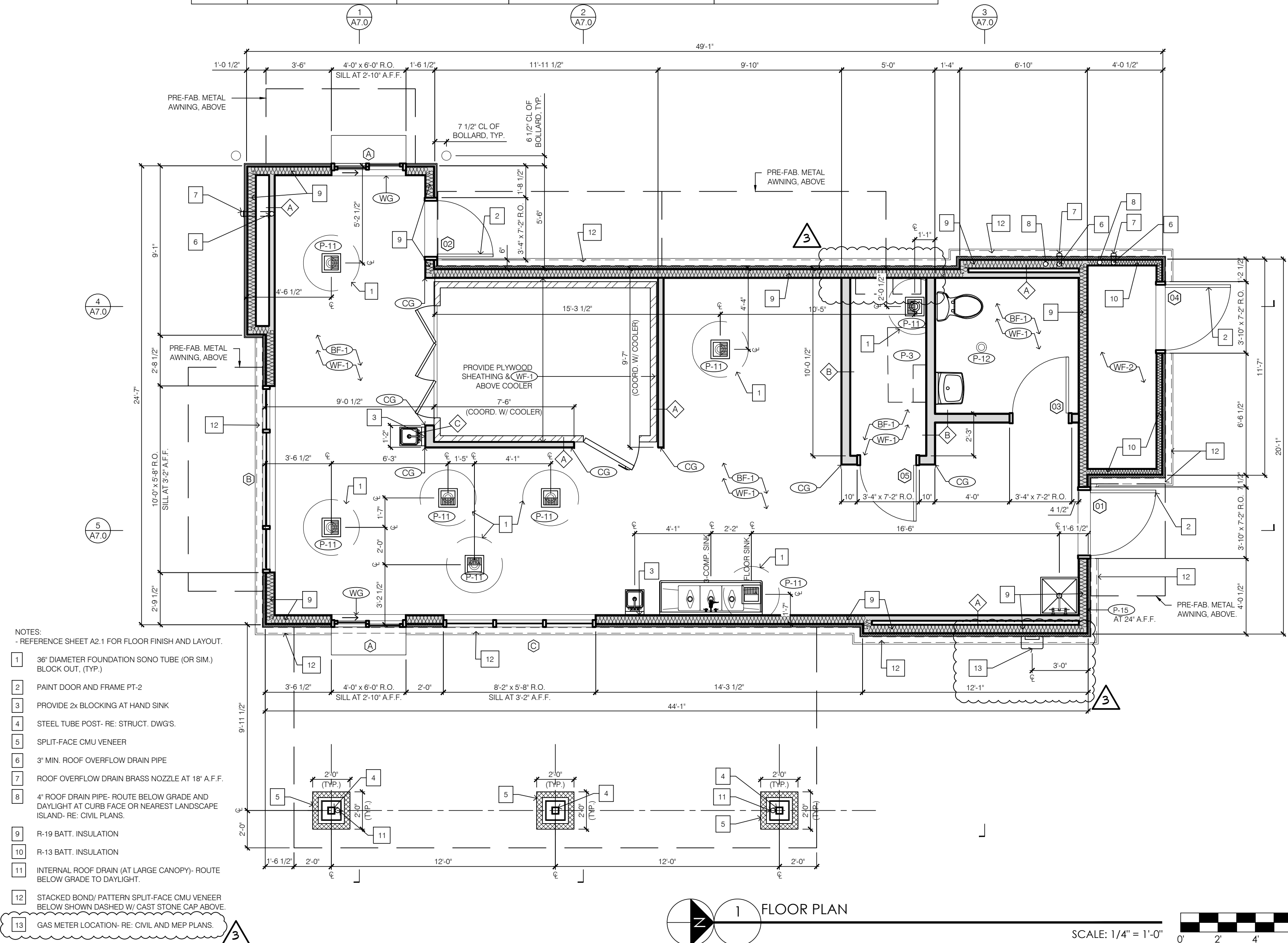
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Project No: MO0102
Dutch Bros Coffee - New Freestanding Store
500 NW Chipman Road, Lee's Summit, Missouri 64086
for: Dutch Bros Coffee
110 SW 4th St.
Grants Pass, OR 97526

A2.0

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EDIN CORALIC ARCHITECT
A-2013031004 - EXP. 12-31-2021



MISSOURI CERTIFICATE OF
AUTHORITY NO. 2013041393

Project No: MO0102
Dutch Bros Coffee - New Freestanding Store
500 NW Chipman Road, Lee's Summit, Missouri 64086
for: Dutch Bros Coffee
110 SW 4th St.
Grants Pass, OR 97526

ISSUED FOR PERMIT:
10.11.2021

REV.	DATE	DESCRIPTION
2	11/3/21	CITY COMMENTS
3	3/18/22	OWNER REVISIONS

SHEET NAME:

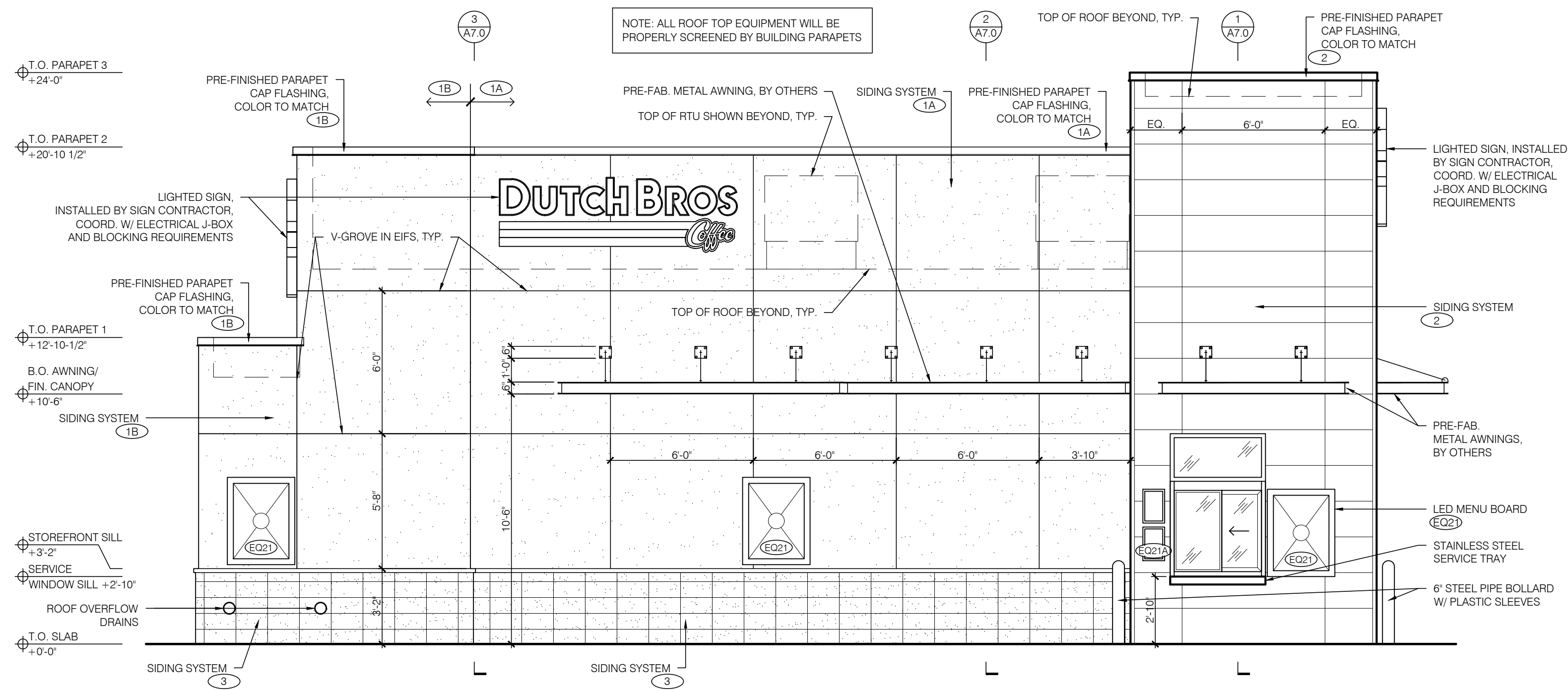
BUILDING ELEVATIONS

SHEET NUMBER:

A6.0

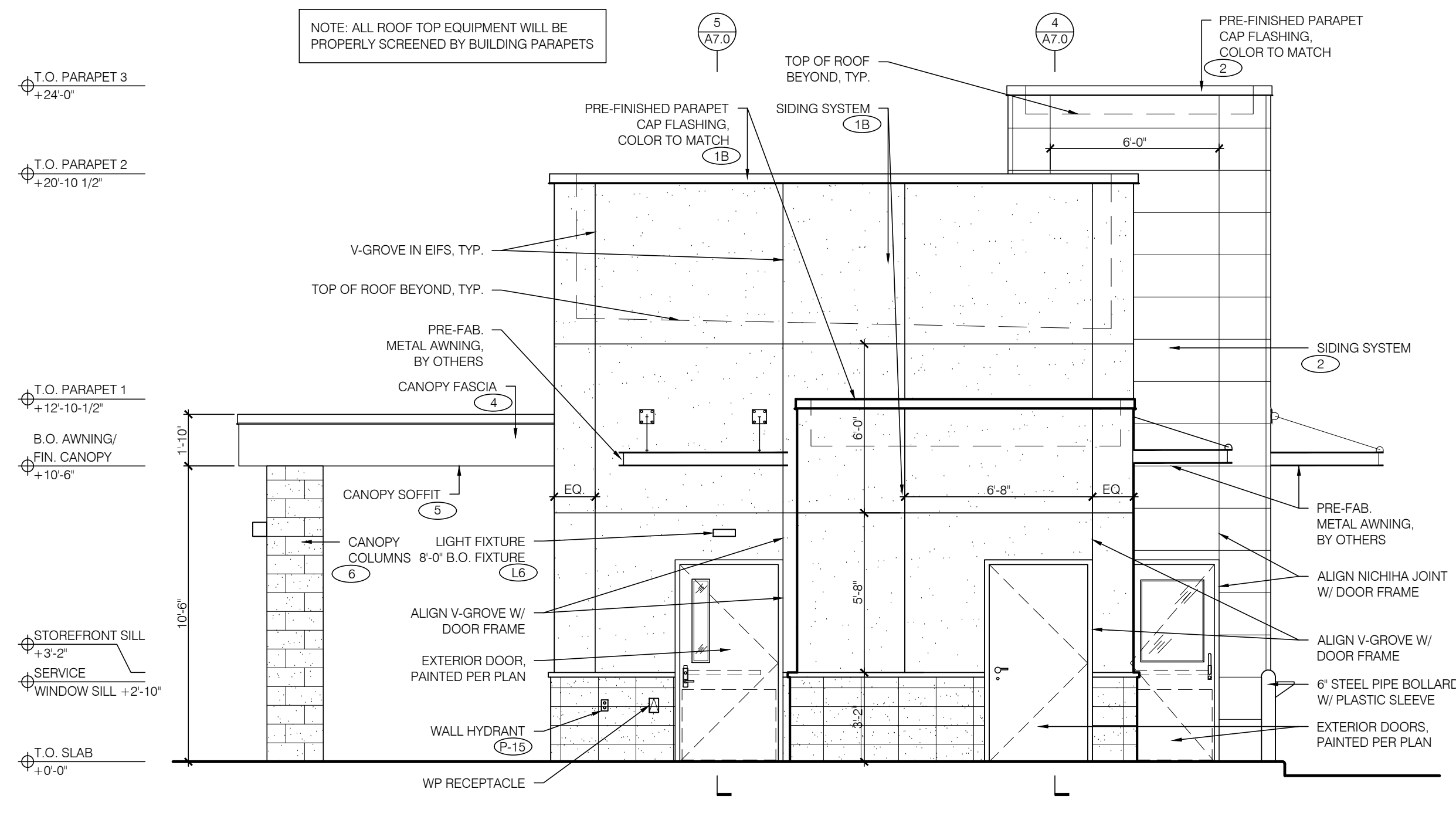
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SIDING SCHEDULE - ALTERNATE w/ CANOPY				
ID TAG	MATERIAL	MANUFACTURER	MODEL	REMARKS
ZONE 1 (BODY)				
1A	EIFS	BASF/ SENERGY	1 1/2" CHANNELED ADHESIVE CI DESIGN SYSTEM	COLOR: BLDG DB DARK GRAY
1B	EIFS	BASF/ SENERGY	1 1/2" CHANNELED ADHESIVE CI DESIGN SYSTEM	COLOR: BLDG DB LIGHT GRAY
ZONE 2 (TOWER)				
2	FIBER CEMENT SIDING	NICHIHA	ILLUMINATION, AWP 1818 w/ FACTORY OUTSIDE CORNERS	COLOR: BLDG DB BLUE
ZONE 3 (BASE)				
3	CMU VENEER AND SILL	WILLAMETTE GRAYSTONE OR APPROVED OTHER	4-8-16, SPLIT FACE	COLOR: CHARCOAL - REVIEW FINAL COLOR SELECTION W/ DB
ZONE 4 (FRAMED CANOPY)				
4	FASCIA	-	METAL FASCIA; FLAT	3 SIDES; COLOR: BLDG DB DARK GRAY
5	SOFFIT	HEWN ELEMENTS	NATURAL NORTHWESTERN SPRUCE	1x8, T&G, 1/8" REVEAL
6	COLUMNS	WILLAMETTE GRAYSTONE OR APPROVED OTHER	4-8-16, SPLIT FACE	COLOR: CHARCOAL - REVIEW FINAL COLOR SELECTION W/ DB



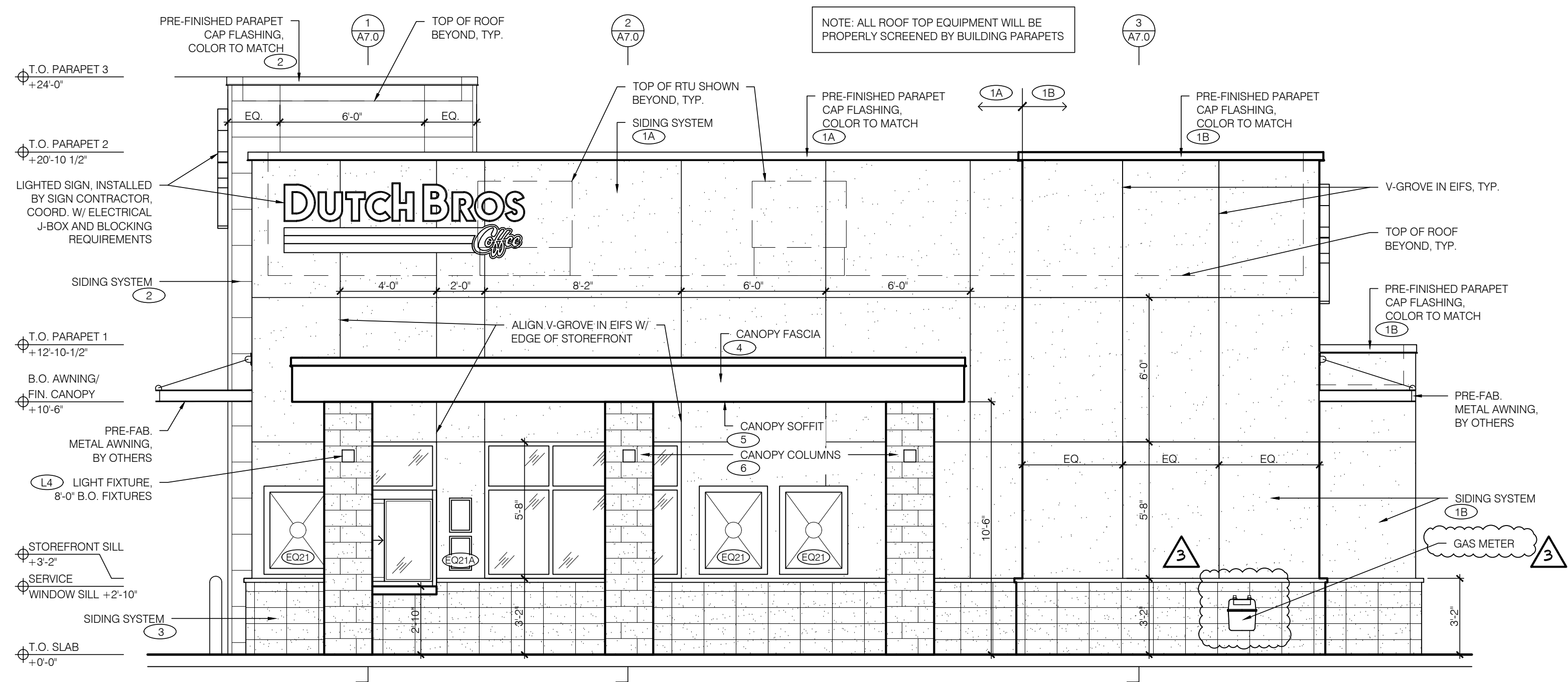
4 WEST ELEVATION - DRIVE-THRU WINDOW

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



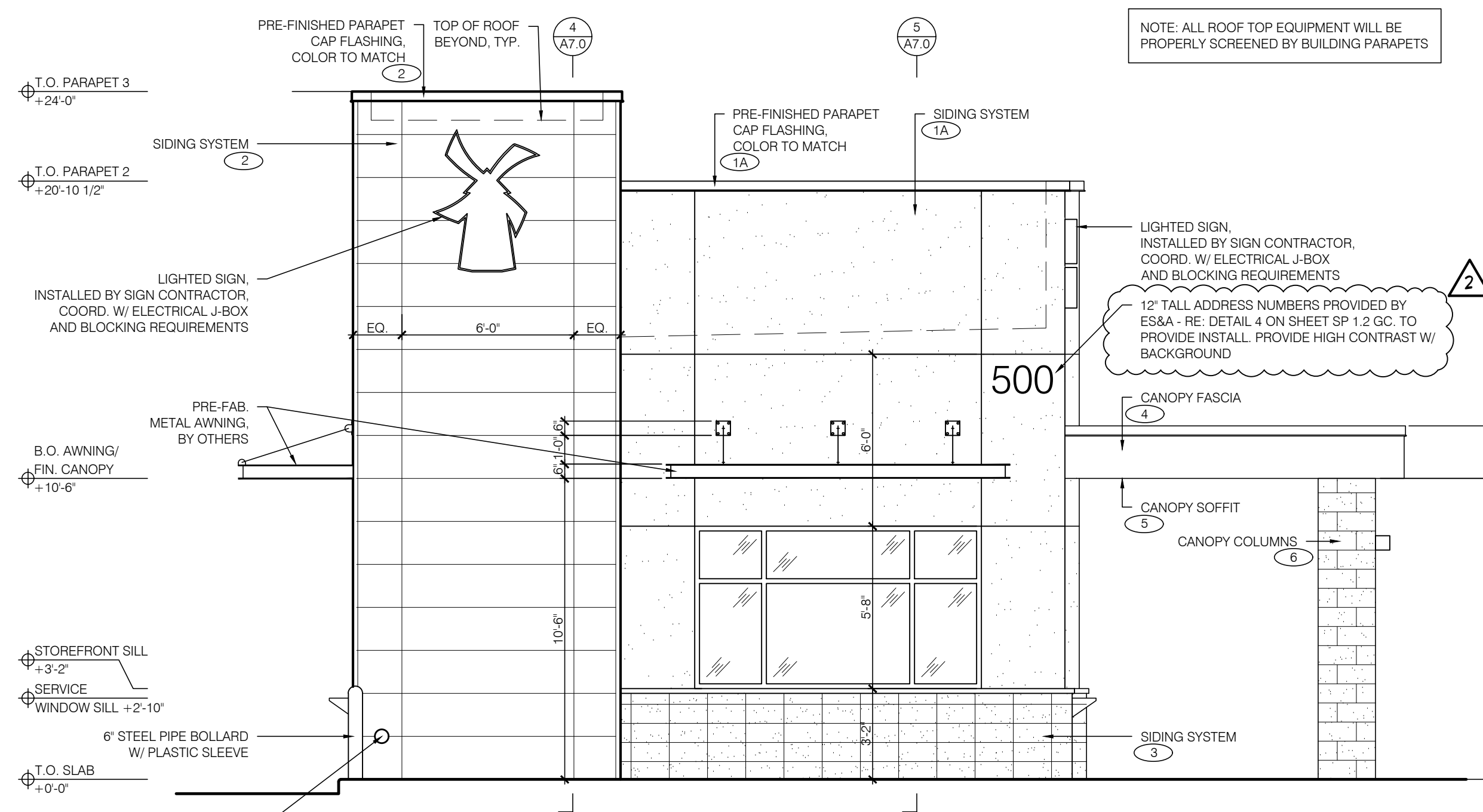
3 NORTH ELEVATION

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



2 EAST ELEVATION - WALK-UP WINDOW

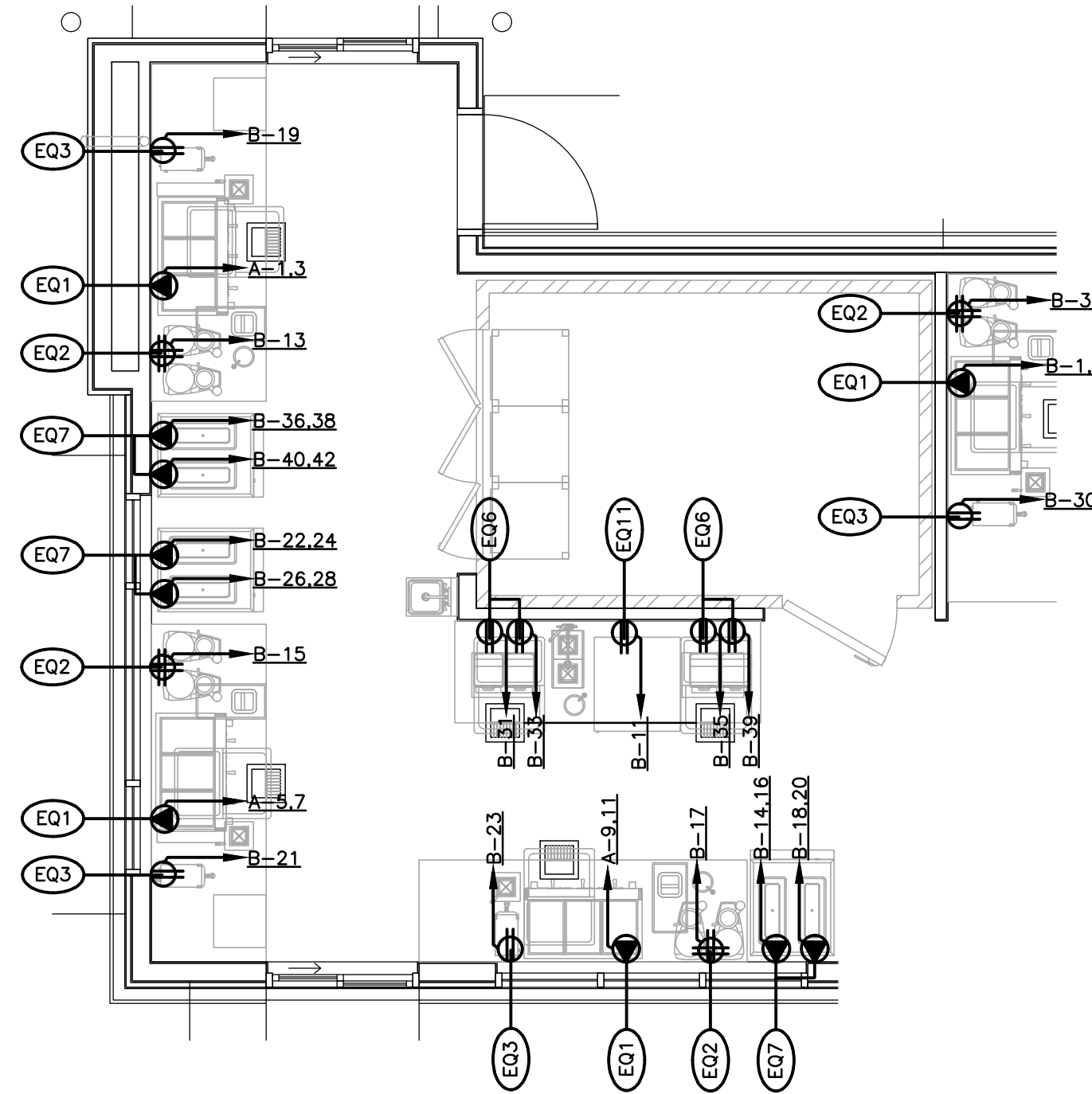
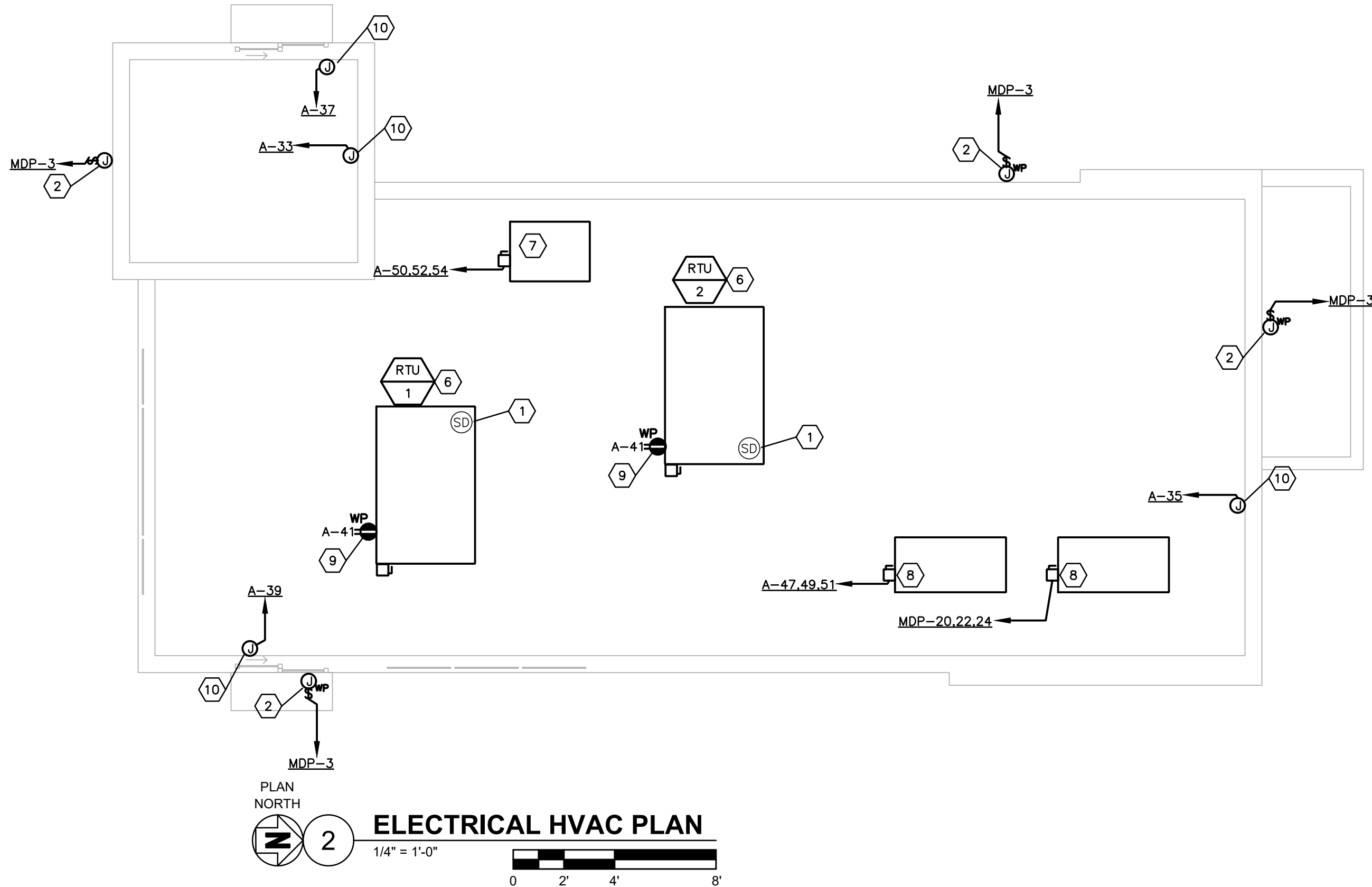
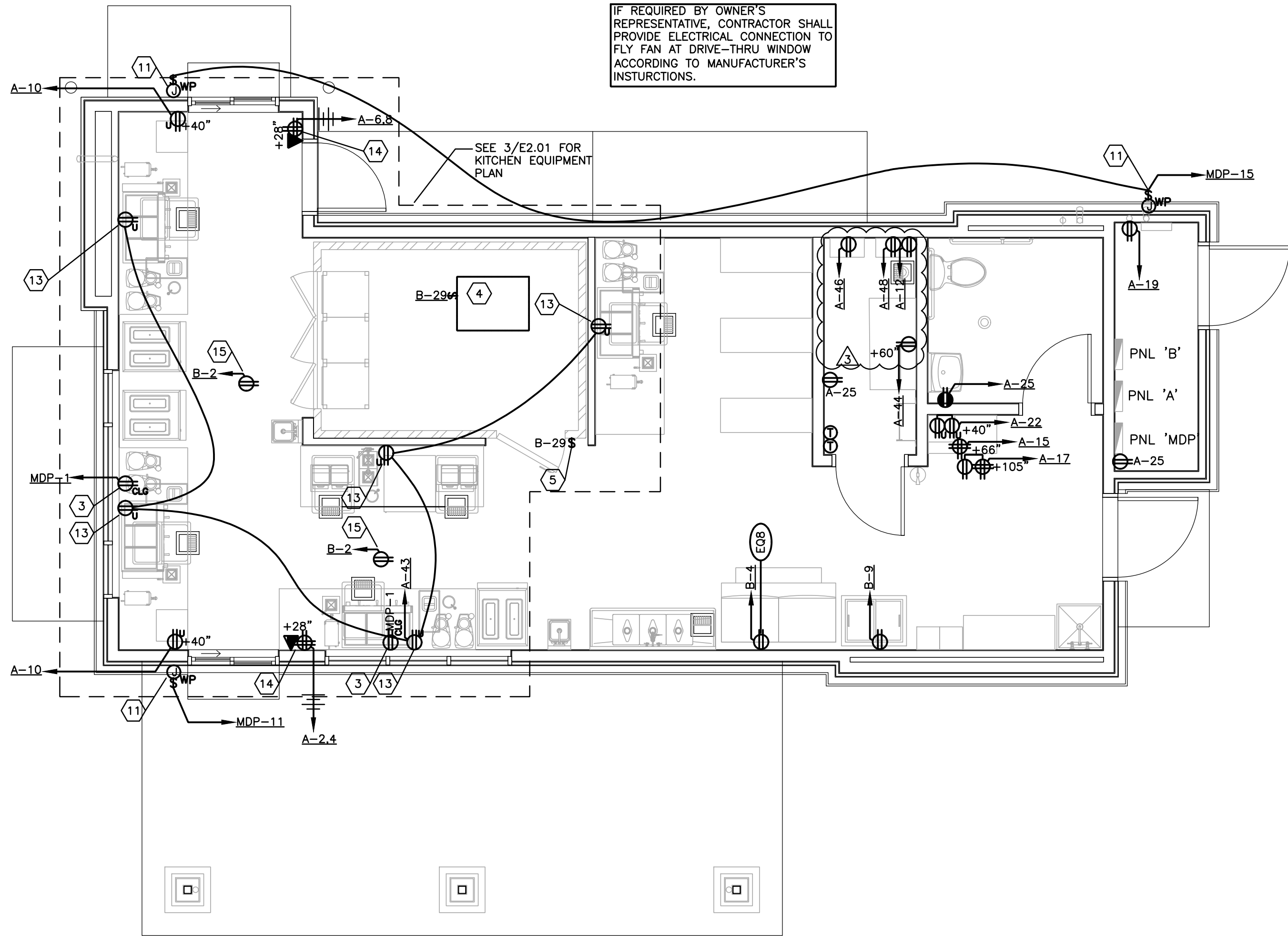
SCALE: 1/4" = 1'-0"



1 SOUTH ELEVATION

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

Drawn By: Edin Coralic, Architect, License No. A-2013031004, State of Missouri
Checked By: James C. Kreher, Structural Engineer, License No. 0000000000, State of Missouri
Date: 10/11/2021
Project: Dutch Bros Coffee - New Freestanding Store, 500 NW Chipman Road, Lee's Summit, Missouri 64086



HVAC NOTES

A. EC SHALL FURNISH AND INSTALL PITCH POCKETS FOR POWER AND CONTROL WIRING, AND IS TO MAINTAIN 12" MINIMUM CLEARANCE FROM BACK PANEL OF AIR CONDITION UNITS. DO NOT PENETRATE BOTTOM OF RTU CURB.

B. THE ELECTRICAL CONTRACTOR SHALL INSTALL LOW-VOLTAGE CONTROL WIRING FOR ALL AIR CONDITIONING CONTROLS.

C. EC SHALL FURNISH AND INSTALL DISCONNECTS FOR RTUS AND INTERLOCK RESTROOM FAN TO RUN CONTINUOUSLY WHILE WORK AREA LIGHTS ARE ON. (SEE DETAIL 2/E1.01)

D. FOR EACH AIR CONDITIONING UNIT, THE EC IS TO PROVIDE ONE SINGLE-GANG RECEPTACLE TEST STATION FOR THE REMOTE SENSOR AND/OR T-STAT, AND ONE DOUBLE-GANG RECEPTACLE TEST STATION FOR THE ANNUNCIATOR, WITH GREEN AND RED LIGHT INDICATORS. THE FIRE AND MECHANICAL INSPECTORS WILL DETERMINE SUITABLE LOCATION FOR TEST STATIONS. ANNUNCIATORS AND TEST STATION WILL BE LOOPED IN THE CIRCUITRY OF THE SMOKE DETECTION DEVICES. WIRING WILL BE INSTALLED BY EC.

- KEYED NOTES**
- MECHANICAL CONTRACTOR SHALL PROVIDE DUCT MOUNTED SMOKE DETECTOR. ELECTRICAL SHALL INSTALL FIRE ALARM DUCT SMOKE DETECTOR IN RETURN AIR WITH REMOTE AUDIO/VISUAL INDICATOR MOUNTED AT LOCATION THAT CAN BE SEEN AND HEARD. DETECTOR TO SHUT OFF AIR HANDLING UNIT UPON ACTIVATION. EC TO CONNECT DETECTOR TO CIRCUIT A-21 AND PROVIDE INTER-CONNECTING WIRING BETWEEN DETECTOR AND REMOTE INDICATOR.
 - PROVIDE WEATHERPROOF JUNCTION BOX AND TOGGLE TYPE 20A-1P DISCONNECT SWITCH FOR BUILDING SIGNS. PROVIDE FINAL CONNECTION TO SIGN AS REQUIRED PER MANUFACTURER'S INSTRUCTIONS. CIRCUIT SHALL BE CONTROLLED BY PHOTOCELL ON/TIMECLOCK OFF. COORDINATE LOCATION W/ ARCHITECTURAL ELEVATIONS & SIGN VENDOR PRIOR TO ROUGH IN.
 - PROVIDE CEILING-MOUNTED SHOW WINDOW RECEPTACLE. RECEPTACLE SHALL BE CONTROLLED BY TIMECLOCK. REFER TO "LIGHTING CONTROL DIAGRAM" ON SHEET E1.01.
 - PROVIDE 20A, 120V/1P DISCONNECT SWITCH WITH (2)#12 & (1)#12G. IN 1/2" CONDUIT TO WALK-IN COOLER EVAPORATOR. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
 - PROVIDE 20A, 120V ELECTRICAL CONNECTION TO WALK-IN COOLER LIGHTS/CONTROLS ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
 - NEW ROOF TOP UNITS (RTU-1&2), 208V, 30 (26 MCA). EC TO PROVIDE (3)#10 & (1)#10 GND IN 3/4" CONDUIT AND 208V, 30, 30A N.F. NEMA 3R DISCONNECT SWITCH. COORDINATE ALL REQUIREMENTS WITH HVAC CONTRACTOR PRIOR TO BID.
 - PROVIDE 30A, 208V/3P, DISCONNECT SWITCH IN NEMA 3R ENCLOSURE WITH (3)#8 & (1)#10G. IN 3/4" CONDUIT TO REMOTE CONDENSING UNIT FOR ICE MACHINE LOCATED ON ROOF. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
 - PROVIDE 60A, 208V/3P, DISCONNECT SWITCH IN NEMA 3R ENCLOSURE WITH (3)#8 & (1)#10G. IN 3/4" CONDUIT TO REMOTE CONDENSING UNIT FOR ICE MACHINE LOCATED ON ROOF. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
 - PROVIDE WEATHERPROOF SERVICE RECEPTACLE FOR MECHANICAL EQUIPMENT. MOUNT ON NON-REMOVABLE PANEL OF EQUIPMENT.
 - EC TO PROVIDE JBOX FOR HARDWIRE CONNECTION TO AIR CURTAIN. AIR CURTAINS PROVIDED WITH MICROSWITCH CONTROL. COORDINATE LOCATION WITH MANUFACTURER'S INSTRUCTION TO ENSURE AIR CUTRAIN ACTIVATES WHEN DOOR/WINDOW OPENS.
 - PROVIDE 20A, 120V ELECTRICAL CONNECTION WITH CONCEALED WEATHERPROOF TOGGLE DISCONNECT SWITCH TO MENU BOARD. COORDINATE LOCATION WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
 - NEW 12kW WATER HEATER, 208V, 10. EC TO PROVIDE (2)#8 & (1)#10 GND IN 3/4" CONDUIT AND 208V, 30, 60A N.F. NEMA 1R DISCONNECT SWITCH. COORDINATE LOCATION WITH PLUMBING CONTRACTOR PRIOR TO BID.
 - IPAD RECEPTACLE WITH USB JACKS TYP. OF (5) CEILING MOUNTED.
 - QUAD OUTLET FOR REGISTER & PRINTER.
 - CEILING MOUNTED OUTLETS FOR SONOS SPEAKER.

SHEET NOTES

A. VERIFY EXACT LOCATIONS OF HVAC EQUIPMENT, CONDUIT STUB-UPS AND POWER CONNECTIONS PRIOR TO ROUGH-IN.

B. VERIFY EXACT LOCATION, MOUNTING HEIGHTS AND CONDUIT ROUTING FOR ALL THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS AND CO₂ SENSORS WITH TEMPERATURE CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.

C. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS. COORDINATE PROVISIONS FOR ALL CONTROL CONDUIT AND WIRING AS REQUIRED FOR INTERLOCKING OF FANS, MOTORS, ETC. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

D. ALL DEVICES INSTALLED ON HVAC EQUIPMENT SHALL BE MOUNTED ON A NON-REMOVABLE PANEL OF THE EQUIPMENT. THIS LOCATION SHALL BE COORDINATED WITH THE MECHANICAL AND/OR PLUMBING CONTRACTOR PRIOR TO COMMENCING ANY ROUGH-IN WORK.

E. ALL ELECTRICAL DEVICES SHALL BE WHITE IN COLOR WITH WHITE COVERPLATES.

F. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITHIN ALL FEEDERS AND BRANCH CIRCUITS.

- NOTES:**
- A. ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO KITCHEN EQUIPMENT. SEE EQUIPMENT RESPONSIBILITY SCHEDULE FOR DETAILS.
- B. ALL HARDWIRED CONNECTIONS TO BE MADE WITH SEAL-TIGHT FLEXIBLE METAL CONDUIT WITH INSULATED GROUND WIRE INSTALLED WITH PHASE AND NEUTRAL CONDUCTORS. GROUND WIRE TO BE BONDED AT BOTH ENDS.
- C. ELECTRICAL CONTRACTOR SHALL VERIFY ALL EQUIPMENT REQUIREMENTS (INCLUDING THOSE SCHEDULED) WITH SUPPLIER PRIOR TO ROUGH-IN.
- D. ALL 15A AND 20A, 120V RECEPTACLES IN KITCHEN SHALL BE GFCI PROTECTED.

WORKSTATION EQUIPMENT SCHEDULE							
ITEM	DESCRIPTION	VOLT/PHASE	LOAD	CONN.	HEIGHT	WIRE & CONDUIT	REMARKS
EQ1	ESPRESSO MACHINE	208/1	29.3FLA	NEMA 6-50	+27"	(2)#6 & (1)#10G, 3/4"C	--
EQ2	GRINDER	120/1	5.4FLA	NEMA 5-20	+27"	(2)#12 & (1)#12G, 3/4"C	QUAD OUTLET FOR COFFEE GRINDER
EQ2a	DOSER	--	--	--	--	--	--
EQ3	HOT WATER DISPENSER	120/1	15.4FLA	NEMA 5-20	+27"	(2)#12 & (1)#12G, 3/4"C	--
EQ6	BLENDER	120/1	12.9FLA	NEMA 5-20	+27"	(2)#12 & (1)#12G, 3/4"C	--
EQ7	FROZEN BEV. DISPENSER	208/1	16FLA	(2)NEMA L620	+27"	(2)SETS: (2)#12 & (1)#12G, 3/4"C	--
EQ8	ICE MACHINE	115/1	1.1FLA	NEMA 5-20	+84"	(2)#12 & (1)#12G, 3/4"C	--
EQ11	U.C. FRIDGE	120/1	2.0FLA	NEMA 5-15P	+27"	(2)#12 & (1)#12G, 3/4"C	--

MECHANICAL EQUIPMENT SCHEDULE							
MARK	LOAD		VOLTAGE /PHASE	TYPE	WIRE	CKT	
	MCA	MOCP					
RTU-1,2	26	30	208/3	60A, NEMA-3R	3#10, #10G., 3/4"C	MDP-19,21,23	MDP-25,27,29



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03.18.2022



Project No: MO0102
Dutch Bros Coffee - New Freestanding Store
500 NW Chipman Road, Lee's Summit, Missouri 64086
for: Dutch Bros Coffee
110 SW 4th St.
Grants Pass, OR 97526

ISSUED FOR PERMIT:
10.11.2021

REV.	DATE:	DESCRIPTION:
01	10.14.21	CITY COMMENTS
02	11.01.21	CITY COMMENTS
03	03.15.22	OWNER REVISIONS

SHEET NAME:

POWER
PLAN

SHEET NUMBER:

E2.01



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SHEET NAME:

PANEL
SCHEDULES

SHEET NUMBER:

E3.01

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NEW PANEL BOARD MDP											
SURFACE MOUNTED 42,000 A.I.C. FULLY RATED											
120/208 VOLTS 3 PHASE 4 WIRE 400 AMP. BUS											
CIRCUIT BREAKER TYPE 400 MLO FED FROM DISCONNECT											
CRK. NO.	TRIP. NO.	TRIP. AMP.	TRIP. POLE	LOAD SERVED	LOAD - V. A.	LOAD - W. A.	LOAD SERVED	NO. TRIP. AMP.	TRIP. POLE	CRK. NO.	TRIP. AMP.
C1	1	20	1	SHOW WINDOW REC.	720	---	SPARE	1	20	2	---
C2	3	20	1	BUILDING SIGN	1000	940	PARKING LOT LTG	1	20	4	---
TS	5	20	1	EF-1	---	---	PARKING LOT LTG	1	20	6	---
	7	20	1	GENERAL LTG	720	---	SPARE	1	20	8	---
C2	9	20	1	PYLON SIGN	1200	800	EXTERIOR BUILDING LTG	1	20	10	---
C1	11	20	1	(4)BLDG MENU BOARD	500	100	PARAPET LIGHT	1	20	12	---
	13	20	1	TIMECLOCK	200	100	PARAPET LIGHT	1	20	14	---
C1	15	20	1	(4)BLDG MENU BOARD	500	100	PARAPET LIGHT	1	20	16	---
C1	17	20	1	MENU BOARD	1200	200	RTU DUCT DETECTOR	1	20	18	---
HACK	19	30	3	RTU-1	3120	3120	ICE MACHINE COND.	3	40	20	---
	21	30	3	RTU-1	3120	3120	SPARE	3	40	22	---
HACK	23	30	3	RTU-2	3120	3120	SPARE	3	50	26	---
	25	30	3	RTU-2	3120	3120	SPARE	3	50	28	---
	27	30	3	RTU-2	3120	3120	SPARE	3	50	30	---
SFB	200	3	3	SUB-FEED TO PANEL "A"	15812	17712	SPARE	3	50	30	---
SFB	200	3	3	SUB-FEED TO PANEL "B"	17644	15428	SPARE	3	50	30	---
					17644	15428	SPARE	3	50	30	---
					19576	17648	SPARE	3	50	30	---
					54764	61396	55724				

TOTAL LOAD SUMMARY (ALL PANELS)

LOAD DESCRIPTION	DEMAND FACTOR	VOLT - AMPS	
		CONNECTED	DEMAND
LIGHTING	D.F. 1.25	9360	11700
RECEPTACLES	NEC	5860	5860
MOTORS	NEC	---	---
MISC. EQUIPMENT	1.00	27374	27374
KITCHEN EQUIPMENT	0.65	82570	53670
HVAC EQUIPMENT	1.00	18720	18720
TOTAL -		143884	117324

PANELBOARD LOAD = 117324 V.A.
FULL LOAD AMPS = 326 A.

LO HAND LOCK "OFF/ON" CLAMP DEVICE
HACK HEATING, AIR CONDITION AND REFRIGERATION RATED BKR
G GROUND FAULT CIRCUIT INTERRUPTING BKR
C# ROUTE CIRCUIT THROUGH CONTACTOR INDICATED

GENERAL NOTES

- EC TO PROVIDE HANDLE TIE ON ALL MULTIWIRED BRANCH CIRCUITS PER NEC 210.4(B).
- ALL SPARE CIRCUIT BREAKERS AND DISCONNECT SWITCHES SHALL BE LEFT IN THE OFF POSITION.
- EC SHALL VERIFY THE VOLTAGE AND AMPERAGE REQUIREMENTS OF ALL EQUIPMENT DELIVERED TO THE SITE PRIOR TO CONNECTION. EC SHALL NOTIFY OWNER OF ANY DIFFERENCE.

SHEET NOTE

- PER NEC 408.4 - EVERY BRANCH CIRCUIT AND CIRCUIT MODIFICATION MUST BE UNIQUELY IDENTIFIED. PROVIDE A TAG AT EACH CIRCUIT CONDUCTORS JUNCTION BOX, OUTLET, SWITCH, ETC. DESIGNATION WHICH ELECTRICAL PANEL AND CIRCUIT NUMBER THE CONDUCTOR IS FED FROM.
- EC TO POST ARC-FLASH HAZARD WARNINGS, PER NEC ART. 110.16 A POWER SYSTEM STUDY IS TO BE PERFORMED TO DETERMINE THIS VALUE AND AVAILABLE FAULT CURRENT AT ALL PANELS.
- EC TO PROVIDE LABELS ON SERVICE EQUIPMENT TO IDENTIFY THE AVAILABLE FAULT CURRENT AS REQUIRED BY NEC ARTICLE 110.24.

FAULT CURRENT NOTES

FAULT CURRENT CALCULATIONS WERE PERFORMED BY CASE ENGINEERING BASED ON AN ASSUMED TRANSFORMER KVA RATING AND ASSUMED TRANSFORMER IMPEDANCE VALUE FOR THE UTILITY COMPANY TRANSFORMER TO ESTABLISH BASIS OF DESIGN AIC RATINGS AS IDENTIFIED ON THE DRAWINGS.

PRIOR TO SUBMITTING THE POWER DISTRIBUTION EQUIPMENT PRODUCT DATA FOR REVIEW, THE ELECTRICAL CONTRACTOR SHALL CONTACT THE UTILITY COMPANY TO VERIFY THE FAULT CURRENT VALUES AVAILABLE FROM THE UTILITY COMPANY AND SUBMIT THE UTILITY COMPANY FAULT CURRENT INFORMATION TO THE ENGINEER FOR REVIEW AND EVALUATION.

AFTER THE UTILITY FAULT CURRENT INFORMATION HAS BEEN REVIEWED AND EVALUATED BY THE ENGINEER, ANY REVISIONS TO THE BASIS OF DESIGN AIC VALUES IDENTIFIED ON THE DRAWINGS THAT MAY BE REQUIRED BASED ON THE FAULT CURRENT INFORMATION RECEIVED FROM THE UTILITY COMPANY SHALL BE COMMUNICATED TO THE ELECTRICAL CONTRACTOR.

CONTRACTOR SHALL NOT SUBMIT THE POWER DISTRIBUTION EQUIPMENT FOR REVIEW OR ORDER THE POWER DISTRIBUTION EQUIPMENT UNTIL THE FAULT CURRENT INFORMATION FROM THE UTILITY COMPANY HAS BEEN SUBMITTED TO THE ENGINEER BY THE CONTRACTOR AND THE ENGINEER HAS EVALUATED THE INFORMATION AND PROVIDED FINAL DIRECTION REGARDING THE AIC RATING OF THE POWER DISTRIBUTION EQUIPMENT.

SERVICE NOTES

IF THE CONTRACTOR ELECTS TO PROVIDE INCOMING SERVICE FEEDERS WITH ALUMINUM CONDUCTORS, CONTRACTOR TO PROVIDE ALUMINUM CONDUCTORS EQUIVALENT IN AMPERAGE CAPACITY TO THE COPPER CONDUCTORS SHOWN ON PLANS. COORDINATE LUG REQUIREMENTS ON EQUIPMENT WHERE AL CONDUCTORS WILL TERMINATE

CONTRACTOR TO FIELD VERIFY THE DISTANCE FROM THE UTILITY TRANSFORMER TO THE SERVICE DISCONNECT SWITCH. INCREASE THE CONDUCTOR SIZE TO ADJUST FOR VOLTAGE DROP (NOTE: VOLTAGE DROP ON THE INCOMING SERVICE FEEDERS SHALL BE A MAXIMUM OF 2%. CONTRACTOR TO INCREASE THE SIZE AND NUMBER OF CONDUITS BASED ON THE CONDUCTORS INSTALLED).

CONTRACTOR TO PROVIDE MAIN GROUNDING ELECTRODE CONDUCTOR, FOR THE GROUNDING ELECTRODE SYSTEM, BASE ON THE SIZE AND TYPE OF SERVICE CONDUCTORS INSTALLED (PER N.E.C. TABLE 250.66). THE GROUNDING ELECTRODE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ARTICLE 250 OF THE CURRENT ADOPTED VERSION OF THE N.E.C..

CONTRACTOR TO FIELD VERIFY WITH THE UTILITY COMPANY THE AVAILABLE FAULT CURRENT AT UTILITY TRANSFORMER AND ENSURE ALL EQUIPMENT HAS AN A.I.C. RATING GREATER THAN OR EQUAL TO THE CALCULATED AVAILABLE FAULT CURRENT AT THE EQUIPMENT.

NEW PANELS SHALL BE LABELED TO IDENTIFY THE AVAILABLE FAULT CURRENT AT THE PANEL IN ACCORDANCE WITH NEC REQUIREMENTS.

NEW PANELS SHALL BE LABELED TO IDENTIFY THE ARC FLASH HAZARD AT THE PANEL IN ACCORDANCE WITH NEC REQUIREMENTS.

SERIES RATED CIRCUIT BREAKERS TO COMPLY WITH THE REQUIREMENTS OF NEC 240.86, DISCONNECTING MEANS SHALL BE LABELED PER NEC 110.22.

NEW PANEL BOARD A											
SURFACE MOUNTED 42/22K A.I.C. SERIES RATED											
120/208 VOLTS 3 PHASE 4 WIRE 200 AMP. BUS											
CIRCUIT BREAKER TYPE 200 AMP-MLO FED FROM MDP											
CRK. NO.	TRIP. NO.	TRIP. AMP.	TRIP. POLE	LOAD SERVED	LOAD - V. A.	LOAD - W. A.	LOAD SERVED	NO. TRIP. AMP.	TRIP. POLE	CRK. NO.	TRIP. AMP.
G	1	50	2	ESPRESSO MACHINE	3518	180	CASH REGISTERS	1	20	2	---
	3	50	2	ESPRESSO MACHINE	3518	180	PRINTER OUTLETS	1	20	4	---
G	5	50	2	ESPRESSO MACHINE	3518	180	CASH REGISTERS	1	20	6	---
	7	50	2	ESPRESSO MACHINE	3518	180	PRINTER OUTLETS	1	20	8	---
G	9	50	2	ESPRESSO MACHINE	3518	720	USB REC.	1	20	10	---
	11	50	2	ESPRESSO MACHINE	3518	1658	BOOSTER PUMP	1	20	12	---
	13	20	1	SPARE	---	---	SPARE	1	20	14	---
	15	20	1	DATA RACK REC.	360	---	SPARE	1	20	16	---
	17	20	1	DATA RACK REC.	180	---	SPARE	1	20	18	---
	19	20	1	IRRIGATION CONTROL	500	---	SPARE	1	20	20	---
	21	20	1	SPARE	360	---	IT REC.	1	20	22	---
	23	20	1	SPARE	---	---	SPARE	1	20	24	---
	25	20	1	RR / BOH REC.	540	---	SPARE	1	20	26	---
	27	20	1	SPARE	---	---	SPARE	1	20	28	---
	29	20	1	SPARE	---	---	SPARE	1	20	30	---
	31	20	1	SPARE	---	---	SPARE	1	20	32	---
	33	30	1	AIR CURTAIN-RUNNER	1000	1000	SPARE	1	20	34	---
	35	20	1	AIR CURTAIN-BACK D.	1000	1000	SPARE	1	20	36	---
	37	20	1	AIR CURTAIN-DRIVE T.	1000	---	SPARE	1	20	38	---
	39	20	1	AIR CURTAIN-WALK UP	1000	---	SPARE	2	40	40	---
	41	20	1	ROOF REC.	540	360	SPARE	1	20	42	---
G	43	20	1	USB REC.	540	480	WATER FILTRATION	1	20	44	---
G	45	20	1	USB REC.	720	---	WATER HEATER	1	20	46	---
	47	40	3	ICE MACHINE COND.	3328	480	WATER HEATER	1	20	48	---
	49	40	3	ICE MACHINE COND.	3328	1692	W.I. CONDENSER	3	20	50	---
	51	40	3	ICE MACHINE COND.	3328	1692	W.I. CONDENSER	3	20	52	---
	53	20	1	SPARE	15812	17712	SPARE	3	50	54	---

LOAD DESCRIPTION	DEMAND FACTOR	VOLT - AMPS	
		CONNECTED	DEMAND
LIGHTING	D.F. 1.25	---	---
RECEPTACLES	NEC	5140	5140
MOTORS	NEC	---	---
MISC. EQUIPMENT	1.00	14190	14190
KITCHEN EQUIPMENT	0.65	29622	19254
HVAC EQUIPMENT	1.00	---	---
TOTAL -		48952	38584

PANELBOARD LOAD = 38584 V.A.
FULL LOAD AMPS = 107 A.

LO HAND LOCK "OFF/ON" CLAMP DEVICE
HACK HEATING, AIR CONDITION AND REFRIGERATION RATED BKR
G GROUND FAULT CIRCUIT INTERRUPTING BKR
C# ROUTE CIRCUIT THROUGH CONTACTOR INDICATED

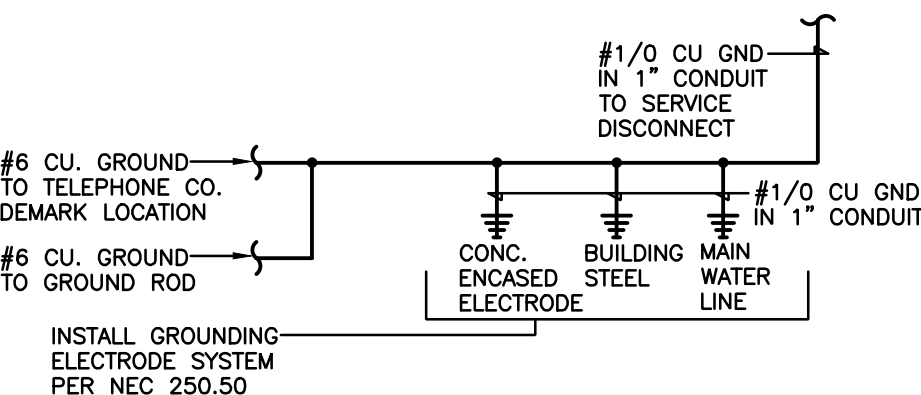
NEW PANEL BOARD B					SURFACE MOUNTED		42/22K A.I.C. SERIES RATED			
120/208 VOLTS 3 PHASE					4 WIRE		200 AMP. BUS			
CIRCUIT BREAKER TYPE					200 AMP-MLO		FED FROM		NDR	
CRK. TRIP. NO.	TRIP. AMP.	TRIP. POLE	LOAD SERVED	LOAD - V. A.	LOAD - W. A.	LOAD SERVED	NO. TRIP. AMP.	TRIP. POLE	CRK. TRIP. NO.	
1	50	2	ESPRESSO MACHINE	3518 200	3518 132	SPEAKERS	1	20	2	
3					132	ICE MACHINE	1	20	4	
5	15	1	SPARE			ICE MACHINE	1	20	6	
7	15	1	SPARE			SPARE	1	20	8	
9	20	1	HUG FREEZER	1500		SPARE	1	20	10	
11	20	1	UC FRIDGE		240	SPARE	1	20	12	
13	20	1	GRINDERS	1300 1920	1300 1920	FROZEN BEV MACHINE (A)	1	2	14	
15	20	1	GRINDERS		1300 1920	FROZEN BEV MACHINE (A)	2	2	16	
17	20	1	GRINDERS		1300 1920	FROZEN BEV MACHINE (A)	2	2	18	
19	20	1	HOT WATER DISPENSER	1848 1920	1848 1920	FROZEN BEV MACHINE (B)	1	2	20	
21	20	1	HOT WATER DISPENSER		1848 1920	FROZEN BEV MACHINE (B)	1	2	22	
23	20	1	HOT WATER DISPENSER		1848 1920	FROZEN BEV MACHINE (B)	1	2	24	
25	20	1	SPARE	1920		FROZEN BEV MACHINE (B)	2	2	26	
27	20	1	SPARE	1920		FROZEN BEV MACHINE (B)	2	2	28	
29	20	1	WALK-IN EVAP/LTG		1000 1848	HOT WATER DISPENSER	1	20	30	
31	20	1	VITAMIX	1800		SPARE	1	20	32	
33	30	1	VITAMIX		1800	SPARE	1	20	34	
35	20	1	VITAMIX		1800 1920	FROZEN BEV MACHINE (C)	1	2	36	
37	20	1	GRINDERS	1300 1920	1800 1920	FROZEN BEV MACHINE (C)	2	2	38	
39	20	1	VITAMIX		1800 1920	FROZEN BEV MACHINE (C)	2	2	40	
41	20	1	SPARE		1800 1920				42	
					17644	10576				

LOAD DESCRIPTION	DEMAND FACTOR	VOLT - AMPS	
		CONNECTED	DEMAND
LIGHTING	D.F. 1.25	---	---
RECEPTACLES	NEC	720	720
MOTORS	NEC	---	---
MISC. EQUIPMENT	1.00	1200	1200
KITCHEN EQUIPMENT	0.65	52948	34416
HVAC EQUIPMENT	1.00	---	---
TOTAL -		54868	36336

PANELBOARD LOAD = 36336 V.A.
FULL LOAD AMPS = 101 A.

LO HAND LOCK "OFF/ON" CLAMP DEVICE
HACK HEATING, AIR CONDITION AND REFRIGERATION RATED BKR
G GROUND FAULT CIRCUIT INTERRUPTING BKR
C# ROUTE CIRCUIT THROUGH CONTACTOR INDICATED

GROUNDING DETAIL



AVAILABLE INTERRUPTING CURRENT CALCULATION	
$f = \frac{1.732 \times (\text{LENGTH OF FEEDER}) \times I_{S.C.}}{(\# \text{ of sets}) \times C \times E_{L-L}}$	
$I_{S.C.}$ = SHORT CIRCUIT AMPS (FROM LANDLORD)	
E_{L-L} = LINE TO LINE VOLTAGE	
C = VALUE FOR 500 = 22,185	
$f = \frac{1.732 \times 20 \times 43,237}{1 \times 22,185 \times 208} = 0.325$	
$M = \frac{1}{1 + f} = \frac{1}{1.325} = 0.755$	
$I_{S.C.}^{SYM}$	$I_{S.C.} \times M = 32,632$

PLUMBING SYMBOLS LEGEND	
— G —	GAS PIPING
— CD —	CONDENSATE DRAIN PIPING
— - —	COLD WATER PIPING
— · — · —	HOT WATER PIPING (140°)
— · · — ·	HOT WATER RECIRCULATING PIPING
— SAN —	SANITARY WASTE PIPING
— FW —	FILTERED WATER PIPING
— 140° —	140° WATER PIPING
— GW —	GREASE WASTE PIPING
— — — — —	SANITARY VENT PIPING
VTR	VENT THROUGH ROOF
— 30 —	PLUMBING TRAP
— 3 —	PIPE TURNING DOWN
— O —	PIPE TURNING UP
— N —	CHECK VALVE
— U —	UNION
AFF	ABOVE FINISHED FLOOR
CO	CLEAN OUT
— P —	PRESSURE REGULATING VALVE (PRV) (50 PSI)
— B —	BALL VALVE
— 0 —	BALANCE VALVE
— EWF —	ELECTRIC WATER FOUNTAIN
GCO	GRADE CLEAN OUT
— T —	CIRCUIT SETTER BALANCE VALVE
— P —	POINT OF CONNECTION
— F —	BELOW FLOOR
— C —	ABOVE CEILING
— PD —	PUMP DISCHARGE

- GENERAL NOTES:
- EXACT LOCATION OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS.
 - BEFORE SUBMITTING BID, THE PLUMBING CONTRACTOR SHALL REVIEW THE ARCHITECTURAL DRAWINGS AND INCLUDE IN HIS BID AN AMOUNT TO FURNISH AND INSTALL ANY FIXTURES WHICH ARE SHOWN IN ADDITION TO FIXTURES SHOWN ON THE PLUMBING DRAWINGS.
 - CONTRACTOR SHALL VERIFY INVERT ELEVATION OF SEWERS TO WHICH NEW WASTE LINES ARE TO BE CONNECTED BEFORE MAKING UP OR INSTALLATION OF NEW WASTE SYSTEM.
 - CONTRACTOR SHALL VERIFY AND COORDINATE LOCATION OF ALL PLUMBING LINES WITH DUCTWORK AND ELECTRICAL SERVICES.
 - THE INSTALLATION OF ALL VALVES, UNIONS, THERMOMETERS, GAUGES, OR OTHER INDICATING OR RECORDING EQUIPMENT, OR SPECIALTIES REQUIRING FREQUENT READING, REPAIRS, ADJUSTMENT, INSPECTION, REMOVAL OR REPLACEMENT SHALL BE CONVENIENTLY AND ACCESSIBLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING.
 - WHERE POSSIBLE, THE VENTS TOGETHER SO THAT A MINIMUM NUMBER TERMINATE THROUGH THE ROOF.
 - WATER CLOSETS IN PUBLIC TOILET ROOMS SHALL CENTER ON THE FINAL LAYOUT OF TOILET PARTITIONS.
 - ALL VENTS THROUGH ROOF SHALL BE AT LEAST 10' REMOVED FROM ALL AIR INTAKES, EVAP. COOLERS.
 - CONTRACTOR SHALL NOT CUT HOLES IN STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN APPROVAL FROM ARCHITECT.
 - CONTRACTOR SHALL INSTALL DIELECTRIC UNIONS AT CONNECTION OF DISSIMILAR METALS.
 - CONTRACTOR SHALL ROUGH-IN ALL WASTE AND SUPPLIES TO SPECIAL EQUIP. ACCORDING TO MANUFACTURERS SHOP DRAWINGS AND MAKE FINAL CONNECTIONS ALL SUPPLIES SHALL BE VALVED.
 - ASSUMED WATER PRESSURE-CONTRACTOR SHALL VERIFY ACTUAL WATER PRESSURES PRIOR TO CONSTRUCTION. IF PRESSURE IS LESS THAN 60 PSI, CONTRACTOR SHALL CONTACT THE ENGINEER FOR PIPE SIZING EVALUATION. IF PRESSURE EXCEEDS 80 PSI, A PRESSURE REDUCING VALVE SHALL BE PROVIDED. PIPING VELOCITY SHALL NOT EXCEED 8 FPS AND HOT WATER VELOCITY SHALL NOT EXCEED 5FPS.

- FIELD VERIFICATION NOTES:
- THE PLUMBING CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO FIELD VERIFY ALL EXISTING CONDITIONS WHICH MAY AFFECT HIS BID. THE FOLLOWING ITEMS SHALL BE VERIFIED. 1.A.EXACT PLACEMENT SIZE CAPACITY MANUFACTURER AND CONDITION OF ALL EXISTING PLUMBING EQUIPMENT WITHIN SCOPE OF WORK. WHETHER SPECIFICALLY SHOWN OR NOT. 1.B.SIZE AND LOCATION OF ALL EXISTING WASTE, GREASE WASTE, VENT AND WATER PIPING.
 - ALL REFERENCES ON THESE DRAWINGS TO EXISTING EQUIPMENT, WATER IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL THESE ITEMS PRIOR TO BID AND INCLUDE IN HIS BID ANY AND ALL AMOUNTS REQUIRED TO ACCOMMODATE EXISTING CONDITIONS.
 - NO ALLOWANCES WILL BE MADE AFTER THE PROJECT HAS BEEN AWARDED FOR FAILURE TO VERIFY EXISTING CONDITIONS.
 - ANY DISCREPANCIES WHICH MAY AFFECT THE CONTRACTOR BID SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND ARCHITECT FOR DIRECTION.
 - PLUMBING ROUTINGS BASED ON OWNER'S SCHEMATICS OF LOCATION OF EXISTING FIXTURES AND SHELL DRAWINGS. CONTRACTOR RESPONSIBLE FOR VERIFICATION OF ACTUAL LOCATION OF SUPPLY LINES AND MAKING APPROPRIATE ADJUSTMENTS TO ACTUAL CONDITIONS IN THE FIELD.
 - PRIOR TO CONSTRUCTION, VERIFY THE LOCATION OF THE HVAC/WALK-IN CONDENSATE FLOOR SINK. IF SLOPE AND DISTANCE OR IF IT IS INFEASIBLE TO DISPOSE OF WALK-IN COOLER CONDENSATE, USE A CONDENSATE PUMP.

PLUMBING FIXTURE SCHEDULE							
DESIGNATION	MODEL NUMBER	MFR.	COLD WATER	HOT WATER	WASTE	VENT SIZE	REMARKS
P-1	WATER CLOSET K-3619 ADA COMPLIANT ELONGATED BOWL	KOHLER	½"	-	4"	2"	18" HIGH BOWL CSEAT AND CAP BOLTS. 1.28 GAL PER FLUSH INSTALL WITH ANGLE STOP. PROVIDE "WHITE" COLOR SELECTION FOR CHINA.
P-2	LAVATORY SINK K-2030 ADA COMPLIANT	KOHLER	½"	½"	2"	2"	DELTA FAUCET 501LF-HGMHDF SINGLE LEVER WITH 0.5 GPM VANDAL RESISTANT AERATOR. GRID STRAINER TAILPIECE. OFFSET WHEELCHAIR TRAP LOOSE KEY STOP. INSTALL HANDLE LIMIT STOP KIT WITHIN SINGLE LEVEL MIXING FAUCET TO LIMIT OUTLET HOT WATER SUPPLY TO 110°F.
P-3	WATER FILTER BY OWNER	EVERPURE	1¼"	-	-	-	PLUMBING CONTRACTOR SHALL INSTALL WATER FILTER SUPPLIED BY OWNER. PROVIDE WITH BALL ISOLATION VALVE AND UNION ON BOTH ENDS OF ALL CONNECTIONS. PROVIDE RPZ WITH DRAIN CUP IF REQUIRED BY CODE.
P-6	2)WATER HEATER CU1991	RINNAI	1"	1"	-	-	198,000 BTU TANKLESS WATER HEATER. PROVIDE T&P RELIEF VALVE, BRASS DRAIN VALVE FOAM INSULATION PER ASHRAE STANDARD, GAS PRESSURE REGULATOR AND ANODE ROD. PROVIDE AND INSTALL INTAKE AND EXHAUST AIR FLUES IN ACCORDANCE WITH MANUFACTURE'S INSTALLATION INSTRUCTIONS. PROVIDE SYSTEM WITH RECIRCULATION PUMP.
P-7	HAND SINK 7-PS-56	ADVANCE TABCO	½"	½"	2"	2"	PROVIDED BY DBC, INSTALLED BY GC.
P-8	3 COMPARTMENT SINK BY OWNER	-	½"	½"	(3)2"	-	PLUMBING CONTRACTOR TO PROVIDE ½" CW AND ½" HW SUPPLY LINES WITH ANGLE VALVE SHUOFF AND SUPPLY STOPS TO SINK FAUCET. PLUMBING CONTRACTOR TO PROVIDE (3) 2" WASTE LINES FROM EACH BAY AND INDIRECT WASTE TO FLOOR SINK BELOW. PROVIDE FISHER 34271 FAUCET AND 24090 WASTE DRAIN WITH STRAINERS, INSTALLED BY PC.
P-9	PULL-OUT SPRAYER HANDLE MPZ-4DLN-06	T&S (T&SBRASS.COM)	-	-	-	-	TO BE INSTALLED IN DB PROVIDED STAINLESS STEEL TABLE BY PC.
P-10	MOP SINK Z1996-24	ZURN	¾"	¾"	3"	2"	MOP SERVICE BASIN WITH 10" HIGH WALLS 3" DRAIN , FIAT 830-AA SERVICE FAUCET'S WITH VACUUM BREAKER. INTEGRAL STOPS AND HOSE WITH HOSE BRACKET.
P-11	FLOOR SINK Z1900	ZURN	-	-	4"	2"	12" X 12" X 6" DEEP CAST IRON BODY WITH WHITE PORCELAIN ENAMEL
P-12	FLOOR DRAIN EZ-5	ZURN	-	-	2"	2"	POLISHED BRASS STRAINER. AND TRAP PRIMER. LOCATE PRIMER WITH SHUT-OFF VALVE AND ACCESS PANEL IN WALL. COORDINATE WITH GENERAL CONTRACTOR.
P-13	GREASE INTERCEPTOR GB-50	SCHIER	-	-	4"	2"	SCHIER GB-50 50GPM BELOW-GRADE AT EXTERIOR VENTED THROUGH BUILDING. PROVIDE HI TRAFFIC COVER AND ACCESS. FINAL SIZE TO BE COORDINATED WITH LOCAL AUTHORITY.
P-14	ROOF DRAIN Z165	ZURN	-	-	3"	-	REFER TO ARCHITECTURAL SHEET A4.0 FOR ROOF DRAIN LOCATIONS AND DETAILS.
P-15	WALL HYDRANT HY-420-8	WATTS	1/2"	-	-	-	6" NON-FREEZE WALL HYDRANT, MOUNT AT 24"A.F.F. AT REAR ELEVATION.
P-16	YARD HYDRANT EVERBILT	WATTS	1/2"	-	-	-	FROST PROOF 2FT. BURY DEPTH
P-17	CIRCULATING PUMP 0010	TACO	-	-	-	-	115V, 3250 RPM, PROVIDE WITH AQUASTAT AND/OR TIMER AS REQUIRED.
P-18	BOOSTER PUMP AQUAVAR BAQUABII 1151AB25HM03	AQUAVAR	1-1/4"	-	-	-	1 HP VARIABLE SPEED CONTROLLER, 115V INPUT, 30 GPM @ 35 PSI BOOST. PROVIDE ALL NECESSARY VALVES AND ACCESSORIES RECOMMENDED BY MANUFACTURER FOR A COMPLETE SYSTEM.

SANITARY SIZING CALCULATION				
FIXTURE	DESIGNATION	DFU WASTE	QUANTITY	TOTAL
WATER CLOSET	P-1	4	1	4
LAVATORY	P-2	1	1	1
FLOOR DRAIN	P-12	5	1	5
3 COMP SINK	P-8	6	1	6
FLOOR SINK	P-11	6	5	30
HAND SINK	P-7	2	2	4
MOP SINK	P-10	3	1	3
TOTAL (DFU)				53

NATURAL GAS CALCULATION	
APPLIANCES	DEMAND (MBH)
RTU-1	72.0
RTU-2	72.0
WATER HEATERS	398.0
TOTAL BTU LOAD	542.0
SYSTEM LENGTH	81
DEVELOPED PIPE LENGTH	97
SITE ELEVATION	6,900' AMSL

KITCHEN FIXTURE SCHEDULE							
DESIGNATION	MFR. AND MODEL NUMBER	COLD WATER	FILTERED COLD WATER	HOT WATER	WASTE	VENT SIZE	REMARKS
P-4	DIPPERWELL FAUCET & SINK ASSEMBLY	½"	-	-	½"	-	SET INTO PRE-CUT HOLE IN COUNTER. CONNECT CW BRAIDED STAINLESS TO FAUCET AND PVC DRAIN TO WELL. PIPE DRAIN STRAIGHT BACK TO WALL, DOWN WALL, THEN FORWARD BETWEEN WHEELS OF ICE BIN BRACED TO FLOOR WITH UNISTRUT AND A 1" AIR GAP OVER FLOOR SINK
P-5	RAPID RINSE STATION BY OWNER	-	-	-	¾"	-	PLUMBING CONTRACTOR TO PROVIDE ½" HW LINE WITH BALL VALVE SHUT-OFF. PROVIDE FINAL COLD WATER CONNECTION TO RAPID RINSE STATION. PROVIDE ¾" INDIRECT WASTE LINE TO FLOOR SINK BELOW. (PROVIDE RPZ IF REQUIRED BY LOCAL CODE)
EQ-1	ESPRESSO MACHINE (3 MACHINE GROUP+1 OPTIONAL) BY OWNER	-	(4)½"	-	(3)¾"	-	CONTRACTOR TO PROVIDE ½" FW LINE WITH BRAIDED FLEX HOSE AND BALL VALVE SHUT-OFF. PROVIDE ¾" INDIRECT WASTE LINE TO FLOOR SINK BELOW. TYPICAL OF 3 MACHINES IN GROUP.
EQ-3	BUNN WATER DISPENSER BY OWNER	-	(4)½"	-	-	-	CONTRACTOR TO PROVIDE ½" FW WITH BALL VALVE SHUT-OFF. SUPPLIED WITH ASSE 1022 INLINE CARTRIDGE BACKFLOW.
EQ-4	GLASS FILLER BY OWNER	-	(4)½"	-	-	-	½" FILTER WATER SUPPLY - NO DRAIN REQUIRED
EQ-8	ICE MACHINE BY OWNER	1/2"	-	-	¾"	-	PROVIDE FINAL COLD WATER CONNECTION TO ICE MACHINE FILTER EQ-8B. PROVIDE ¾" INDIRECT WASTE LINE TO FLOOR SINK BELOW. BACKFLOW ON FILTER ASSEMBLY IF REQUIRED. NOTE: PC AND EC TO PROVIDE ADDITIONAL OUTLET AND WATERLINE STOP FOR FUTURE 2ND ICE MACHINE.
EQ-8B	ICE MACHINE WATER FILTER PENTAIR EVERPURE EV9293-22	1/2"	-	-	-	-	PROVIDE 1/2" COLD WATER TO ICE MACHINE FILTER.
EQ-9	ICE STORAGE BIN BY OWNER	-	-	-	¾"	-	PROVIDE ¾" INDIRECT WASTE LINE TO FLOOR SINK BELOW.

- GENERAL NOTES:
- PLUMBING CONTRACTOR SHALL STRAP UP ALL SUPPLY LINES TIGHT TO STAINLESS TABLES WITH ZIPTIES SO THAT UNDER COUNTER EQUIPMENT CAN BE REMOVED WITHOUT GETTING CAUGHT IN THE BRAIDED STAINLESS SUPPLY LINES.
 - PLUMBING CONTRACTOR SHALL RUN DRAINS OFF OF STAINLESS TABLES AND DRINK EQUIPMENT IN RIGID COPPER PIPE. DRAINS ARE TO BE RUN TOWARD THE CENTER OF THE FLOOR SINK BENEATH EACH TABLE. DRAINS WILL FIT BETWEEN THE WHEELS OF THE ROLLING ICE BINS. PC TO STRAP DRAINS TO FLOOR WITH UNISTRUT OR SIMILAR.
 - ALL EXPOSED WATER LINES ARE TO BE RIGID COPPER.
 - ALL SHUT OFF VALVES ARE TO BE COLORED BALL VALVES (DOMESTIC-BLUE, HOT-RED, FILTERED-WHITE) AND LABELED FOR EACH PIECE OF EQUIPMENT THAT IT SUPPLIES. NO ANGLE STOPS.

WATER PRESSURE CALCULATION			
STATIC PRESSURE			60.0
PRESSURE DROP THRU FRICTION LOSS FROM MAIN TO METER (12" WATER LINE)			0.0
PRESSURE DROP THRU METER			5.0
PRESSURE DROP THRU FRICTION LOSS FROM METER TO BACKFLOW			5.2
PRESSURE DROP THRU BACKFLOW AND STRAINER			15.0
PRESSURE DROP DUE TO ELEVATION TO PUMP			4.3
PRESSURE AVAILABLE @ PUMP			22.5
PRESSURE AVAILABLE AFTER PUMP			57.5
PRESSURE NEEDED AT FIXTURES			35.0
PRESSURE DROP DUE TO ELEVATION			4.0
REMAINING PRESSURE			26.5
SYSTEM LENGTH			150
EQUIVALENT PIPE LENGTH		187.50 FT	
ALLOWABLE LOSS PER 100FT OF PIPE:	26.5PSI X 100FT	187.50 FT	14.1
FIXTURE UNITS DOMESTIC WATER			
FIXTURES	QUANTITY	COLD WATER	HOT WATER
HAND SINK	2	2	2
LAVATORY	1	1	1
WATER CLOSET	1	3	0
3-COMP	1	3	3
MOP SINK	1	3	3
WATER DISPENSER	4	4	0
ESPRESSO MACHINE (3 MACHINE GROUP)	4	12	0
ICE MAKER	1	1	0
RAPID RINSE	5	5	0
TOTAL		34	9
GPM		20	9

FORMULA FOR SIZING GREASE INTERCEPTORS							
INTERIOR/EXTERIOR IN-FLOOR GREASE INTERCEPTORS							
Length X Width X Depth/231= Gallons X .75 Fill Factor X Number of Compartments= Size of Grease Interceptor (GPM)							
Discharge from 3-Compartment Sink Compartment Deminsions: 16" X 14" X 14" / 231 = 20 X .75 Fill Factor X 3 Compartments = 31 Gal							
Total GPM / Retention Time 31 Gal / 1 Min = 31 GPM GREASE WASTE SIZE: 4"							
FIXTURE	x	NUMBER OF FIXTURES	x	FIXTURE VALUE UNIT	=	TOTAL FIXTURES UNITS /	2 DFU PER GPM = FLOW RATING GPM
* FLOOR FIXTURES	x	6	x	3	=	18 /	2 = 9
HAND SINKS	x	2	x	2	=	4 /	2 = 2.0
SERVICE BASIN	x	1	x	3	=	3 /	2 = 1.5
TOTAL REQUIRED FLOW RATING GPM							= 43.5

* FLOOR SINKS RECEIVING DISCHARGE FROM COMPARTMENT SINK(S). NOT COUNTED. REFER TO VOLUME CALCULATION FOR SINKS IN THIS TABLE.



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10.14.2021



Project No: MO0102
Dutch Bros Coffee - New Freestanding Store
500 NW Chipman Road, Lee's Summit, Missouri 64086
for: Dutch Bros Coffee
110 SW 4th St.
Grants Pass, OR 97526

ISSUED FOR PERMIT:
10.11.2021

REV:	DATE:	DESCRIPTION:
01	10.14.21	CITY COMMENTS
02	11.01.21	CITY COMMENTS
03	03.15.22	OWNER REVISIONS

SHEET NAME:

PLUMBING
SPECIFICATIONS &
SCHEDULES

SHEET NUMBER:

P1.0



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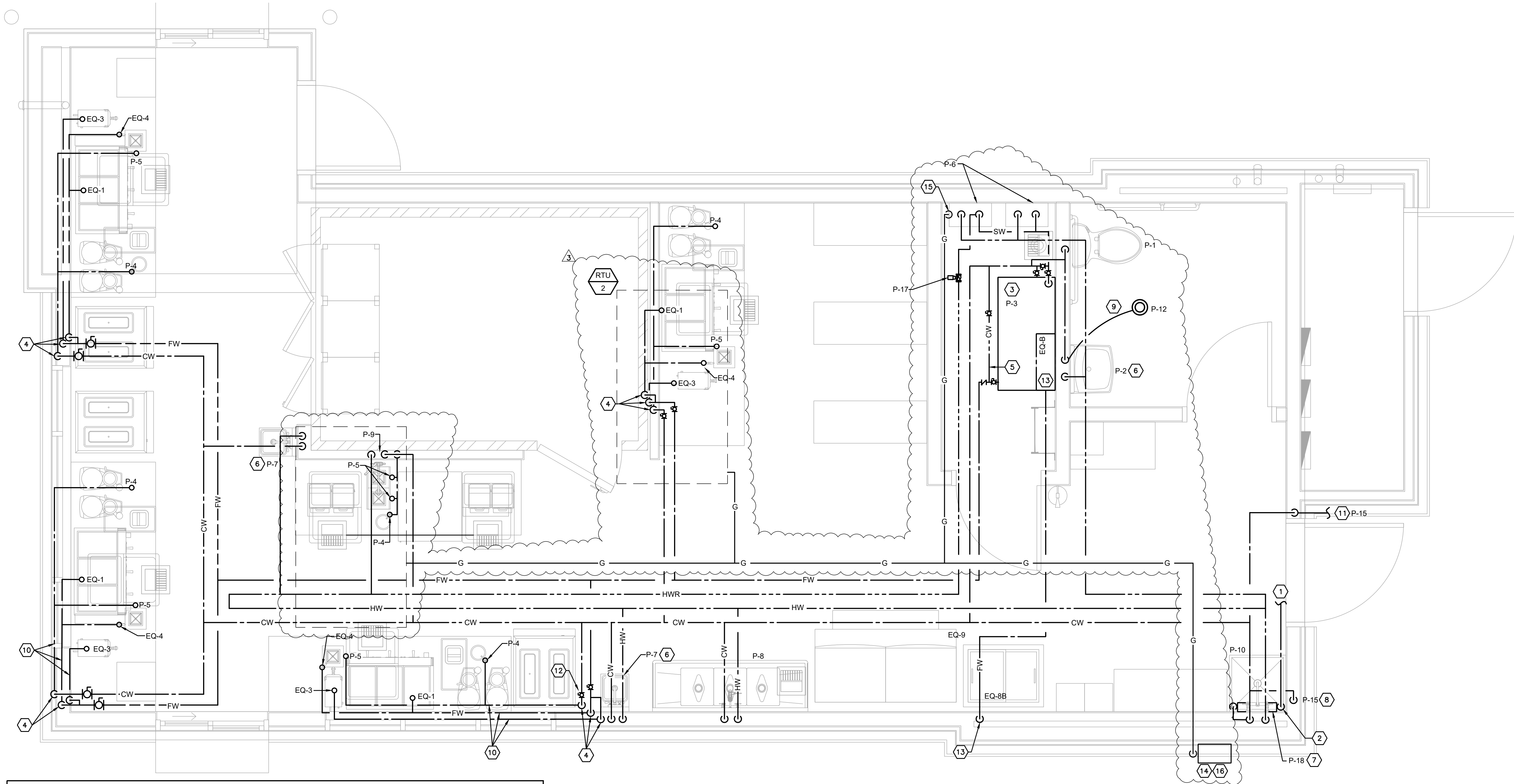
SHEET NAME:

PLUMBING SUPPLY
FLOOR PLAN AND
DETAILS

SHEET NUMBER:

P3.0

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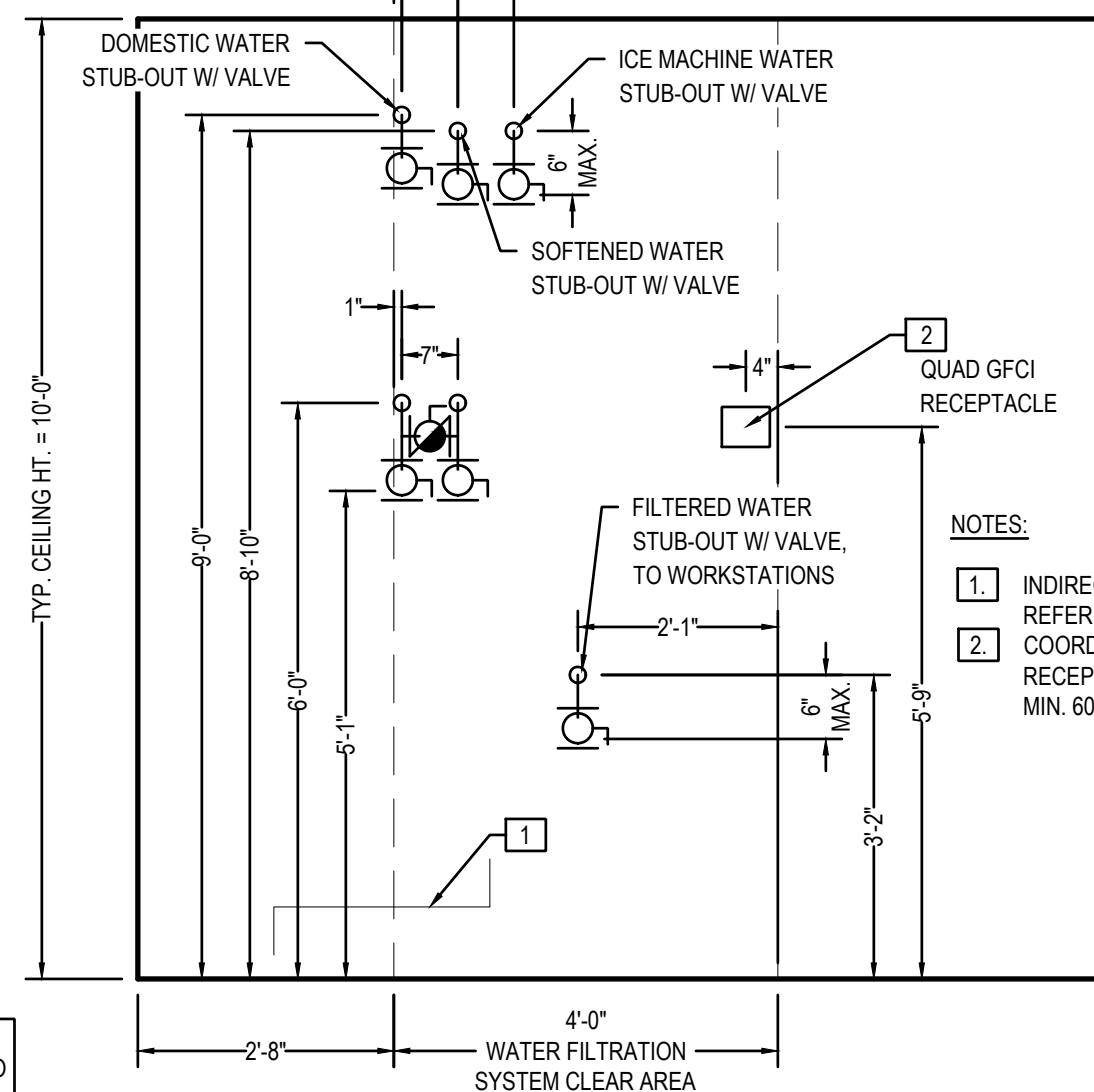
1 WATER FLOOR PLAN

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

NOTE:
AN APPROVED BACKFLOW PREVENTION DEVICE IS REQUIRED FOR BEVERAGE MACHINES CONNECTED TO THE WATER SUPPLY PER 2018 IPC.
TANK-LESS WATER HEATERS SHALL BE NATIONALLY LISTED AND BE INSTALLED IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS THAT WERE APPROVED AS PART OF THEIR LISTING. THE GAS PIPING SERVING THIS APPLIANCE MUST BE SIZED IN COMPLIANCE WITH THE WATER HEATER'S LISTED INSTALLATION INSTRUCTIONS PER 2018 IPC.
STUB-OUTS FOR COFFEE EQUIPMENT AT TABLE SHALL BE 24" A.F.F.

LEGEND:

- 3/4" BALL VALVE, FNPT; DIRECT DOWN AND KEEP TIGHT TO WALL
- 3/4" BYPASS VALVE, U.N.O.



NOTES:

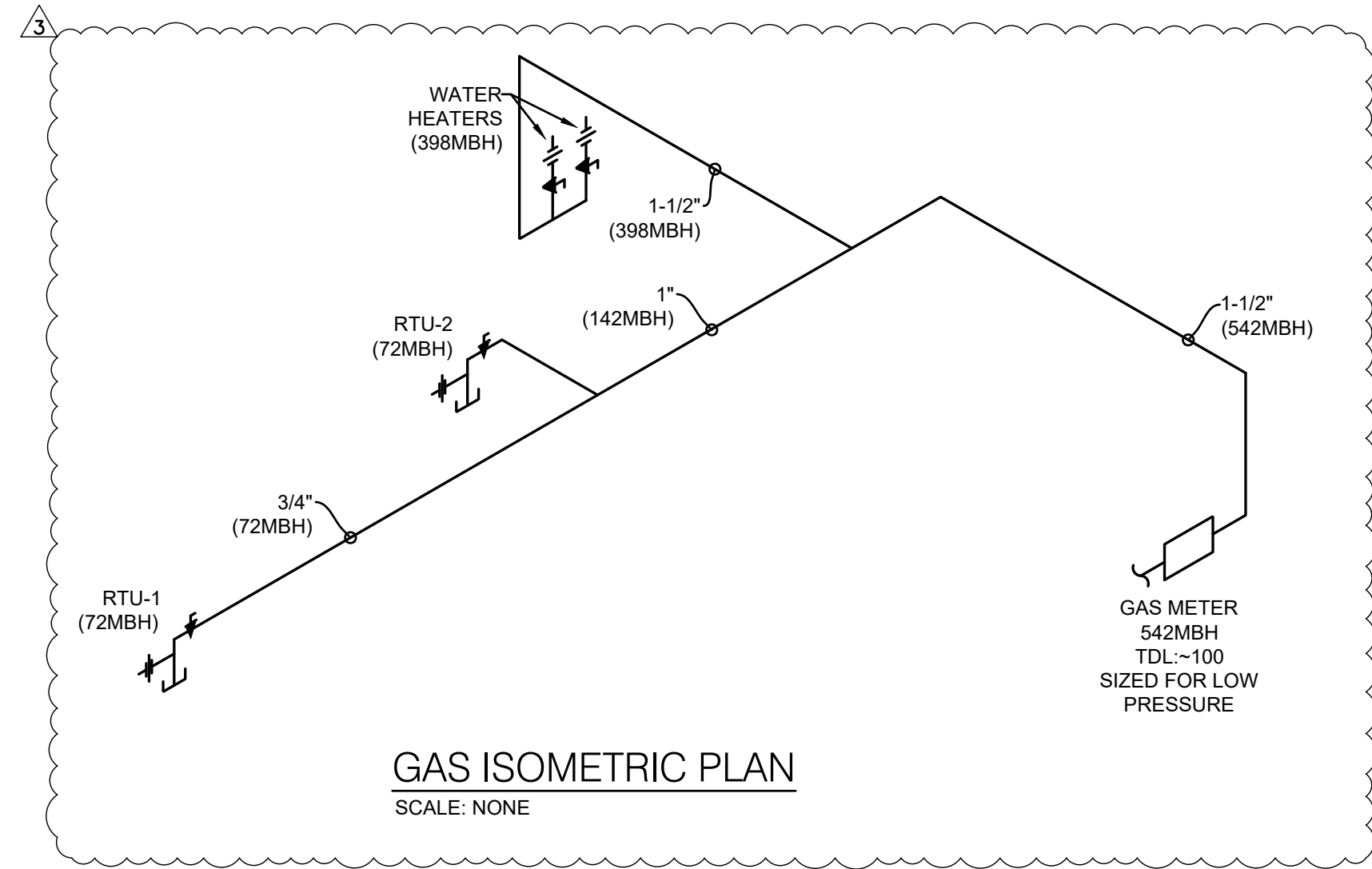
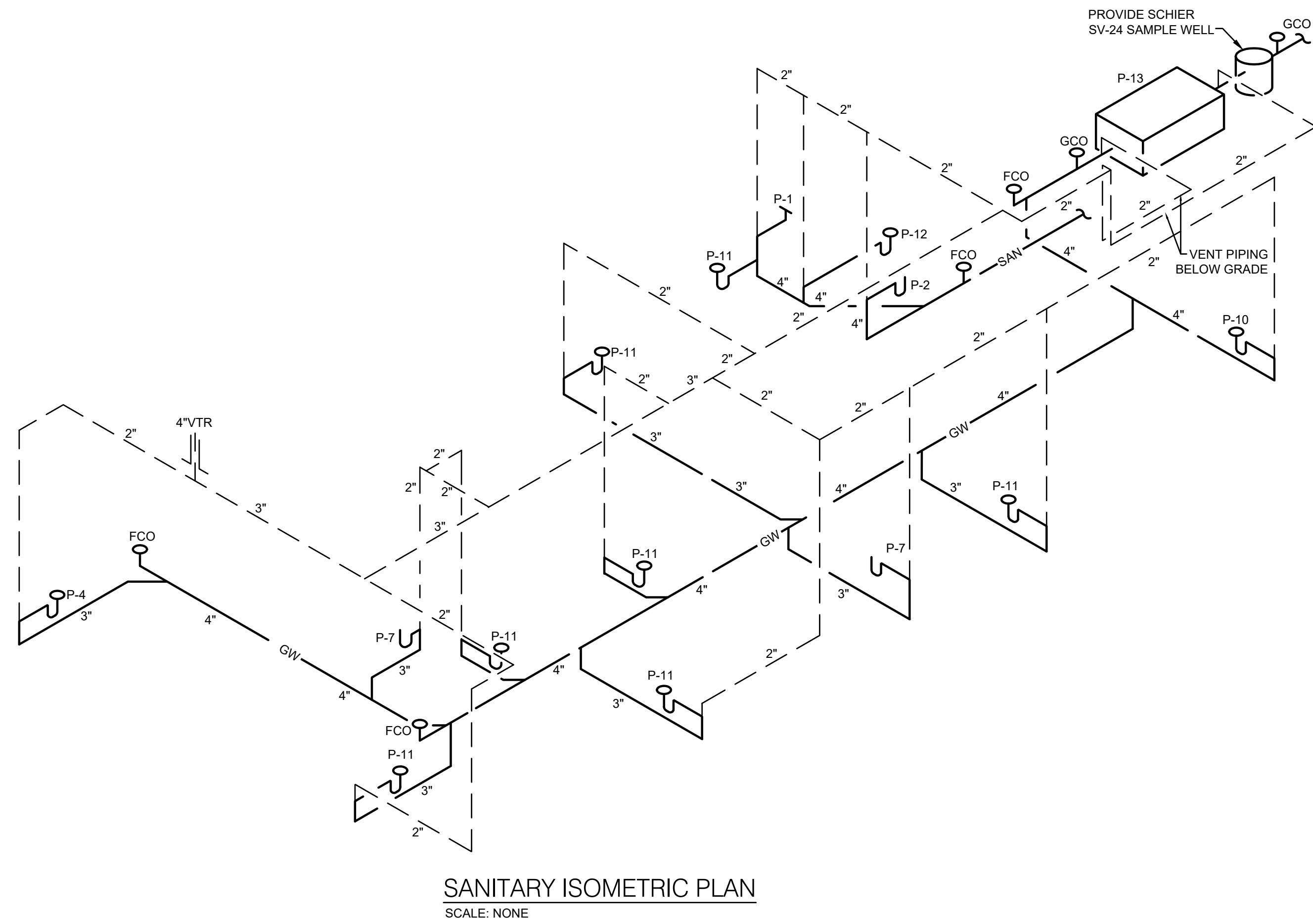
- INDIRECT DRAIN LINE TO MOP/FLOOR SINK. REFER TO "INDIRECT DRAIN" DETAIL.
- COORDINATE LOCATION OF GFCI QUAD RECEPTACLE W/ EQUIPMENT REQUIREMENTS; MIN. 60" A.F.F.

FILTRATION SYSTEM 3 - DB2550-A1

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

PLUMBING KEYED NOTES

- ROUTE NEW 1" WATER PIPING TO CONNECT TO WATER METER AND MAIN. VERIFY EXACT SIZE AND LOCATION IN FIELD. VERIFY WITH WATER COMPANY AND LANDLORD EXACT CONNECTION, DELIVERY PRESSURE AND METER REQUIREMENTS PRIOR TO WORK. WATER PIPING SIZE BASED ON 52 PSI INCOMING STATIC WATER PRESSURE. PROVIDE PRESSURE REDUCING VALVE ON INCOMING WATER LINE TO BUILDING.
- PROVIDE WATTS LF009 BACKFLOW PREVENTER ABOVE MOP SINK. ROUTE RELIEF PIPES TO DISCHARGE INDIRECTLY TO MOP SINK.
- WATER FILTRATION SYSTEM TO BE PROVIDED AND INSTALLED BY SELECTED WATER FILTRATION MANUFACTURER. PLUMBING CONTRACTOR TO INSTALL BYPASS PIPING TO WATER FILTRATION SYSTEM.
- DROP 1/2" CW AND 1/2" FW LINES DOWN IN WALL ON WARM SIDE OF INSULATION TO BE RAN UNDER COUNTER TO SERVE FIXTURES.
- PROVIDE FULL SIZED BYPASS VALVES FOR THE MAIN CW LINE SERVING THE WATER FILTRATION SYSTEM.
- PROVIDE WATTS LFMMV MIXING VALVE FOR LAVATORY. SET OUTLET TEMPERATURE TO 110°.
- INSTALL BOOSTER PUMP SYSTEM AS REQUIRED ON PLATFORM ABOVE MOP SINK. INSTALL PER MANUFACTURERS GUIDELINES. PROVIDE WITH ALL NECESSARY VALVES AND ACCESSORIES FOR A COMPLETE SYSTEM. COORDINATE EXACT INSTALLATION OF ALL SYSTEM COMPONENTS IN FIELD PRIOR TO ANY WORK AS DRAWING IS SHOWN DIAGRAMMATICALLY ONLY.
- 1/2" COLD WATER DOWN TO FREEZE PROOF WALL HYDRANT.
- COLD WATER DOWN FROM TRAP PRIMER TO FLOOR DRAIN. SEE DETAIL ON DRAWING P5.0 FOR MORE INFORMATION.
- PIPING TO BE RAN LOW IN WALL BELOW WINDOW.
- 1/2" COLD WATER LINE TO WALL HYDRANT (P-15) IN TRASH ENCLOSURE. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE PIPE/DISTANCE FOR FINAL CONNECTION.
- PROVIDE NIBCO SERIES 585-70 BALL VALVE. (TYP.)
- PROVIDE COLD WATER STUBOUT AT 72" AFF ABOVE FREEZER FOR ICE MAKER WATER FILTER.
- ROUTE TO CONNECT TO NEW GAS METER. GAS METER'S NEW DEMAND = 542MBH. (FIELD VERIFY ACTUAL LOCATION). APPROXIMATE LENGTH FROM FURTHEST FIXTURE TO METER BANK 100'-0". CONTRACTOR TO VERIFY EXACT LENGTH, AVAILABLE PRESSURE AND INSTALLATION LOCATION IN FIELD. VERIFY WITH GAS COMPANY FOR EXACT CONNECTION AND METER INSTALLATION GUIDELINES AND REQUIREMENTS PRIOR TO ANY WORK.
- GAS PIPING DOWN TO WATER HEATERS.
- PROVIDE EARTHQUAKE-ACTUATED GAS SHUT OFF VALVES, AT GAS METER ON SUPPLY TO BUILDING, INSTALL PER MANUFACTURER'S RECOMMENDATIONS.



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10.14.2021



Project No: MO0102
Dutch Bros Coffee - New Freestanding Store
500 NW Chipman Road, Lee's Summit, Missouri 64086
for: Dutch Bros Coffee
110 SW 4th St.
Grants Pass, OR 97526

ISSUED FOR PERMIT:
10.11.2021

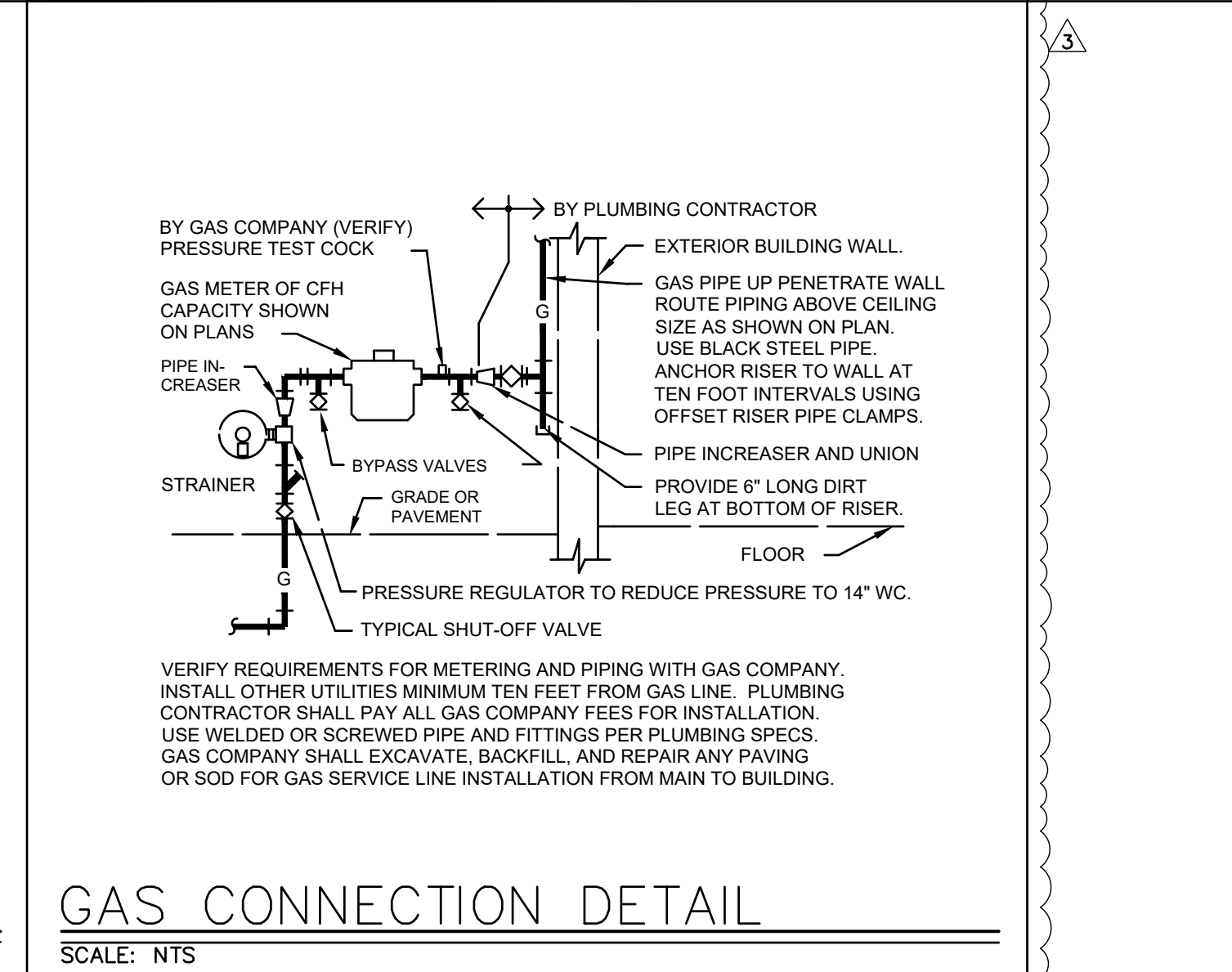
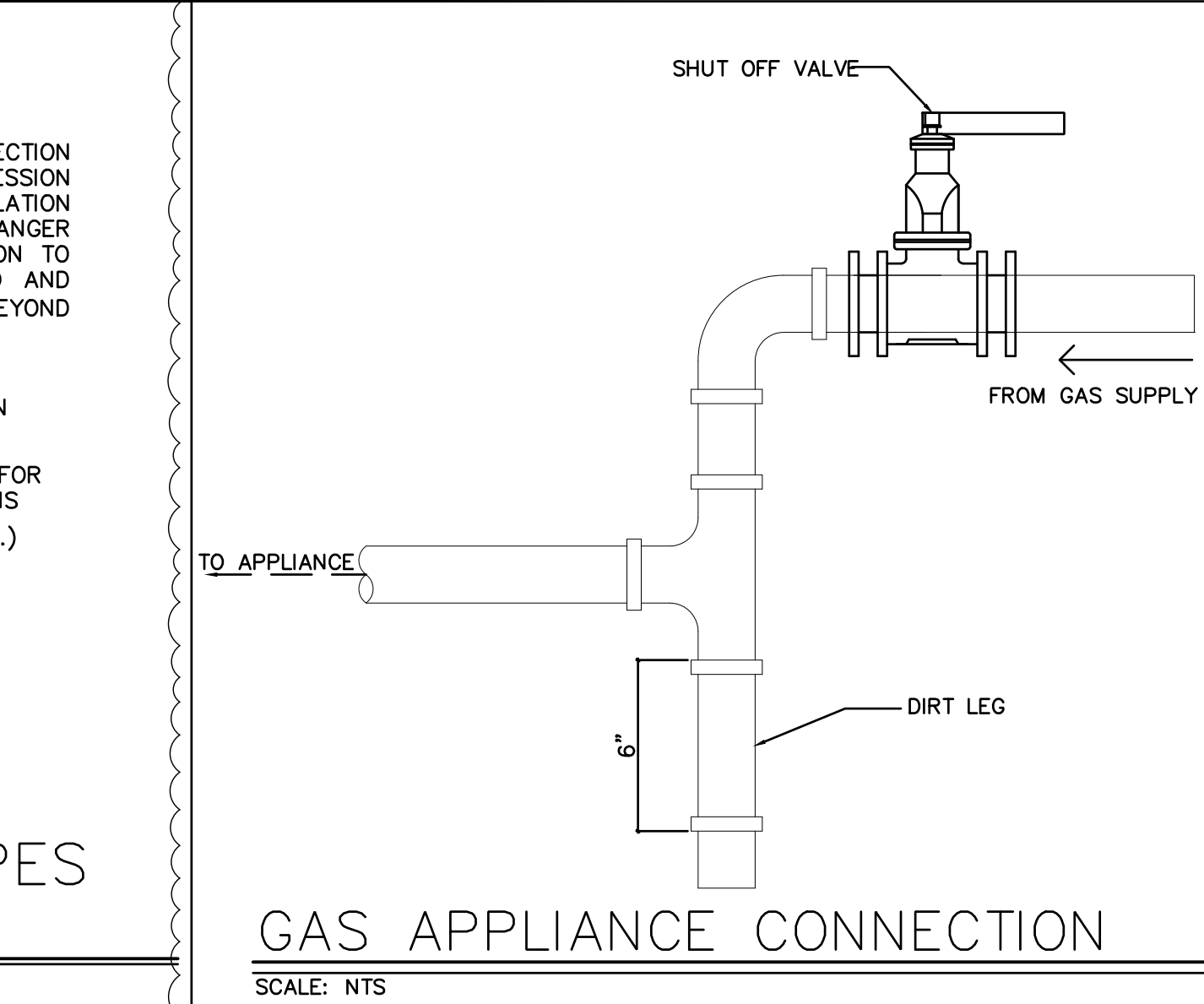
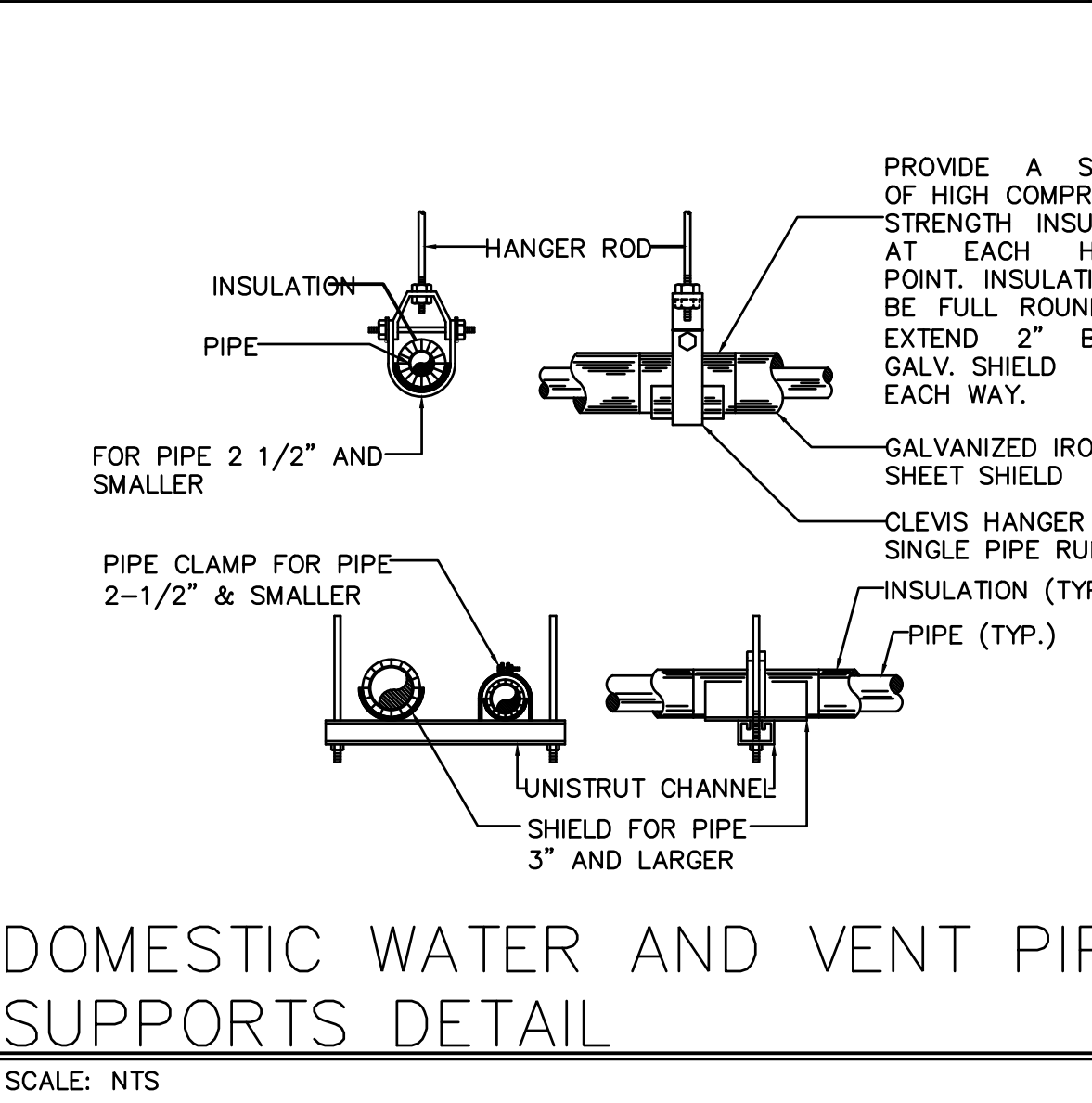
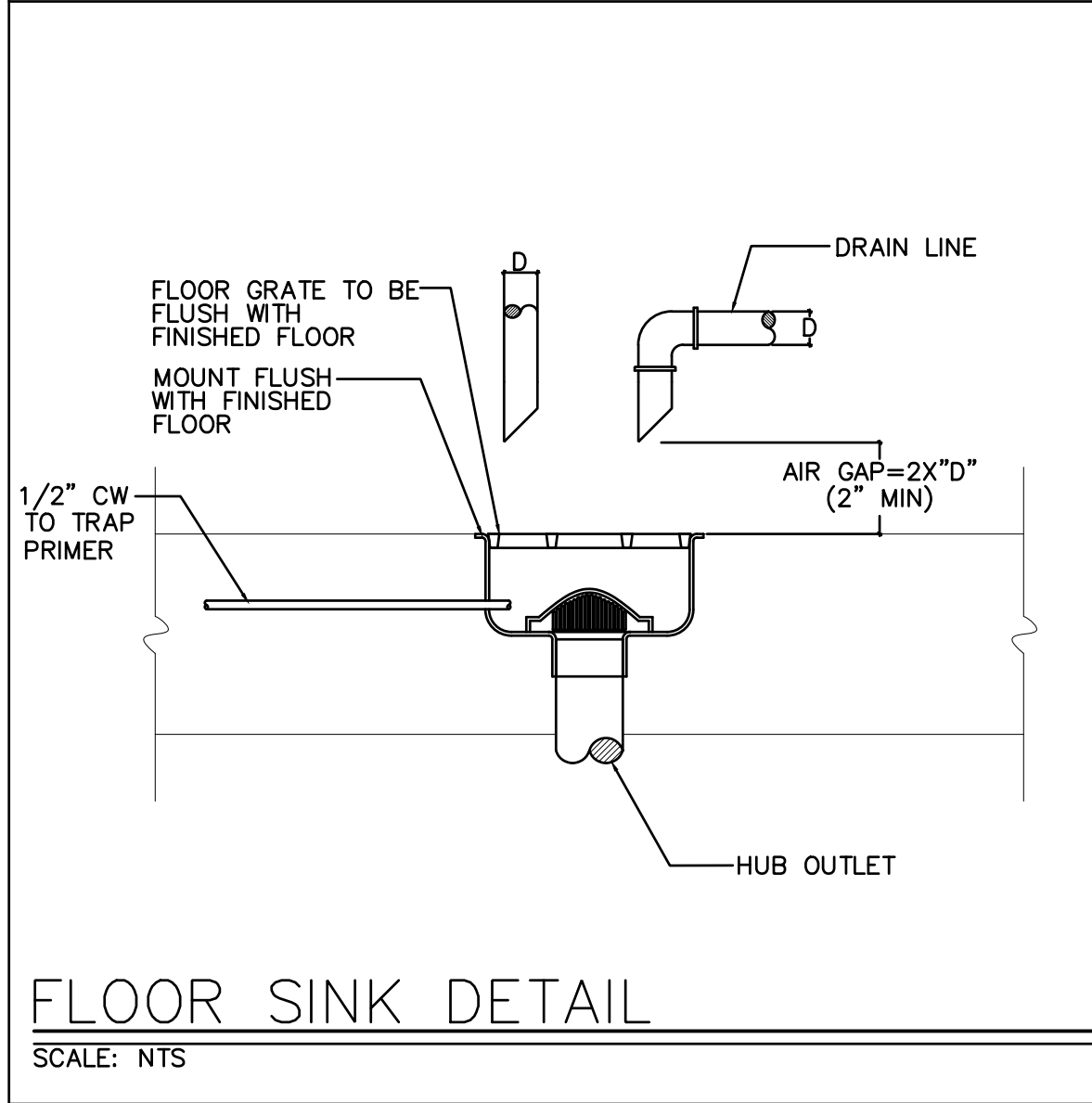
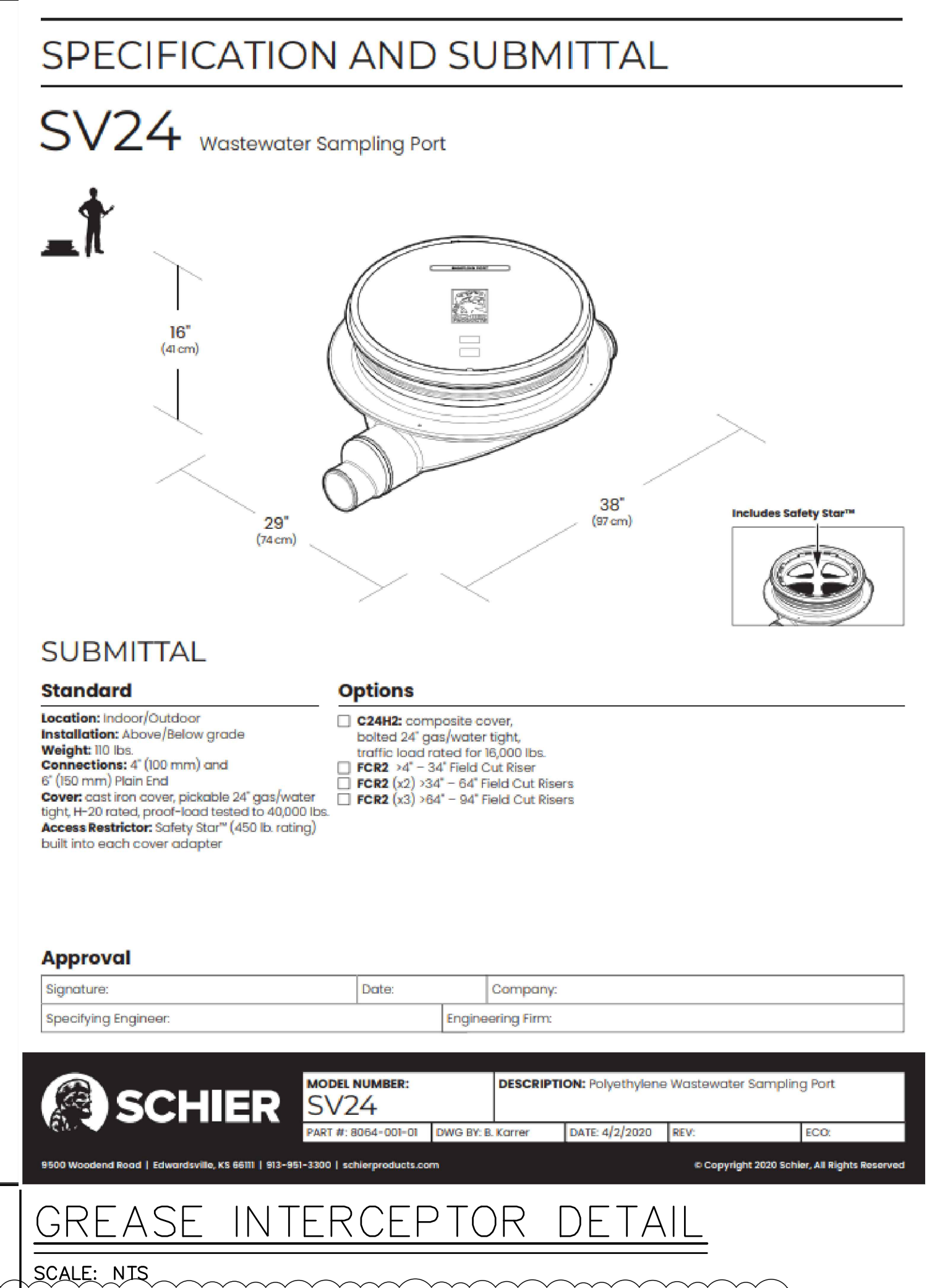
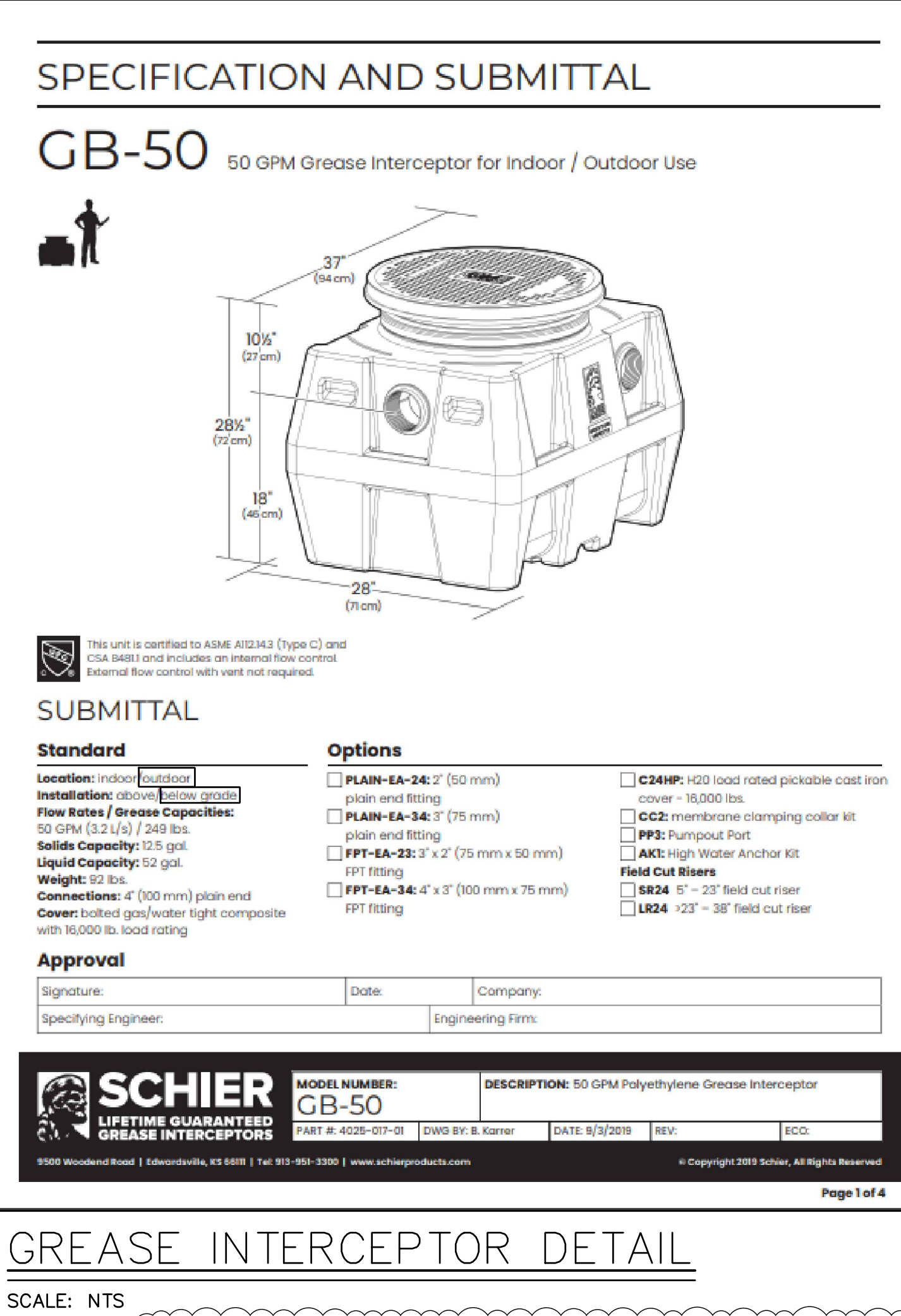
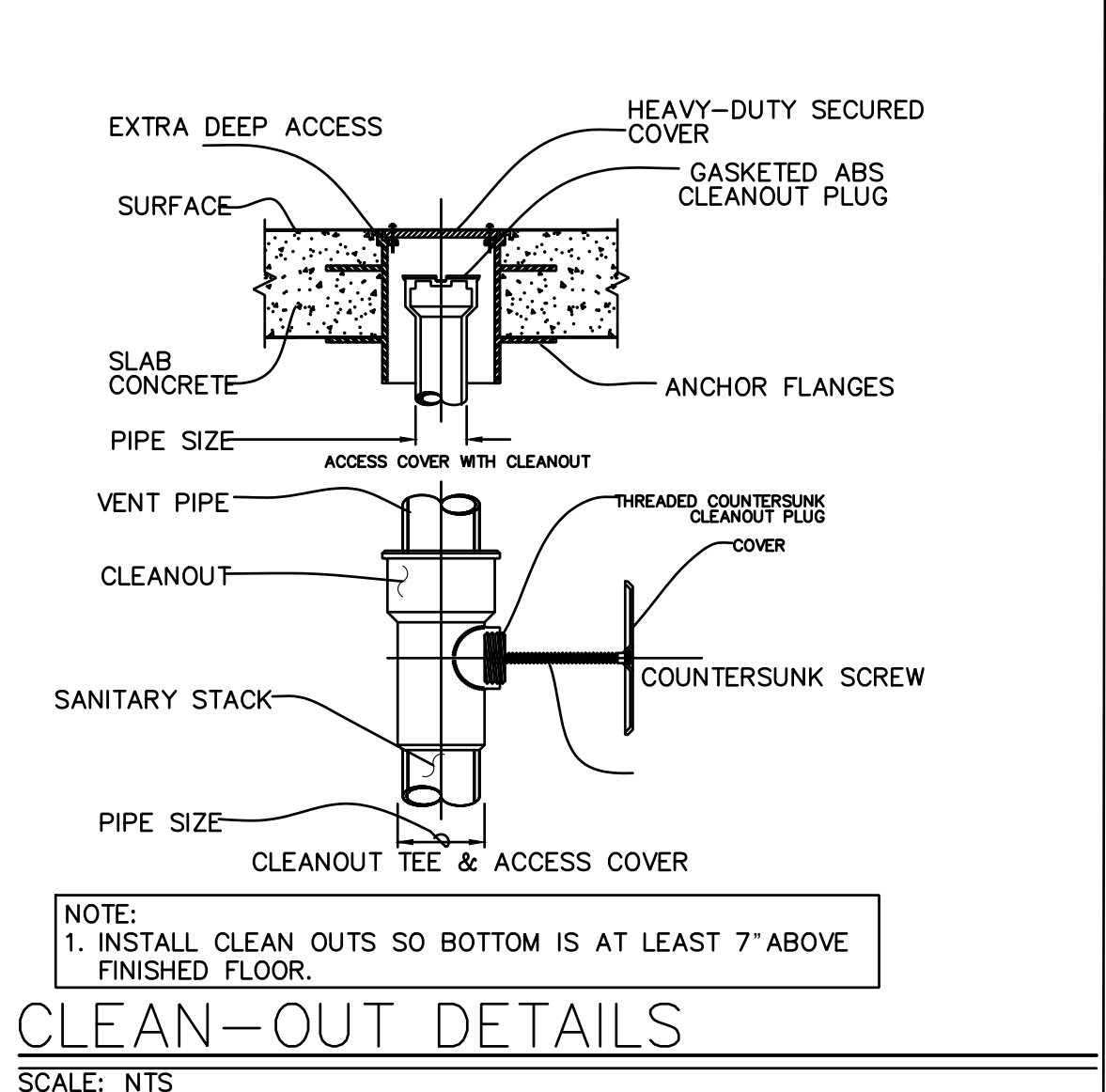
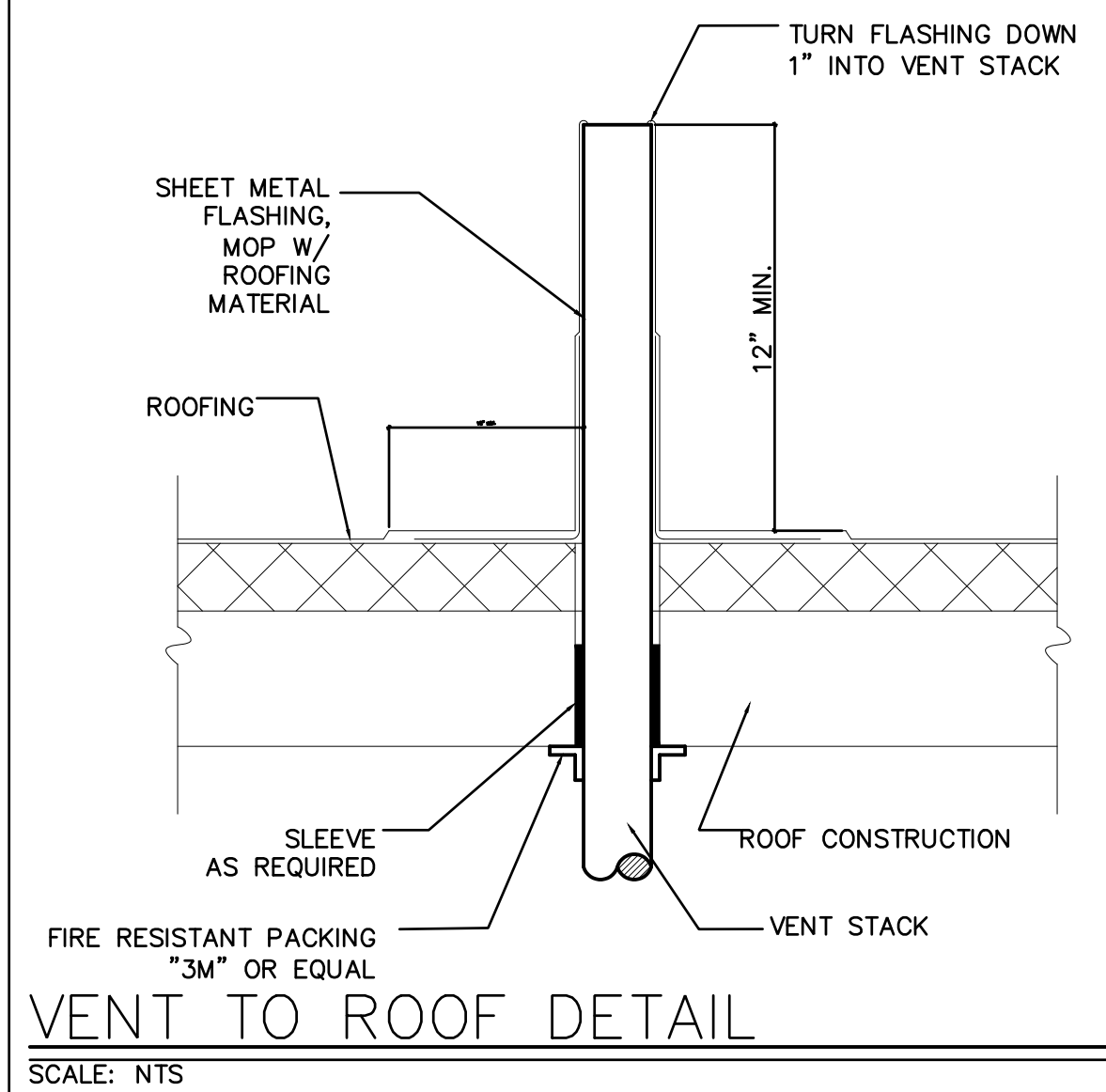
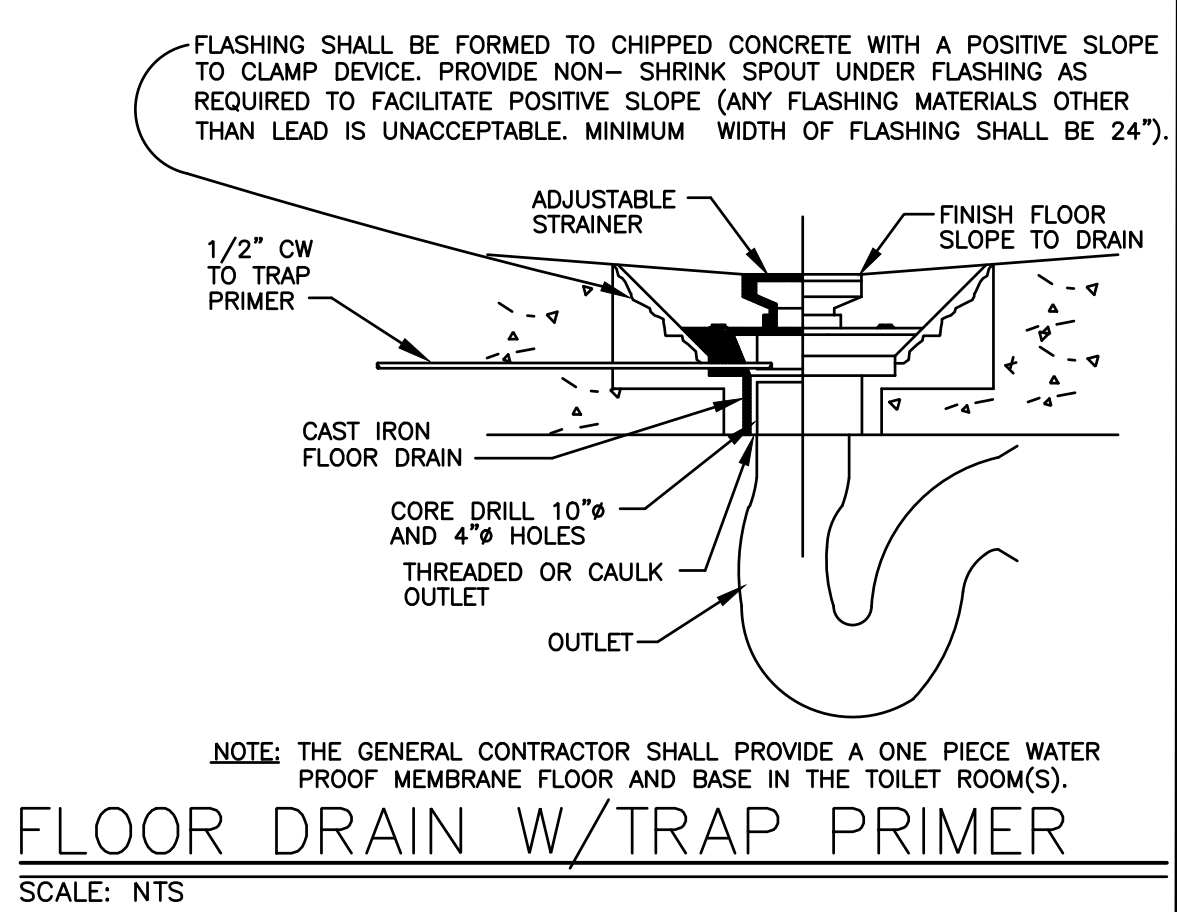
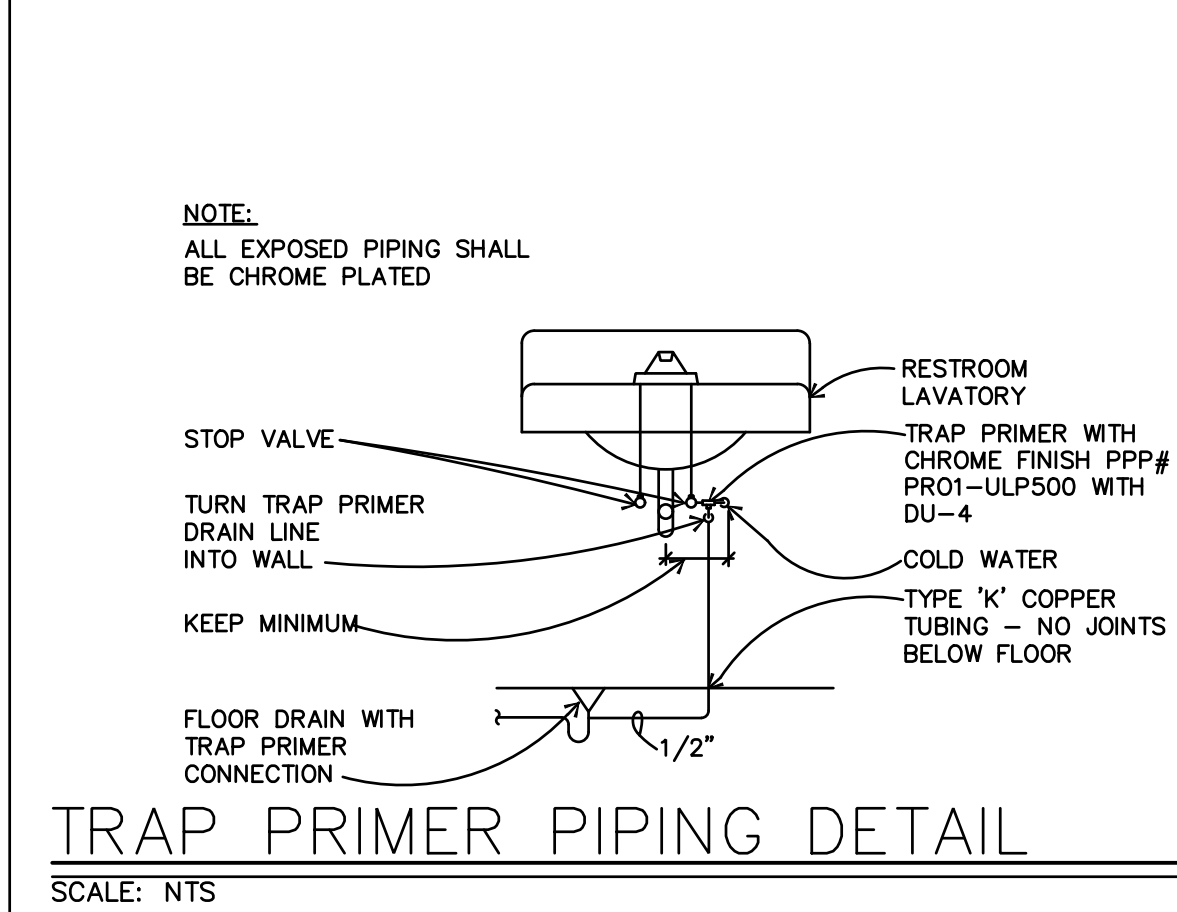
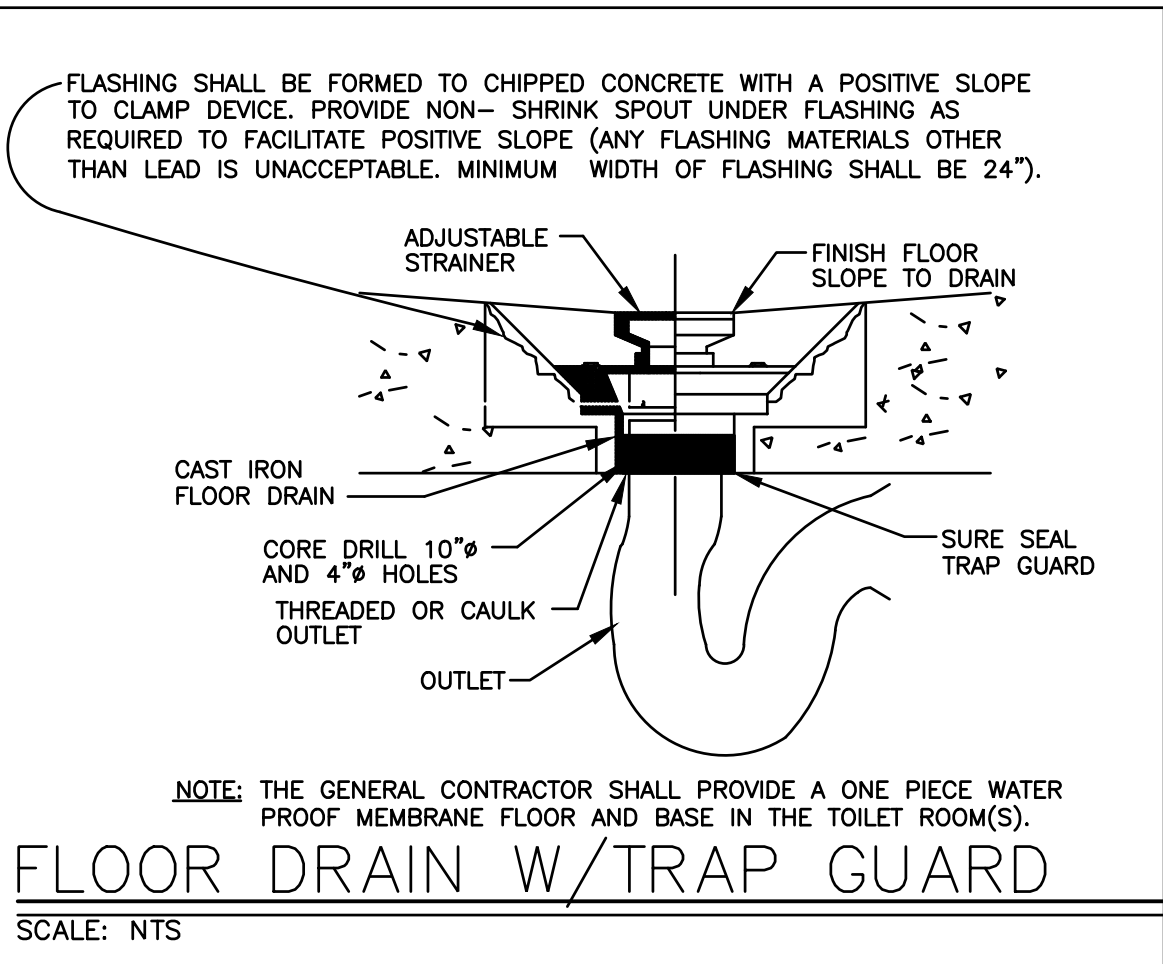
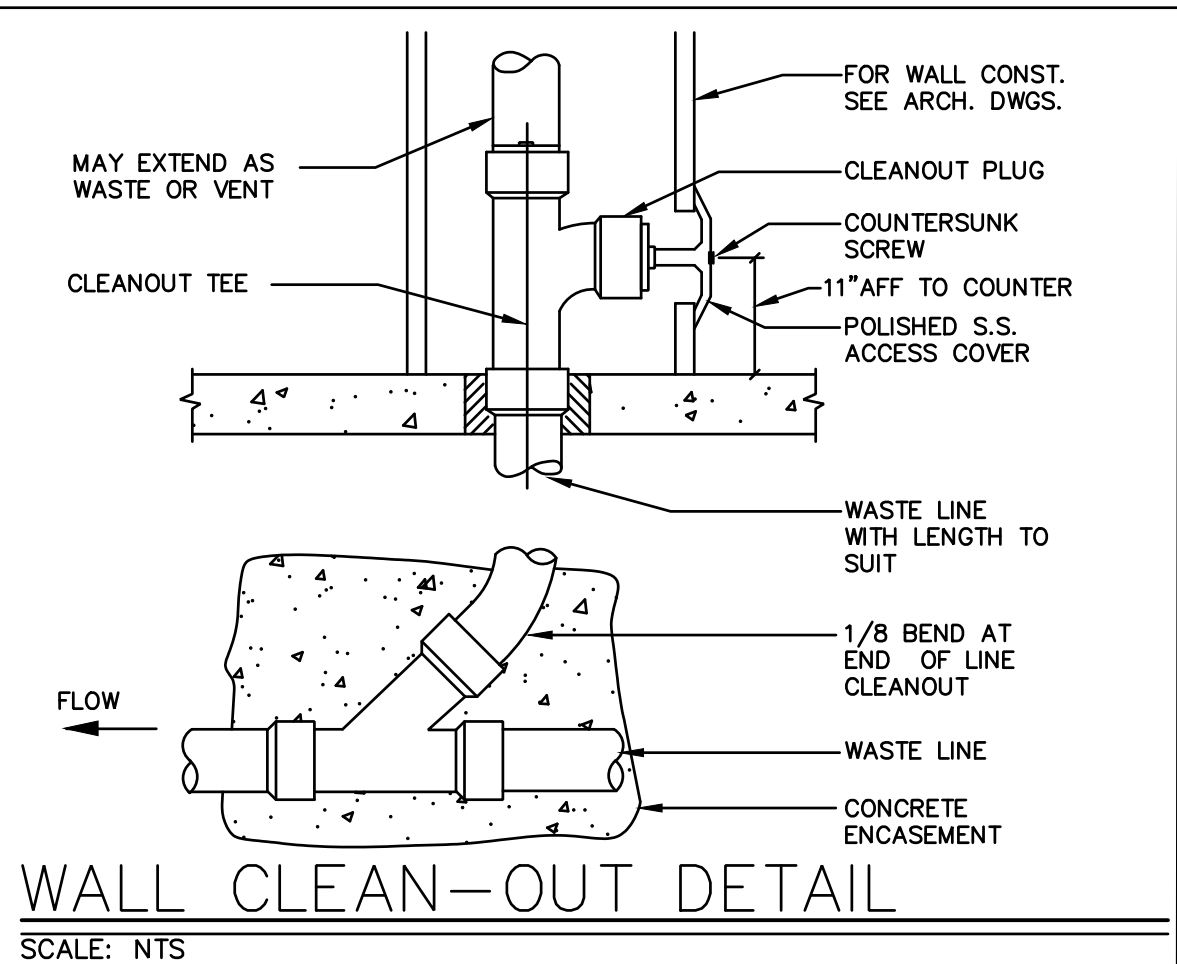
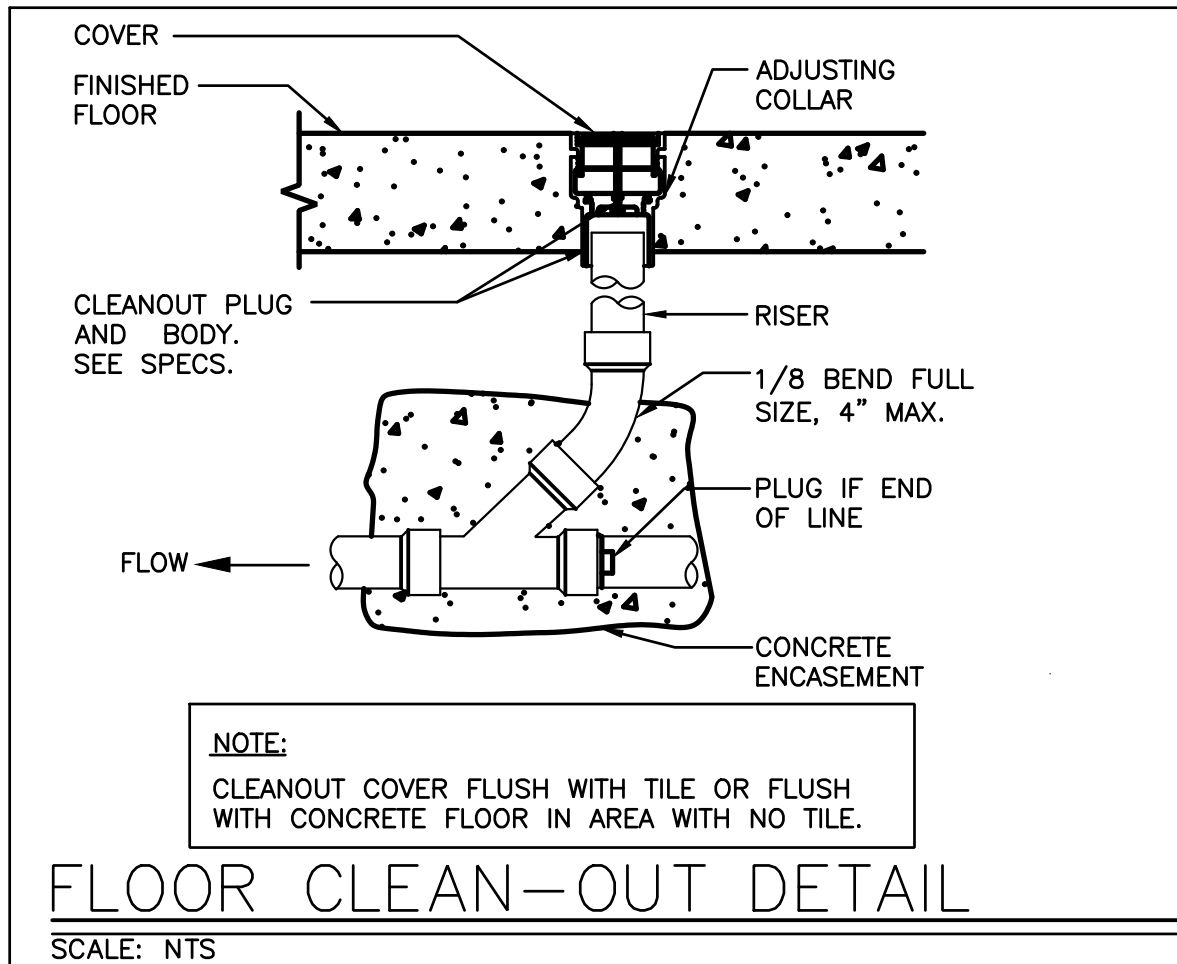
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PLUMBING ISOMETRICS

SHEET NUMBER:

P4.0



DUTCH BROS

CORALIC ARCHITECTURE

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