

SIGNATURE DATE: 07/16/2025

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QuikTrip No. 1011
 10132 BELLHAVEN BOULEVARD
 CHARLOTTE, NORTH CAROLINA



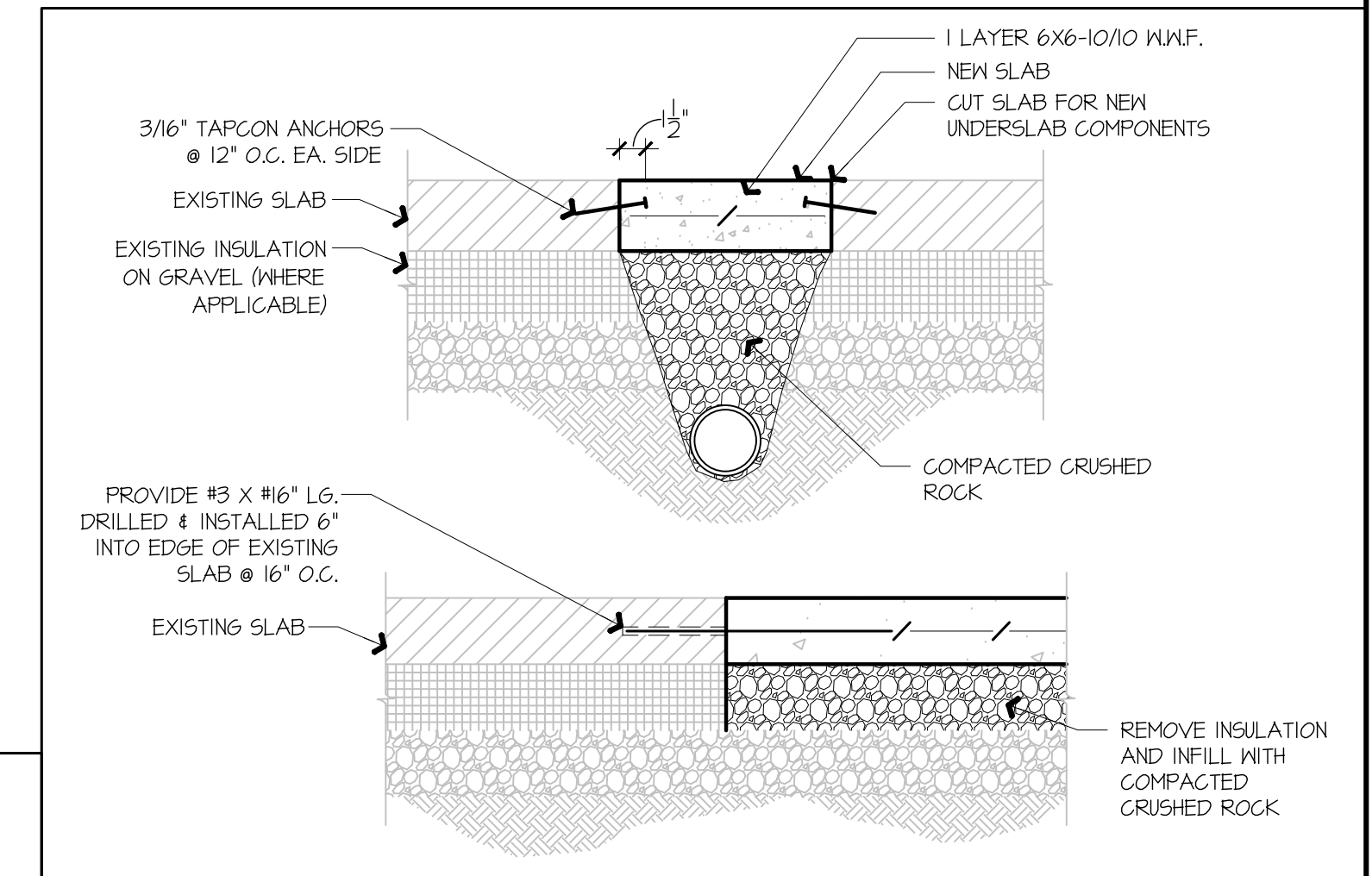
PROTOTYPE	FRYER ADDITION
DIVISION	CAROLINA
VERSION	G35
DATE	06-18-2025

REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 07/16/2025

SHEET TITLE:
PLUMBING TRENCHING PLAN

SHEET NUMBER:
P100



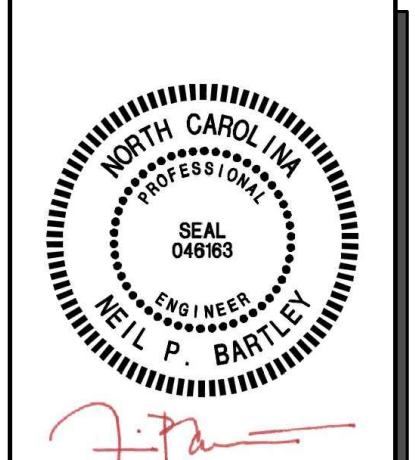
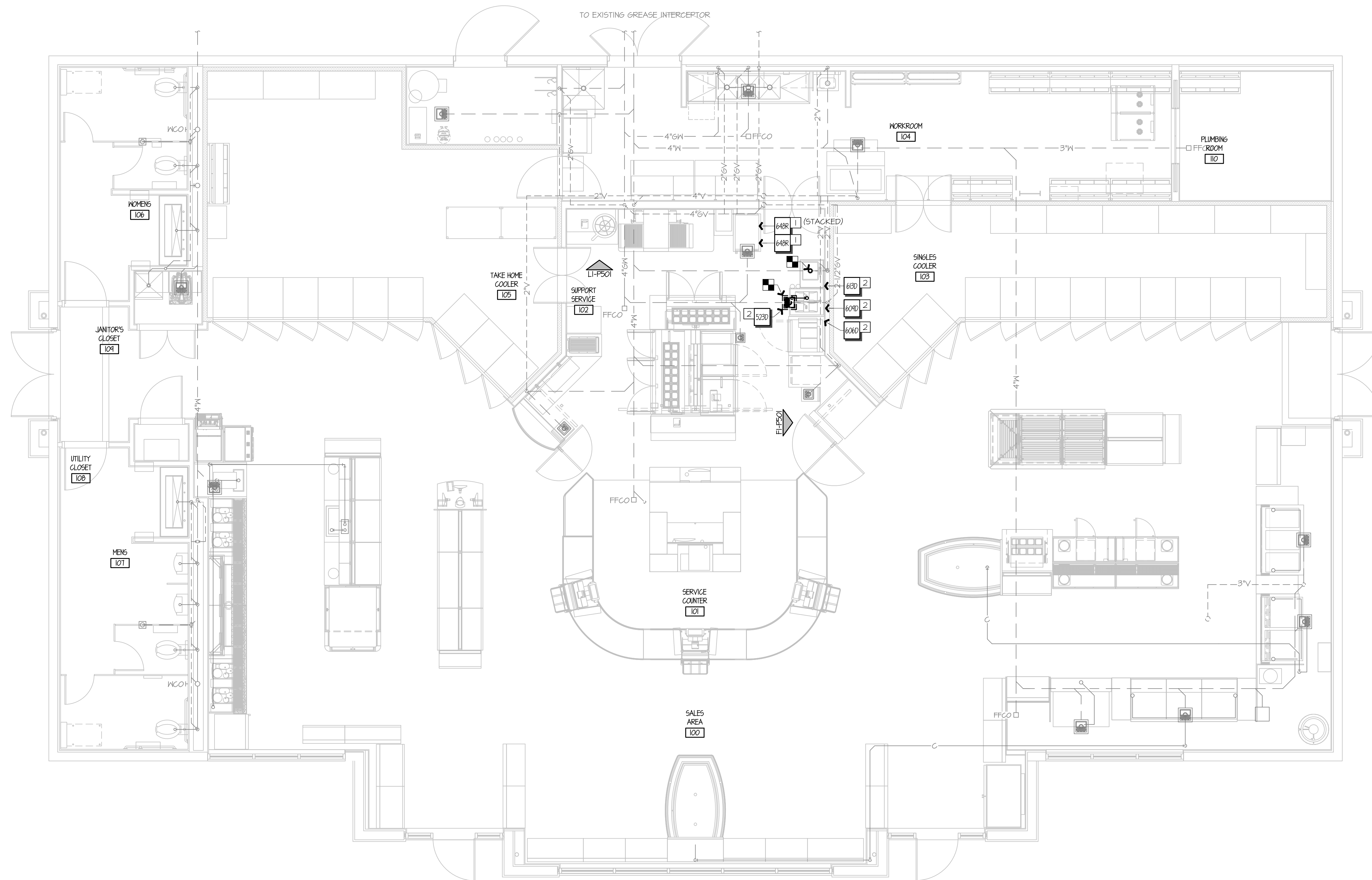
BUILDING CODES:
 2021 INTERNATIONAL PLUMBING CODE WITH NORTH CAROLINA AMENDMENTS

A1 PLUMBING TRENCHING PLAN
 1/8" = 1'-0"



A10 BUILDING CODES

A13 TRENCHING DETAIL
 NOT TO SCALE



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SHEET TITLE:
 PLUMBING WASTE & VENT FLOOR PLAN - DEMO

SHEET NUMBER:
P101

- 1 REMOVE EQUIPMENT AND RETAIN FOR RELOCATION. DISCONNECT ALL ASSOCIATED WASTE CONNECTIONS AS REQUIRED TO PREPARE FOR NEW WORK. RE: AI-P102 FOR MORE INFORMATION.
- 2 REMOVE EQUIPMENT AND TURN OVER TO OWNER. DISCONNECT ALL ASSOCIATED WASTE CONNECTIONS AS REQUIRED.

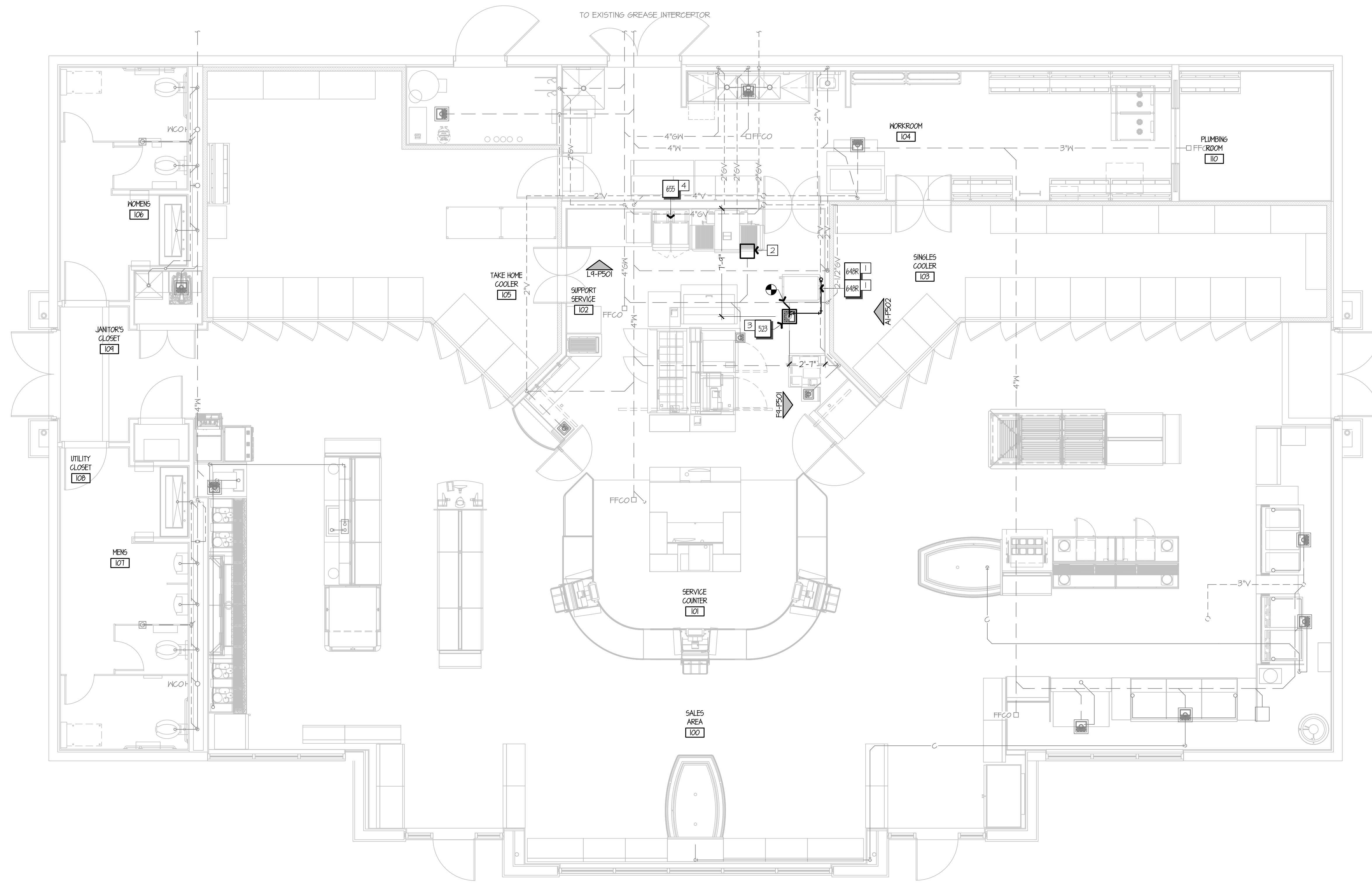
REFER TO SHEET P&Q FOR EQUIPMENT TAGS



A1 PLUMBING WASTE & VENT FLOOR PLAN - DEMO

A13 PLAN NOTES

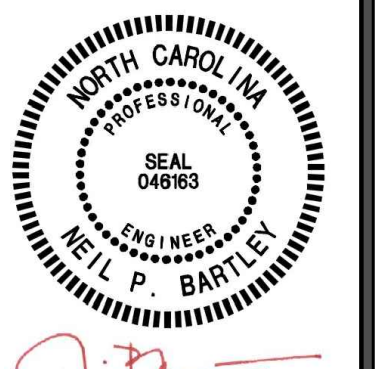
1/8" = 1'-0"



CONTRACTOR SHALL VERIFY ALL EXISTING FLOOR SINKS IN KITCHEN ARE AT LEAST HALF-EXPOSED UNDER EQUIPMENT AS REQUIRED BY AHJ.

- 1 RELOCATE EQUIPMENT RETAINED DURING DEMOLITION AND PROVIDE WASTE CONNECTIONS AS REQUIRED. DISCHARGE INDIRECT WASTE OVER FLOOR SINK AS SHOWN, AND PROVIDE AIR GAP FITTING PER LOCAL AUTHORITY. RE: A13-P502 AND G1-P601 FOR MORE INFORMATION.
- 2 FILL TRAP WITH WATER AND PROVIDE LINE SIZE CERNE PIPE PLUG. FOR 12" x 12" FLOOR SINKS, PROVIDE 4-3/4" x 4-3/4" x 3/4" SOLID PVC PLATE TO COVER FLOOR SINK OPENING. FOR 8" x 8" FLOOR SINKS, PROVIDE 6-1/8" x 6-1/8" x 3/4" SOLID PVC PLATE TO COVER FLOOR SINK OPENING. ENSURE PLATE IS FLUSH WITH TILE. SEAL PLATE EDGE WITH SILICONE SEALANT.
- 3 PROVIDE NEW FLOOR SINK AND TIE INTO EXISTING LINE AS REQUIRED. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO INSTALLATION. RE: A13-P502 AND G1-P601 FOR MORE INFORMATION.
- 4 NEW FRYER SHOWN FOR REFERENCE. WASTE TO BE COLLECTED BY OIL RECLAMATION UNIT. NO WASTE SHALL BE DRAINED TO EXISTING BELOW GRADE PLUMBING.

REFER TO SHEET P&Q1 FOR  EQUIPMENT TAGS


 ENGINEER
 NEIL P. BARTLEY

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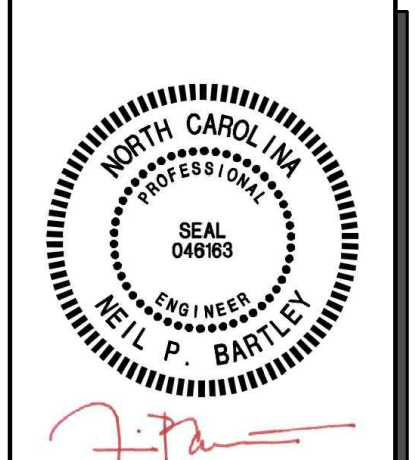
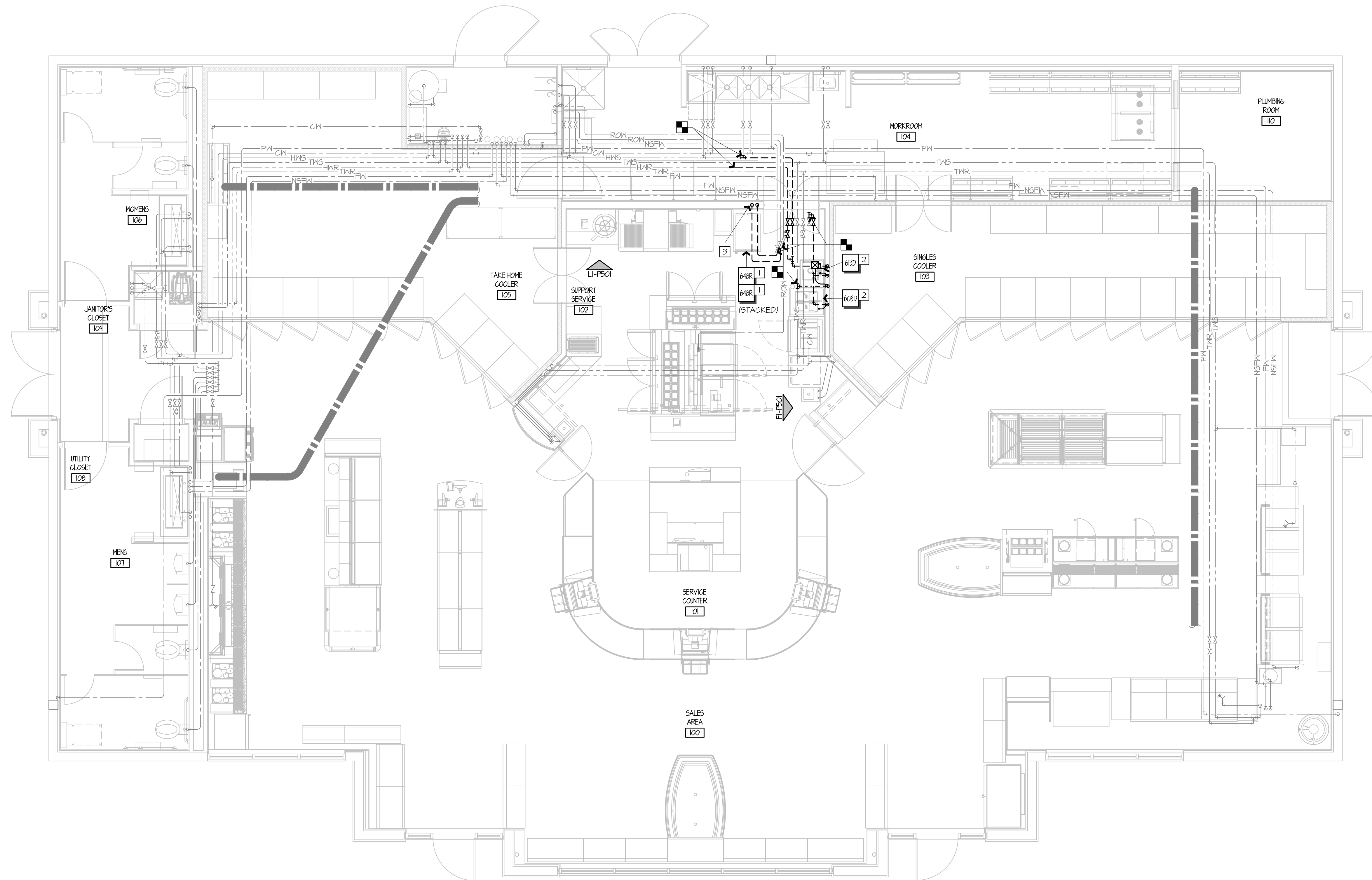
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SHEET TITLE:
 PLUMBING WASTE & VENT FLOOR PLAN - NEW

SHEET NUMBER:
P102



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SHEET TITLE:
 PLUMBING WATER FLOOR PLAN - DEMO

SHEET NUMBER:
P103

- 1 REMOVE EQUIPMENT AND RETAIN FOR RELOCATION. REMOVE AND RETAIN ASSOCIATED WATER PIPING FOR USE IN NEW WORK WHERE POSSIBLE. RE: AI-P104 & G1-P601 FOR MORE INFORMATION.
- 2 REMOVE EQUIPMENT AND TURN OVER TO OWNER. REMOVE ASSOCIATED WATER PIPING BACK TO LOCATION SHOWN. RE: G1-P601 FOR MORE INFORMATION.
- 3 REMOVE WATER SUPPLY OUTLET BOX. RE: AI-P104 FOR MORE INFORMATION.

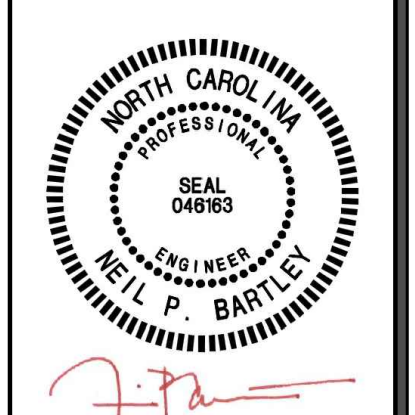
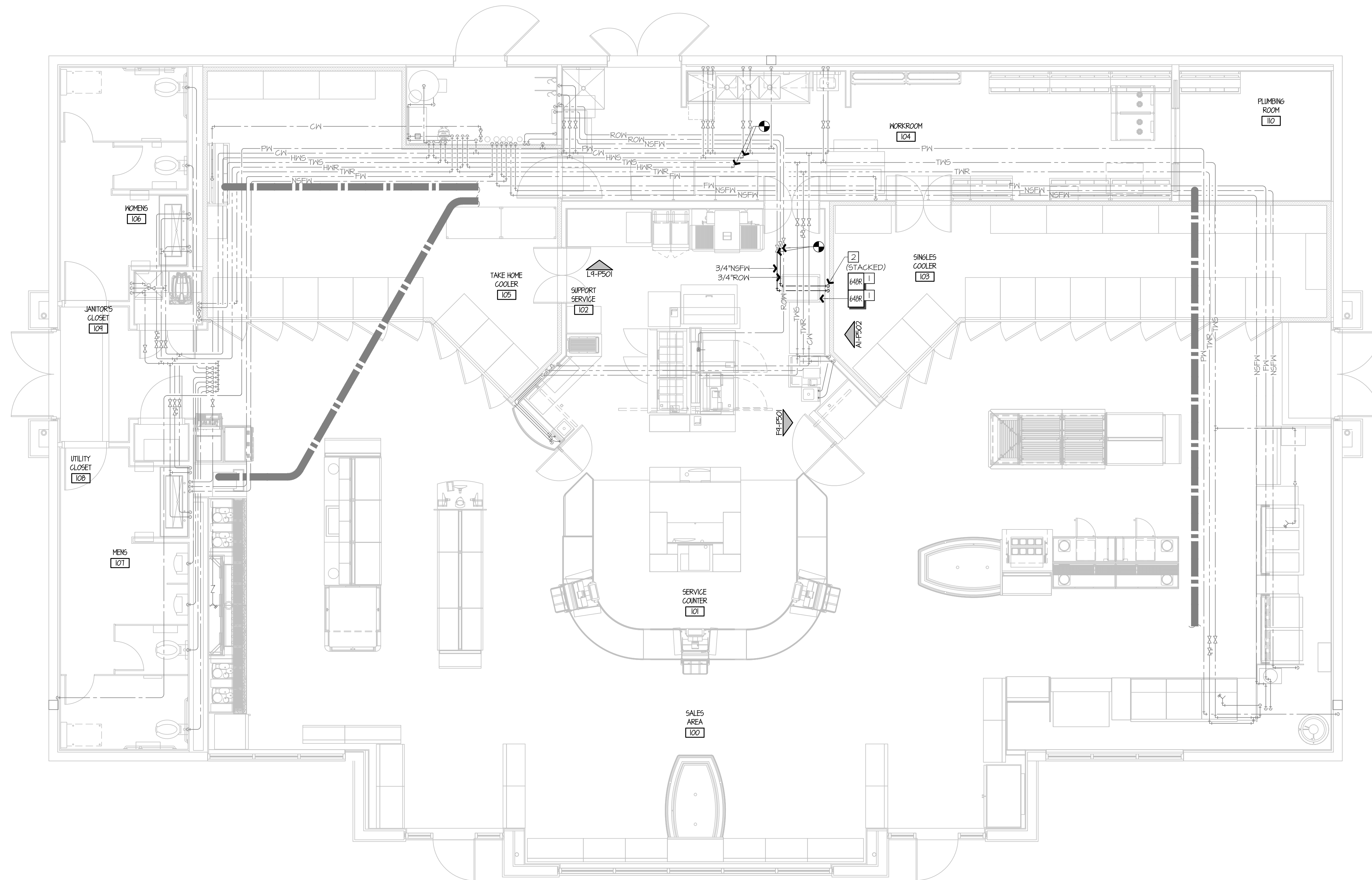
REFER TO SHEET P&Q1 FOR EQUIPMENT TAGS



A1 PLUMBING WATER FLOOR PLAN - DEMO

A13 PLAN NOTES

1/8" = 1'-0"



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SHEET TITLE:
 PLUMBING WATER FLOOR PLAN - NEW

SHEET NUMBER:
P104

- 1 RELOCATE EQUIPMENT RETAINED DURING DEMOLITION AND PROVIDE WATER CONNECTIONS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. RE: G1-P601 FOR MORE INFORMATION.
- 2 PROVIDE ROW, NSFW, AND WATER SUPPLY BOX TO COMBI OVENS. COORDINATE INSTALLATION IN WALL WITH POWER DEVICES. RE: F4-F501, A1-F502, & G1-P601 FOR MORE INFORMATION.

REFER TO SHEET P&Q1 FOR  EQUIPMENT TAGS



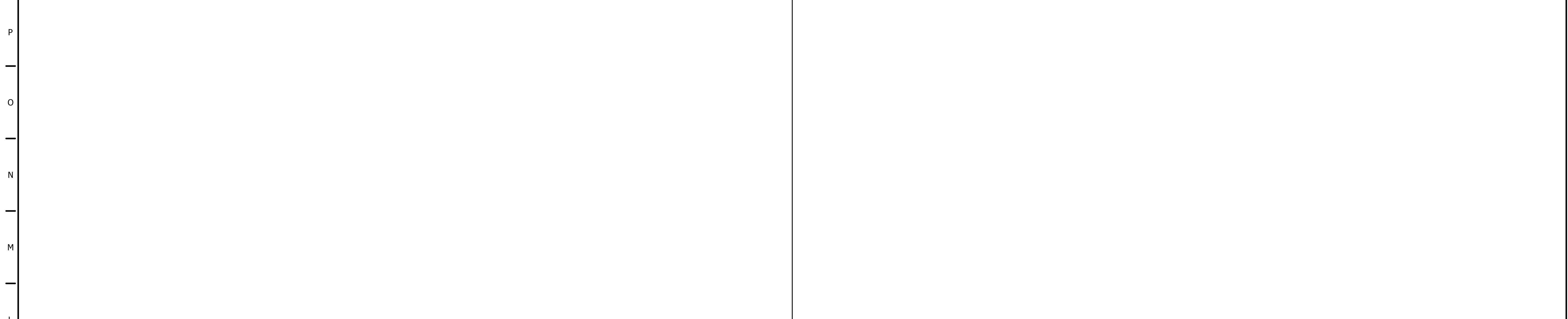
A1 PLUMBING WATER FLOOR PLAN - NEW

A13 PLAN NOTES

1/8" = 1'-0"

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

P O N M L K J H G F E D C B A

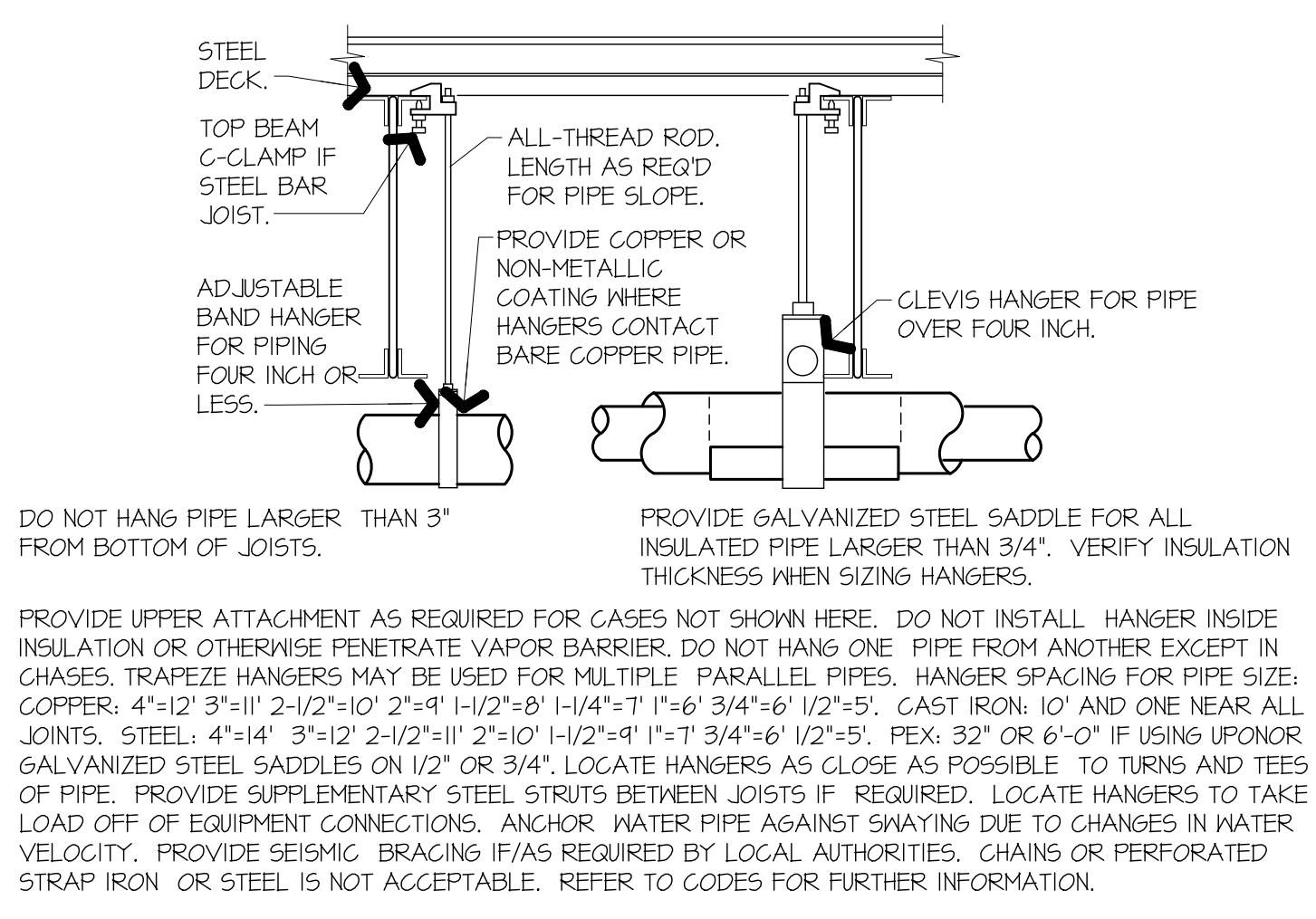
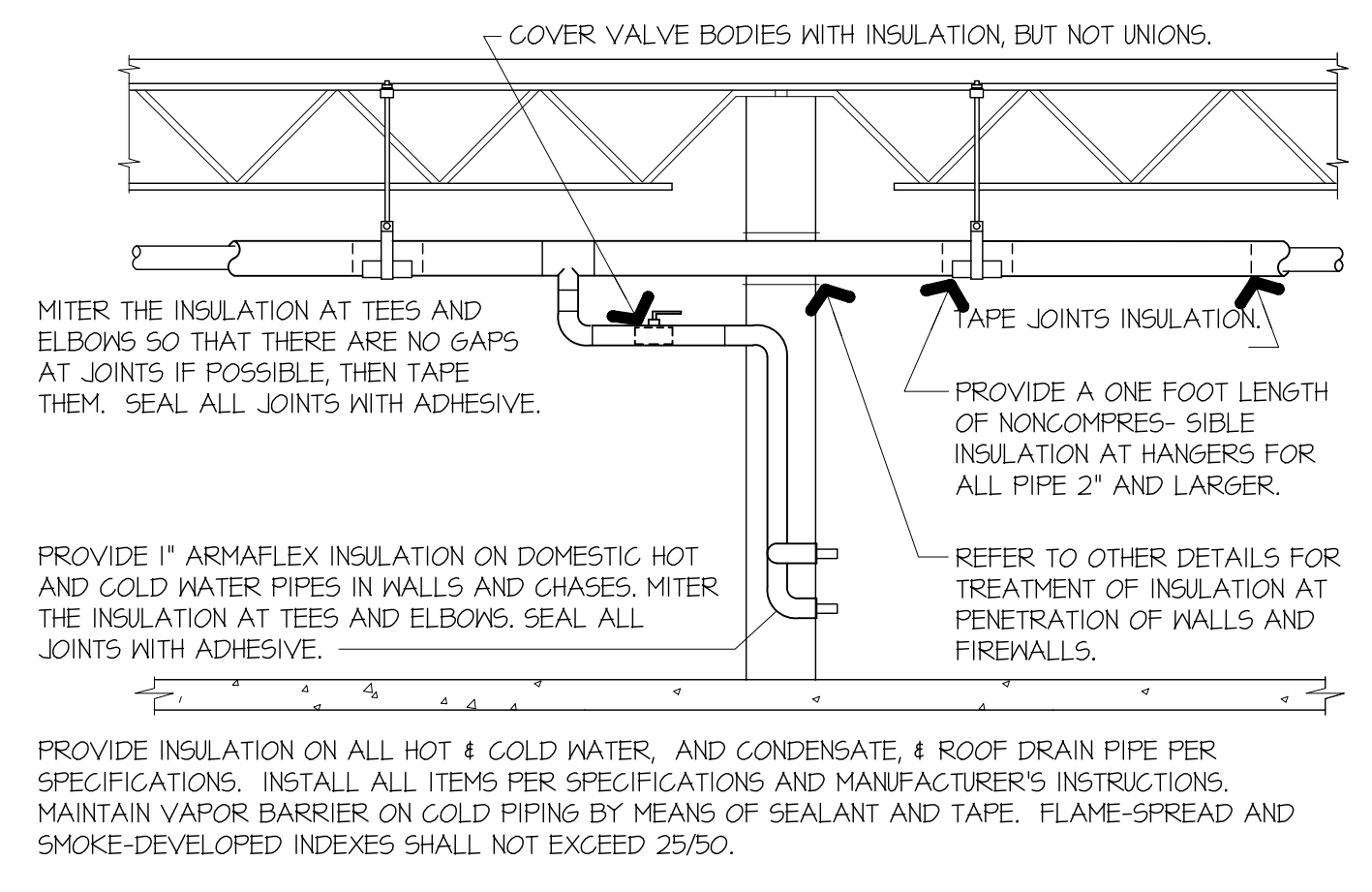
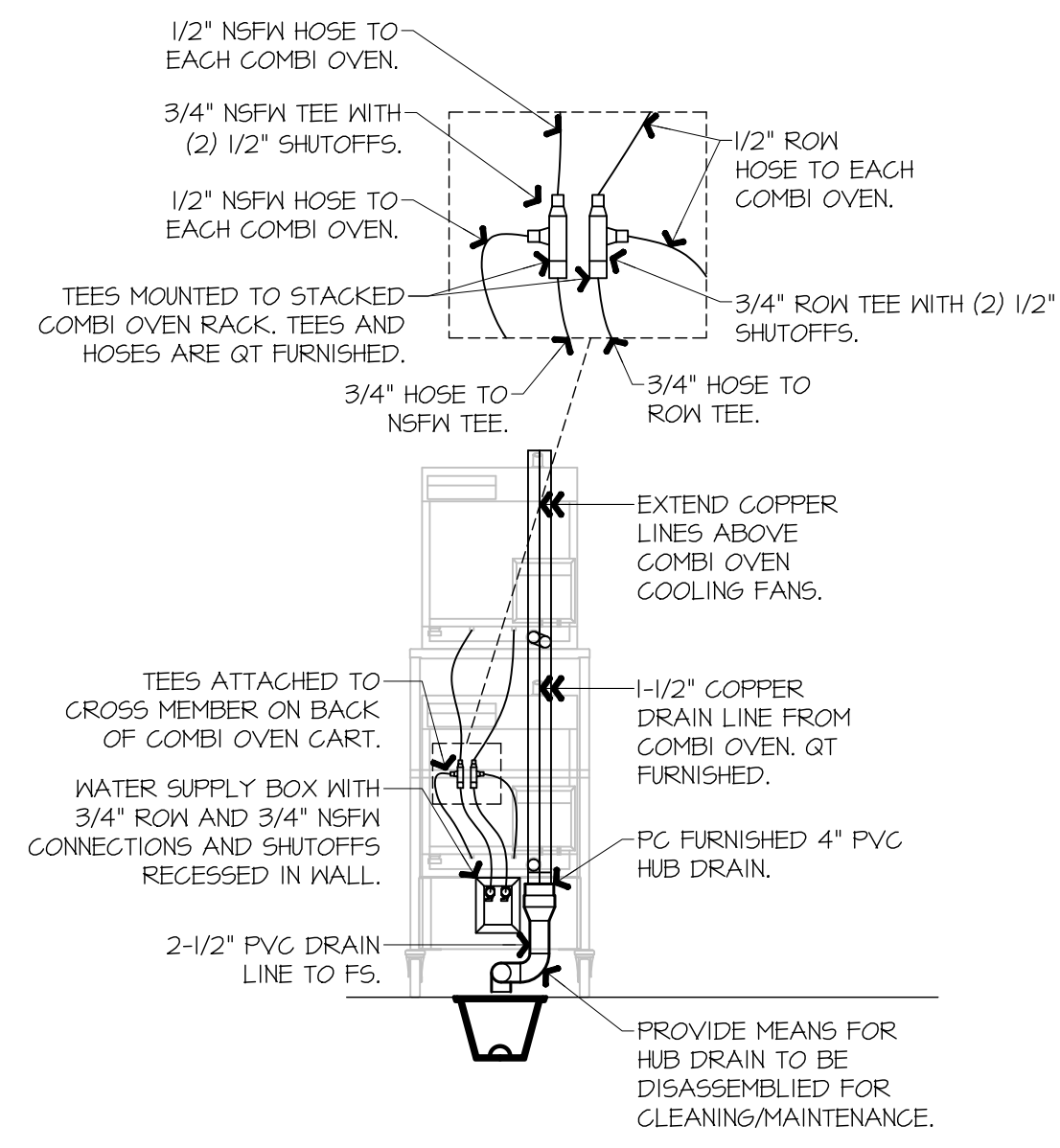


L1 NOT USED

L9 NOT USED

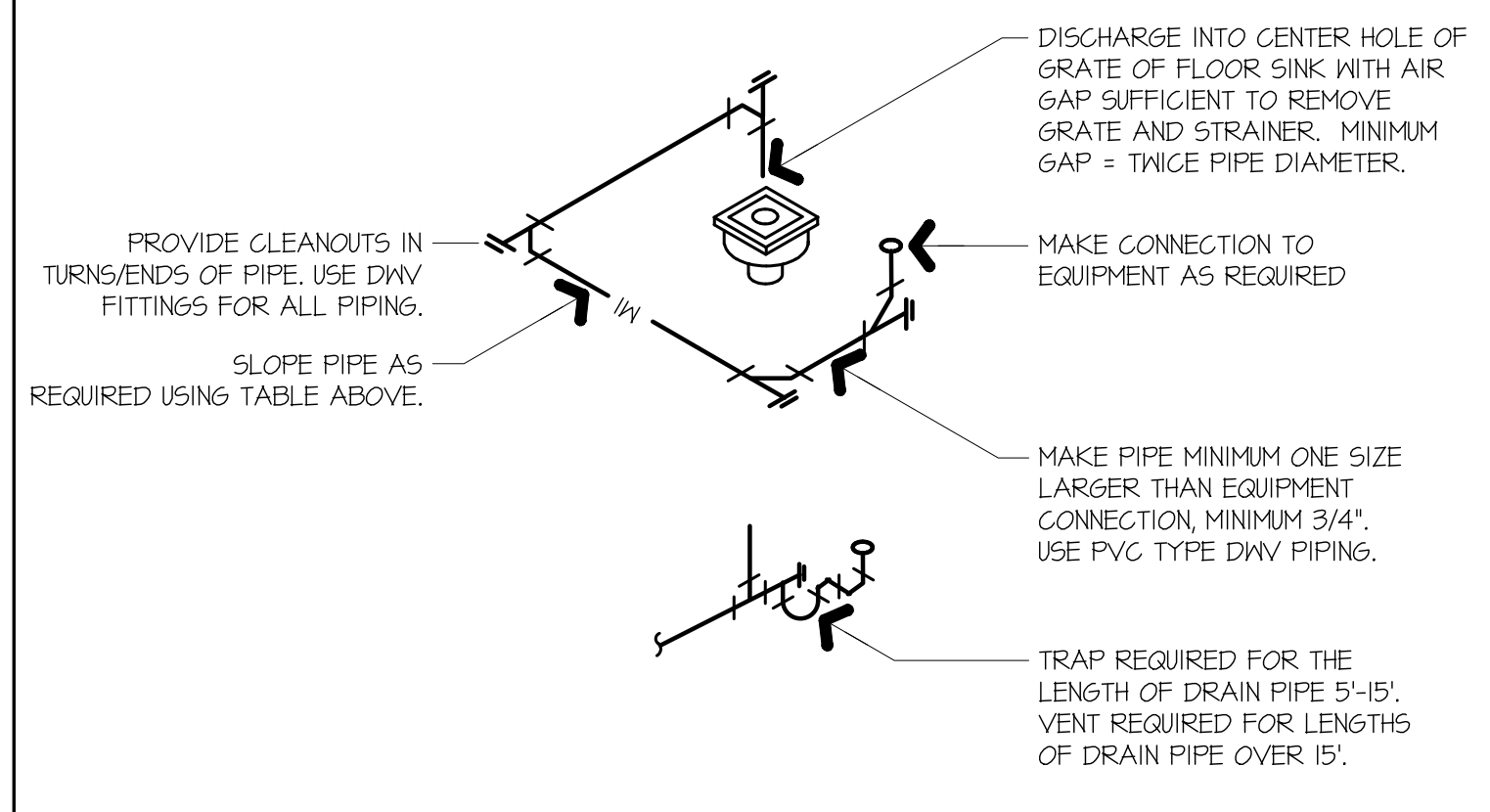
F1 NOT USED

F9 NOT USED



SLOPE OF HORIZONTAL DRAINAGE PIPE	
SIZE (INCHES)	MINIMUM SLOPE (INCHES PER FOOT)
2-1/2 OR LESS	1/4
3 TO 6	1/8
8 OR LARGER	1/16

ROUTE PIPE INCONSPICUOUSLY AND UNOBTUSIVELY. HANG PIPE AS REQUIRED. DO NOT INSULATE INDIRECT DRAIN PIPE WHEN INSTALLED EXPOSED IN FOOD SERVICE FACILITY. REFER TO LOCAL CODES FOR FURTHER INFORMATION.



A1 REAR COMBI OVEN ELEVATION
 1/8" = 1'-0"
 A1-P102, A1-P104

A5 PIPE INSULATION
 NOT TO SCALE

A9 PIPE HANGERS
 NOT TO SCALE

A13 INDIRECT DRAIN
 NOT TO SCALE

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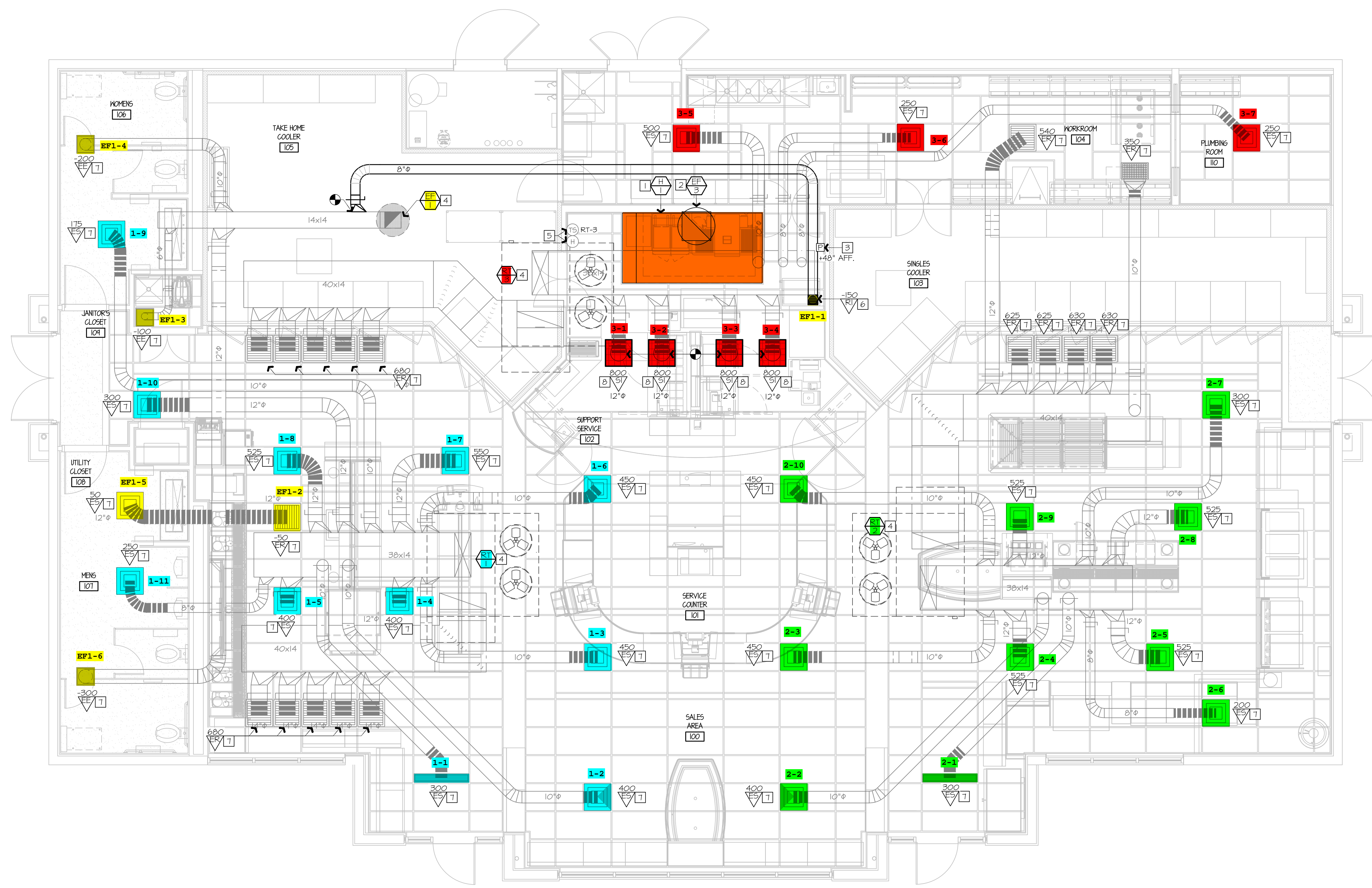
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SHEET TITLE:
PLUMBING ELEVATIONS & DETAILS

SHEET NUMBER:
P502



- 1 INSTALL NEW OWNER-FURNISHED TYPE-I KITCHEN HOOD EXHAUST SYSTEM, FIRE SUPPRESSION SYSTEM, GREASE DUCT, AND ALL OTHER REQUIREMENTS FOR A TYPE-I SYSTEM. INSTALL HOOD CONTROL PANEL, TEMPERATURE SENSOR(S), AND HUMIDITY SENSOR(S) WITHIN HOOD UTILITY CABINET ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS.
- 2 INSTALL NEW OWNER-FURNISHED ROOF-MOUNTED EXHAUST FAN. INSTALL 12" GREASE DUCT TO ROOF MOUNTED FAN. EXTEND HOOD COLLAR. BALANCE TO AIRFLOW RATE SCHEDULED ON M601. COORDINATE WITH ELECTRICAL CONTRACTOR FOR FAN CONTROLS BETWEEN HOOD AND FAN. RE: QT INSTALL DRAWINGS AND HOOD MANUFACTURER'S INSTRUCTIONS.
- 3 INSTALL OWNER-FURNISHED HOOD SUPPRESSION PUSH STATION PER MANUFACTURER'S INSTALLATION REQUIREMENTS. RE: F4-E501 FOR ELEVATION.
- 4 EXISTING ROOF EQUIPMENT TO REMAIN, SHOWN FOR REFERENCE. RE: 61-M601 TO RE-BALANCE AIRFLOWS AS REQUIRED.
- 5 EXISTING TEMPERATURE SENSOR AND HUMIDITY SENSOR SERVING KITCHEN RTU TO REMAIN, SHOWN FOR REFERENCE.
- 6 PROVIDE EXHAUST GRILLE ABOVE COMBI OVENS AND PROVIDE DUCT AS SHOWN TO TAP INTO EXISTING RESTROOM EXHAUST DUCT. RE: 61-M601 FOR MORE INFORMATION.
- 7 RE-BALANCE EXISTING DIFFUSER/GRILLE TO AIRFLOW SHOWN ON PLAN. RE: M601.
- 8 PROVIDE DIFFUSER/GRILLE AS SCHEDULED AND RECONNECT TO EXISTING DUCT MAINTAINED DURING DEMOLITION. RE-BALANCE TO AIRFLOW SHOWN ON PLAN. RE: M601.

SEAL 04893
 ENGINEER
 NEIL P. BARTLEY

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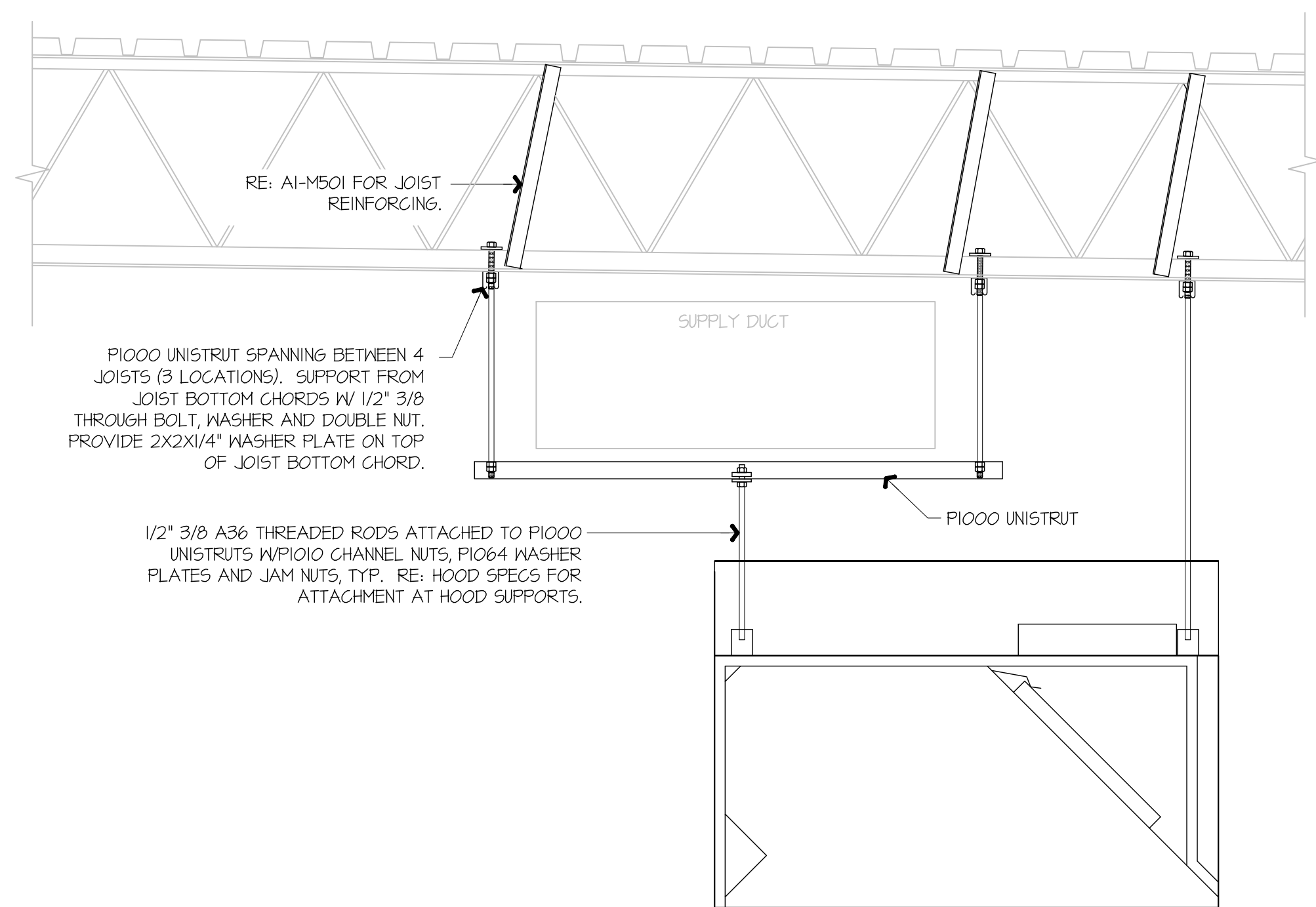
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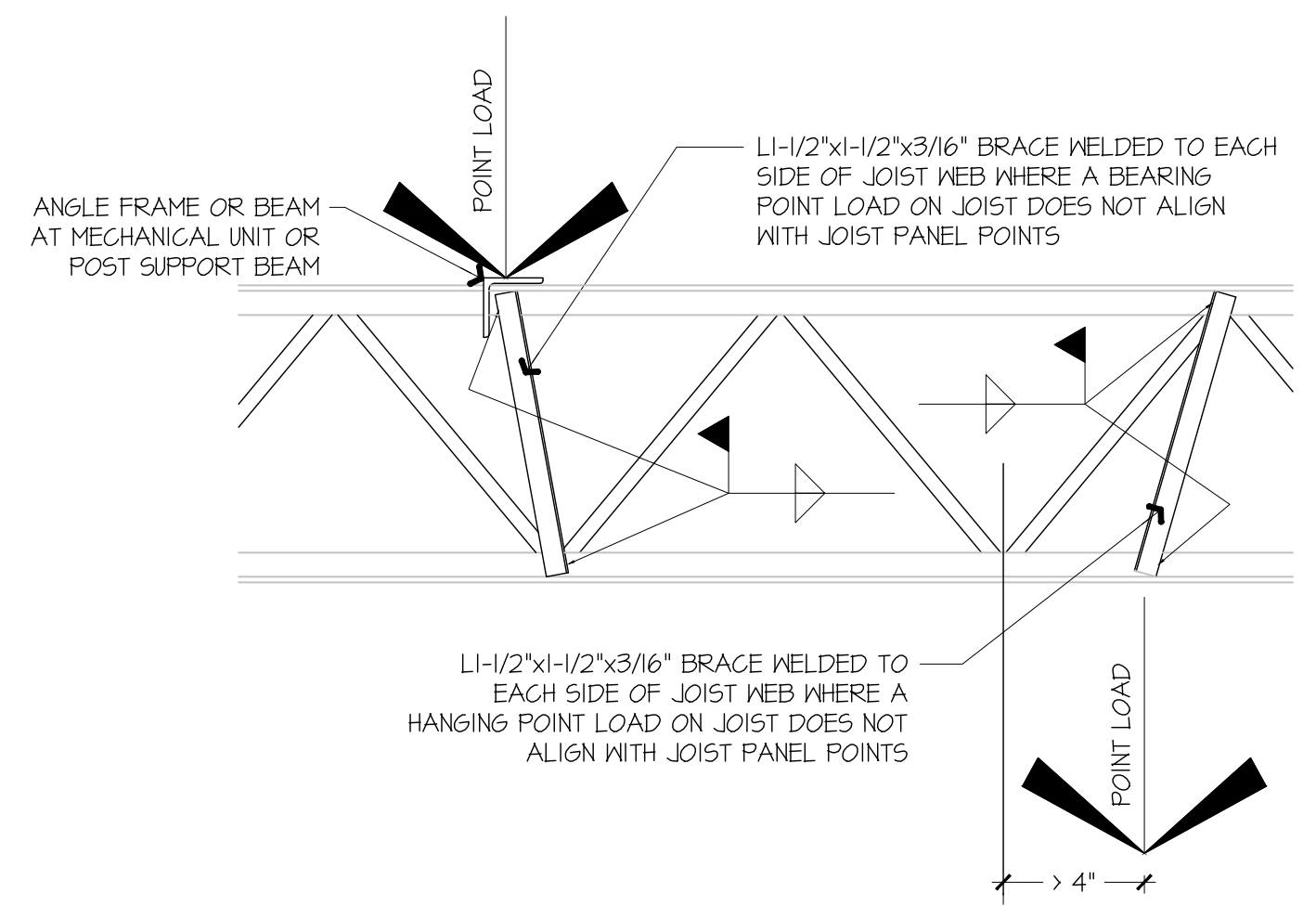
SHEET TITLE:
 MECHANICAL
 DUCTWORK
 CEILING PLAN - NEW

SHEET NUMBER:
M102



F1 KITCHEN EXHAUST HOOD SUPPORT DETAIL

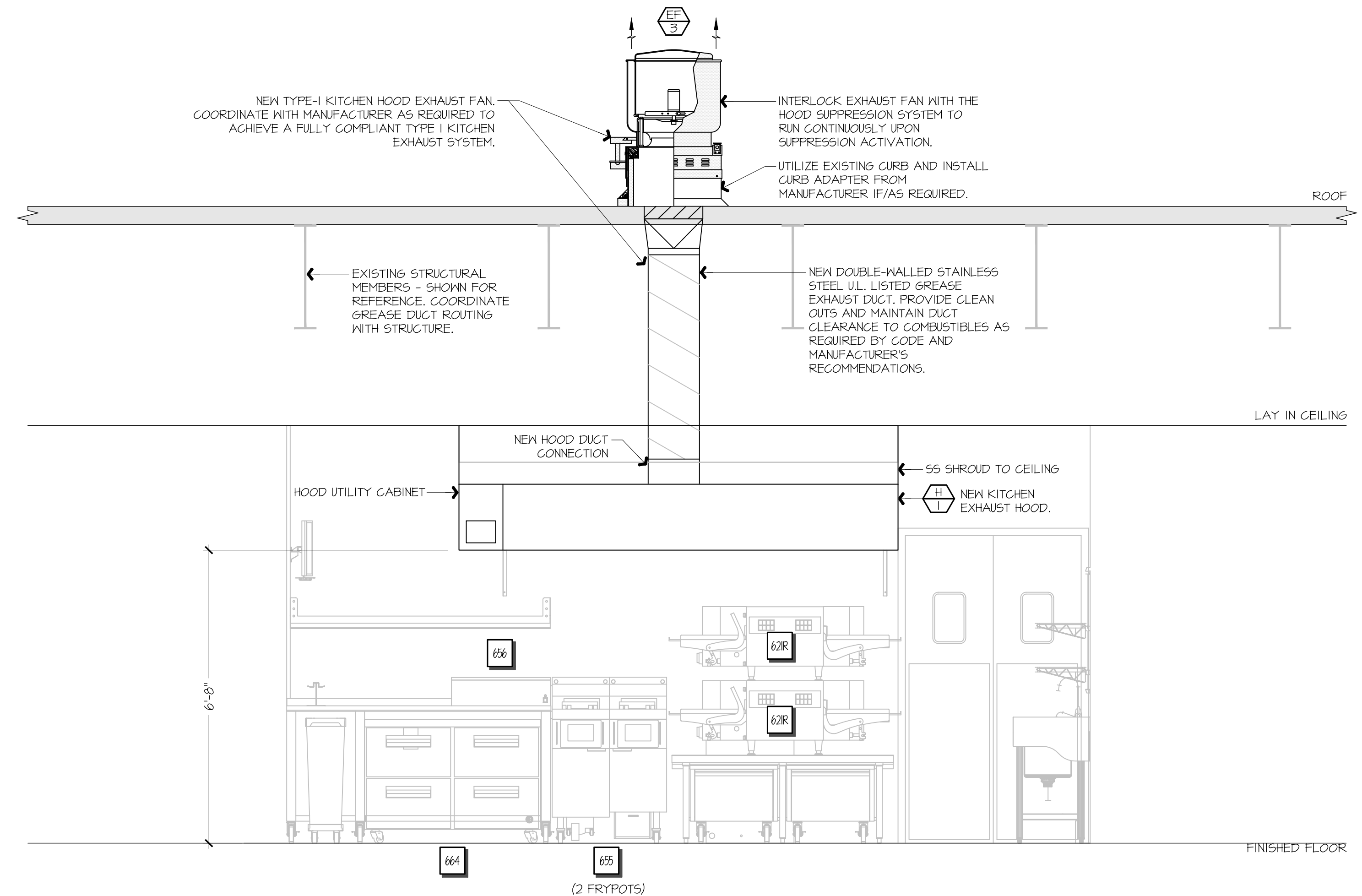
NOT TO SCALE



A1 JOIST REINFORCING DETAIL

NOT TO SCALE

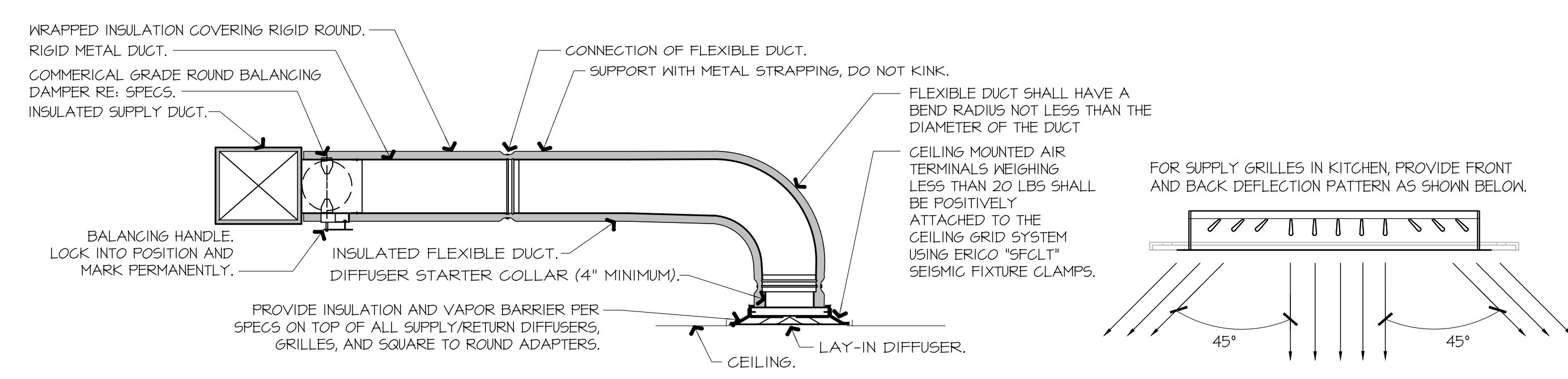
GENERAL NOTES:
 KITCHEN EXHAUST HOOD SHALL BE TYPE-I RATED FOR MEDIUM DUTY COOKING APPLIANCES THAT PRODUCE GREASE OR SMOKE AS A RESULT OF THE COOKING PROCESS. HOOD SHALL BE PROVIDED WITH AUTOMATIC FIRE SUPPRESSION SYSTEM INTERLOCKED WITH EQUIPMENT SHUTDOWN CONTROLS. HOOD SHALL BE PROVIDED WITH UL1046 GREASE FILTERS. HOOD SHALL BE LISTED AND LABELED FOR 0" CLEARANCE REQUIREMENTS TO COMBUSTIBLES.
 HEAT AND MOISTURE LOADS FOR APPLIANCES THAT DO NOT PRODUCE GREASE OR SMOKE AS A RESULT OF THE COOKING PROCESS AND ARE NOT LOCATED UNDER THE HOOD, HAVE BEEN INCORPORATED INTO THE HVAC SYSTEM CAPACITY SERVING THE KITCHEN.
 ALL OVENS NOT LOCATED UNDERNEATH A HOOD ARE UL1018 LISTED FOR VENTLESS OPERATION.
SEQUENCE OF OPERATION:
 THE FOLLOWING KITCHEN EQUIPMENT SHALL BE INTERLOCKED WITH CURRENT TRANSFORMERS THAT AUTOMATICALLY ACTIVATE THE HOOD EXHAUST FAN UPON THE KITCHEN EQUIPMENT BEING ENERGIZED: [621] PIZZA OVENS, [648] COMBI OVENS, [647] STEAM DRAINER, [655] FRYER, [656] FRY HOLDING STATION.
 AS HOOD EXHAUST FAN ENERGIZES, RTU'S SHALL MODULATE OUTSIDE AIR TO MAINTAIN BUILDING PRESSURIZATION. RE: M601.
 HEAT SENSORS SHALL BE PROVIDED WITHIN HOOD CANOPY FOR TEMPERATURE AND HUMIDITY MONITORING. RE: MANUFACTURER DRAWINGS.
 UPON ACTIVATION OF THE FIRE SUPPRESSION SYSTEM, ALL EQUIPMENT LOCATED UNDER THE HOOD SHALL BE SHUTDOWN VIA CONTACTORS LOCATED WITHIN THE HOOD UTILITY CABINET, AND RTU SERVING KITCHEN SPACE SHALL BE AUTOMATICALLY SHUTDOWN. RE: A13-E601.



F9 FSC REAR WALL ELEVATION - NEW

1/8" = 1'-0"

A1-M102



NOTES:
 1. PROVIDE AT FLEXIBLE DUCT CONNECTION METAL OR "PANDUIT" DRAMBAND ON THE INTERIOR FLEXIBLE DUCT HELIX. SECURE THE INSULATION OVER THE DRAMBAND WITH AN ADDITIONAL DRAMBAND.
 2. PROVIDE BEADING ON ROUND METAL DUCT 12" OR LARGER IN DIAMETER.
 3. PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF THE FLEX DUCT TO ROUND DUCT, DAMPERS AND DIFFUSERS.
 4. BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE FIBER REINFORCED FOIL BACKED TAPE FOR INSULATION OVERLAP.

A9 DIFFUSER CONNECTION DETAIL

NOT TO SCALE

North Carolina Professional Engineer Seal
 SEAL 04893
 ENGINEER
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DATE	06-18-2025

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SHEET TITLE:
 MECHANICAL SECTIONS & DETAILS

SHEET NUMBER:
M501

HOOD / EXHAUST FAN SCHEDULE									
	MANUFACTURER	MODEL	SIZE	CFM OFF/ON	MISC.	LIGHTS	FIRE SYSTEM	WEIGHT	NOTES
H-1	CAPTEVAIRE	60BOND-2-F	(9) 60"X30"	0 / 1950	12" EXHAUST CXN	(6) LED	YES	861 LBS	I-10
EF-3	CAPTEVAIRE	DUBOHA	1/2 HP	0 / 1950	DIRECT-DRIVE	-	-	74 LBS	IJ2

NOTES:

- HOODS, FANS, AND ACCESSORIES SHALL BE MANUFACTURER-FURNISHED, CONTRACTOR-INSTALLED.
- HOOD SHALL BE 480 STAINLESS STEEL.
- HOOD SHALL BE FURNISHED WITH FAN INDICATOR AND LIGHTSWITCH MOUNTED ON FRONT PANEL.
- MANUFACTURER FURNISHED DOUBLE-WALLED UL LISTED STAINLESS STEEL DUCT KIT AND ALL REQUIRED CONNECTION ACCESSORIES FOR FIELD-INSTALLATION FROM HOOD TO FAN.
- HOOD SHALL HAVE RIGHT AND LEFT QUARTER END PANELS, AND FRONT, LEFT, AND RIGHT STAINLESS STEEL FIELD WRAPPER.
- HOOD SHALL BE FURNISHED WITH UL 1046 LISTED GREASE FILTERS.
- HOOD SHALL BE FURNISHED WITH DUCT MOUNTED HEAT SENSORS AND AUTOMATIC FAN CONTROLS MOUNTED IN HOOD UTILITY CABINET.
- SYSTEM SHALL BE CAPABLE OF MODULATING FAN AS SCHEDULED, AND INTERLOCKED WITH BUILDING HVAC SYSTEM FOR BUILDING PRESSURIZATION.
- EQUIPMENT SHUT DOWN CONTACTORS ARE FACTORY-FURNISHED WITHIN HOOD UTILITY CABINET.
- HOOD SHALL BE LISTED AND LABELED FOR 0' CLEARANCE REQUIREMENTS TO COMBUSTIBLES.
- FAN SHALL BE FURNISHED WITH VENTED AND HINGED CURB, GREASE BOX, AND DISCONNECT.
- VARIABLE SPEED CONTROLLER PRE-MOUNTED IN FAN HOUSING. SPEED CONTROLLER SHALL BE MANUALLY ADJUSTED BY TEST AND BALANCE CONTRACTOR.

GRILLE, REGISTER, & DIFFUSER SCHEDULE							
	MANUFACTURER	MODEL	SERVICE	FACE SIZE	NECK SIZE	DESCRIPTION	NOTES
R1	TITUS	35ORL	EXHAUST	8" X 8"		3/4" 35° BLADE TRANSFER GRILLE, ALL WHITE.	I2
S1	TITUS	300FS	SUPPLY	22" X 22"	SEE PLAN	DOUBLE DEFLECTION GRILLE, ALL WHITE.	I3

NOTES:

- PROVIDE TRIM RINGS FOR ALL DIFFUSERS OR GRILLES IN GYP. BOARD CEILINGS.
- PROVIDE PLASTER FRAME IN HARD CEILINGS.
- PROVIDE BORDER TYPE I WITH NO SCREEN HOLES.

GENERAL NOTES (APPLY TO ALL THE ABOVE):

- GRILLES, REGISTERS, AND DIFFUSERS SHALL BE CONTRACTOR-FURNISHED, CONTRACTOR-INSTALLED.
- MAXIMUM NG OF 30 FOR ALL GRILLES, REGISTERS, AND DIFFUSERS.
- FOUR-WAY THROW PATTERN FOR SQUARE DIFFUSERS UNLESS SHOWN OTHERWISE.
- PROVIDE SQUARE-TO-ROUND ADAPTER ON ALL GRILLES AND DIFFUSERS AS REQUIRED PER THE DRAWINGS.
- PROVIDE NONASBESTOS THERMAL INSULATING BLANKETS WITH VAPOR BARRIER FOR ALL SUPPLY DIFFUSERS AND RETURN GRILLES.
- RE: THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- RE: DRAWINGS FOR FURTHER INSTALLATION AND APPLICATION DETAILS.

EXHAUST FAN CONTROL SETTINGS				RTU 1, 2, 3 O/A CONTROL SETTINGS			
CONDITION	EXHAUST FAN CFM	PERCENTAGE OF MAX EXHAUST	CONTROL VOLTAGE Vdc *	CONTROL VOLTAGE Vdc *	OUTSIDE AIR CFM	O/A DAMPER POSITION **	
HOOD OFF	0	0.0%	0	0	350	0 / (FAN# X SUPPLY AIRFLOW)	
HOOD ON	1950	100.0%	10	5	800	1350 / (FAN# X SUPPLY AIRFLOW)	

* CONTROL VOLTAGE SIGNAL RECEIVED FROM HOOD CONTROL PANEL ** O/A CFM / (SUPPLY FAN# X SUPPLY AIRFLOW)

AIR BALANCE & PRESSURIZATION SCHEDULE				
	SA CFM	HOOD ON RA CFM	HOOD OFF OA CFM	HOOD ON OA CFM
RT-1	4200	3400	350	800
RT-2	4200	3400	350	800
RT-3	4200	3400	350	800
EF-1 RR/JANITOR EXHAUST	0	0	-150	-150
EF-3 KITCHEN EXHAUST HOOD	0	0	0	-1350
	12600	10200	300	300

NEW SUPPLY DIFFUSER WITH CFM AMOUNT, NEW RETURN OR EXHAUST GRILLE WITH TYPE AND CFM AMOUNT.

RELOCATED SUPPLY DIFFUSER WITH CFM AMOUNT, RELOCATED RETURN OR EXHAUST GRILLE WITH TYPE AND CFM AMOUNT.

EXISTING SUPPLY DIFFUSER WITH CFM AMOUNT, EXISTING RETURN GRILLE WITH CFM AMOUNT.

REMOVED SUPPLY DIFFUSER WITH CFM AMOUNT, REMOVED RETURN GRILLE WITH CFM AMOUNT.

RECTANGULAR DUCTWORK WIDTH INCHES X DEPTH INCHES

TAKE-OFF WITH GASKET AND DAMPER 45° OR 90° AS SHOWN ON PLAN FLEX/DUCT RUNOUT

ELEWON WITH TURNING VANES

ROOF-MOUNTED EXHAUST FAN

ROOFTOP UNIT (HIDDEN OUTLINE REPRESENTS SERVICE CLEARANCE)

TEMPERATURE SENSOR

HUMIDITY SENSOR

DUCT SMOKE DETECTOR

INTERIOR ELEVATION TAG

CONNECT TO EXISTING

DISCONNECT FROM EXISTING

HOOD SUPPRESSION PUSH STATION

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G1 MECHANICAL SCHEDULES

MECHANICAL SYSTEM SECTION 230000

THE WORK INCLUDES INSTALLATION OF THE HVAC SYSTEM AND PROVIDING NEW DUCTWORK, DIFFUSERS AND GRILLES, INSULATION, CONTROLS, AND EQUIPMENT NECESSARY FOR A COMPLETE FUNCTIONING SYSTEM. HVAC SYSTEM INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

- HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) UNITS.
- SUPPLY AND RETURN DUCTWORK SYSTEM WITH GRILLES, DIFFUSERS, FILTERS, AND DAMPERS.
- CONTROL SYSTEM INCLUDING LOW VOLTAGE WIRING AND CONDUIT.
- DUCT, PIPING, AND EQUIPMENT INSULATION, WHERE INDICATED HEREIN.
- ROOF CURBS AND FLASHING OF ROOF PENETRATIONS FOR EQUIPMENT NOTED.

EQUIPMENT INDICATED ON THE DRAWINGS OR AS REQUIRED FOR A COMPLETE INSTALLATION, SUCH AS ROOFTOP UNITS, DUCTWORK, HOODS, EXHAUST FANS, SUPPLY AND RETURN DIFFUSERS, ETC., SHALL BE PROVIDED WITHIN THE SCOPE OF WORK OF THIS SECTION.

COMPLY WITH ALL LAWS APPLYING TO MECHANICAL INSTALLATIONS IN EFFECT. ALL MATERIALS USED SHALL BE NEW AND SHALL CONFORM TO THE STANDARDS ESTABLISHED BY LOCAL CODES AND SMACNA.

WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF THE COMPLETED PROJECT. PROVIDE A SEPARATE LINE ITEM DEDUCT AMOUNT ON THE PROPOSAL FORM TO DELETE WARRANTY SERVICE, AT THE OWNER'S OPTION.

DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS AS REQUIRED. PROVIDE ALL DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE SYSTEM FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED. THE WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES OR ORDINANCES AND SUBJECT TO INSPECTION.

COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITES.

CONTRACTOR SHALL INSTALL ONE SET OF NEW FILTERS AT THE END OF CONSTRUCTION, WHEN QUIKTRIP TAKES OCCUPANCY OF THE BUILDING.

SHEET METAL DUCTWORK: SHEET METAL FABRICATED AND INSTALLED TO CONFORM TO THE 2005 EDITION OF HVAC DUCT CONSTRUCTION STANDARDS-METAL AND FLEXIBLE OF THE SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION. SHEET METAL SHALL BE GALVANIZED SHEET STEEL OF LOCK-FORMING QUALITY, ASTM A-525, UNLESS OTHERWISE NOTED. DUCT DIMENSIONS ON DRAWINGS ARE INTERNAL AIRWAY DIMENSIONS. DUCT REINFORCEMENT SHALL BE SUITABLE FOR 1" AND -1" INCH STATIC PRESSURE.

ALL UNISTRUT USED FOR SUPPORT SHALL BE PRIMED STEEL SHOP PAINTED. CONNECTIONS TO WALLS OR FLOORS SHALL BE AIRTIGHT WITH ANGLE IRON AND CAULKING. SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL, AIRTIGHT WITH UNITED SHEET METAL "DUCT SEALER" TO SMACNA CLASS 'B'. PROVIDE TURNING VANES AT ALL ELBOWS OR OFFSETS EXCEEDING 45°.

TRAPEZE DUCT HANGERS: MINIMUM 1"X2"X1/8" 18 GAUGE CHANNELS WITH 1" X18 GAUGE STRAPS TO STRUCTURAL SUPPORT ABOVE.

DUCT WRAP/AS-J INSULATION (ON ALL RIGID ROUND AND RECTANGULAR SUPPLY AIR DUCTWORK): PROVIDE 2" THICK (MIN R-6) FIBERGLASS AS-J DUCT WRAP WITH VAPOR SEAL ON ALL RIGID ROUND DUCTWORK ABOVE THE CEILING. CONFORM TO SPEC ASTM C 1290.

RIGID ROUND GALVANIZED DUCT SHALL BE SPIRAL OR SNAP LOCK GALVANIZED SHEET METAL COMPLYING WITH SMACNA.

FLEX DUCT: PROVIDE FACTORY ASSEMBLED CLASS I AIR DUCT (UL 181) WITH 1" THICK I PCF (MIN R-5) FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER/VAPOR BARRIER. FLEX DUCT SHALL MEET NFPA 40A WITH FLAME SPREAD UNDER 25, SMOKE DEVELOPED UNDER 50, AND SHALL BE RATED FOR 2" W.G. PRESSURE AND 0 TO 250 DEGREE FAHRENHEIT. PROVIDE STAINLESS STEEL ADJUSTABLE CLAMPING DEVICES, SCREW OPERATED. USE TWIST-LOCK CONICAL TAP COLLARS AT CONNECTIONS INTO SHEET METAL DUCTWORK. DO NOT EXCEED SIX (6) FEET IN LENGTH FOR ANY FLEX DUCT. REFER TO DETAILS FOR ADDITIONAL REQUIREMENTS. FLEXIBLE DUCTWORK SHALL BE SERIES 70 BY ATCO, OR EQUIVALENT.

ROUND BALANCING DAMPERS: FABRICATED OF SAME MATERIAL AS DUCT, TWO METAL GAUGES HEAVIER THAN DUCT. MOUNT ON 3/8" SQUARE ROD WITH SAA SLOT POSITION INDICATOR. PIVOT BEARING, LOCKING POSITION REGULATOR, YOUNG REGULATOR CO., SERIES 443. REGULATOR SHALL BE POSITIONED WITH SHEET METAL BRACKET BEYOND DUCT COVERING.

CEILING DIFFUSERS/RETURNS: PROVIDE SUPPLY DIFFUSERS AND DAMPER IN SIZES, CAPACITIES, MATERIALS, AND PATTERN INDICATED ON THE DRAWINGS.

ACCESS PANELS: PROVIDE HINGED ACCESS PANELS IN DUCTWORK WHERE REQUIRED FOR ACCESS TO EQUIPMENT. PROVIDE INSULATED ACCESS DOORS IN INSULATED DUCTWORK.

AUTOMATIC TEMPERATURE CONTROL: ENTIRE BUILDING IS SERVED BY A BUILDING ENERGY MANAGEMENT SYSTEM REFERRED TO AS 'EMS'. SYSTEM WILL INCLUDE THERMOSTATIC AND HUMIDITY CONTROL FOR HVAC ROOFTOP UNITS.

HVAC TEST AND BALANCING AND CRITERIA:

HVAC TEST AND BALANCING AND SHALL BE PERFORMED BY A CERTIFIED BALANCING CONTRACTOR WHO IS AN INDEPENDENT CONTRACTOR FROM THE HVAC INSTALLING CONTRACTOR. A COMPLETED AND CERTIFIED TEST & BALANCE REPORT SHALL BE PRESENTED TO THE OWNER'S CONSTRUCTION MANAGER PRIOR TO REQUEST FOR FINAL PAYMENT.

CONTRACTOR SHALL FIRST VERIFY THAT THE SYSTEM MATCHES THE CONSTRUCTION DOCUMENTS FOR LOCATIONS OF ALL DIFFUSERS, GRILLES, ROOFTOP UNITS, EXHAUST FAN, THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS, SMOKE DETECTORS, TEST UNITS, AND ANNUNCIATORS, MAKE VISUAL OBSERVATIONS OF INSTALLATION SUCH AS ROOFTOP UNITS INSTALLED LEVEL AND COMPLETE, CLEAN FILTERS, GOOD REFRIGERANT CHARGE, ADEQUATE CONDENSATE DRAINAGE, ETC. VERIFY THAT ALL DUCTS ARE CONNECTED (NONE HAVE COME LOOSE AND ARE BLOWING AIR INTO THE PLENUM), NO KINKED FLEX-DUCT, ALL DUCTS WELL INSULATED AND NO GAPS EXIST THAT COULD CREATE A SOURCE FOR CONDENSATION, PARTICULARLY ON TOP OF DIFFUSERS. INDICATE DIRECTION THAT STOREFRONT FACES. (PROVIDE A NORTH ARROW ON PLAN). ANY DISCREPANCIES SHALL BE MARKED ON A DRAWING TO BE PRESENTED TO THE OWNER'S REPRESENTATIVE ALONG WITH THE FINAL REPORT.

MINOR REPAIR WORK, SUCH AS LOOSE FLEX CONNECTIONS, REPLACEMENT BELTS, ETC., SHALL BE PERFORMED BY THE TEST AND BALANCE CONTRACTOR PRIOR TO AIR BALANCING. MAJOR REPAIR WORK SHALL BE REPORTED TO THE QUIKTRIP REPRESENTATIVE AND NEGOTIATED PRIOR TO WORK BEING DONE. INSTALL ALL NEW FILTERS.

ADJUST EACH PIECE OF HVAC EQUIPMENT AS REQUIRED TO ASSURE PROPER BALANCE AND OPERATION. FOLLOW NEBS AND ASHRAE STANDARDS. BALANCE ALL SYSTEMS TO WITHIN 5% OF AIR VOLUMES INDICATED OR PROPORTIONALLY PER THE DRAWING TO ACHIEVE A SLIGHTLY POSITIVE BUILDING PRESSURIZATION OF +0.05"WC. TEST AND VERIFY PROPER ECONOMIZER AND GRAVITY RELIEF VENT OPERATION. CHECK RESTROOM PRESSURIZATION AND VERIFY THAT AN ADEQUATE TRANSFER AIR PATH EXISTS, ELIMINATE NOISE AND VIBRATION, AND ASSURE PROPER FUNCTION OF ALL CONTROLS, MAINTENANCE OF TEMPERATURE AND HUMIDITY WHERE APPLICABLE, AND OVERALL OPERATION. FINAL BALANCED POSITIONS SHALL BE MARKED ON EACH DAMPER WITH A PERMANENT MARKER.

AUTOMATIC TEMPERATURE & HUMIDITY CONTROL: EACH ROOFTOP UNIT SHALL BE CONTROLLED BY THE BUILDING ENERGY MANAGEMENT SYSTEM BY OTHERS. EMS LOCATED IN THE LOW-VOLTAGE CABINET, TEMPERATURE AND/OR HUMIDITY SENSORS IN THE SPACE. SET OUTSIDE AIR DAMPER TO MINIMUM POSITION DURING OCCUPIED MODE. ALL PROGRAMMING SHALL BE THROUGH THE EMS BY OTHERS. VERIFY THAT ROOFTOP UNITS EQUIPPED WITH DEHUMIDIFICATION (HOT GAS REHEAT) ARE WIRED, FUNCTIONAL, AND SET. ALL WIRING SHALL BE IN CONDUIT.

CONTRACTOR SHALL PRESENT A FINAL DRAWING AND CERTIFIED BALANCE REPORT TO THE QT REPRESENTATIVE THAT CONTAINS ALL ACTUAL DIFFUSER AND GRILLE LOCATIONS WITH AIR QUANTITIES SHOWN FOR EACH DEVICE, EXHAUST AND OUTSIDE AIR QUANTITIES, SUPPLY AIR TEMPERATURE, FAN RPM, MOTOR CURRENTS, MAIN DUCT STATIC PRESSURE, AND DUCT TEMPERATURES, INDOOR/OUTDOOR PRESSURE DIFFERENTIAL, AND ROOFTOP UNIT(S) MAKE AND MODEL NUMBER.

CONTRACTOR TO OBTAIN COPY OF 'QT TEST AND BALANCE REPORT FORM' FROM QT REP FOR REPORTING PURPOSES.

G13 MECHANICAL SYMBOLS LEGEND

- REFER TO THE SPECIFICATIONS, DETAILS, AND SCHEDULES FOR ADDITIONAL REQUIREMENTS NOT SHOWN ON THE PLAN.
- ALL TEMPERATURE CONTROL WIRING SHALL BE TAPPAN OR BELDEN CABLE BY THE EMS INSTALLER AND SHALL MEET NATIONAL ELECTRIC CODE REQUIREMENTS. SEE ROOFTOP UNIT SCHEDULE FOR ADDITIONAL REQUIREMENTS. CONCEAL ALL WIRING IN HALL CAVITIES OR ABOVE CEILING.
- MECHANICAL CONTRACTOR SHALL REMOVE AND REPLACE FILTERS FOR ALL EXISTING ROOFTOP UNITS AT THE END OF PROJECT CONSTRUCTION.
- CONTRACTOR SHALL FIELD REVIEW AND VERIFY EXISTING CONDITIONS AS APPLICABLE AND COORDINATE WITH OTHER TRADES.
- TRANSITION AS REQUIRED FROM BRANCH DUCT TO DIFFUSER NECK. COORDINATE BETWEEN PLANS AND SCHEDULES.
- DUCTWORK DIMENSIONS ARE CLEAR INSIDE DIMENSIONS.
- FLEXIBLE DUCTWORK SHALL BE LIMITED TO NO MORE THAN 6' IN LENGTH.
- HOLD TOP OF DUCTWORK INSULATION TO UNDERSIDE OF STRUCTURE WHEREVER POSSIBLE.
- ALL BRANCH DUCTS SHALL HAVE BALANCING DAMPERS INSTALLED AS INDICATED ON DRAWINGS. HANDLE SHALL BE BOTH ACCESSIBLE AND CAPABLE OF OPENING AND CLOSING FULLY. REFER TO DIFFUSER CONNECTION DETAIL.
- FINAL LOCATION OF TEMPERATURE CONTROLS SHALL BE FIELD-VERIFIED BY OWNER AT JOB SITE.
- MECHANICAL CONTRACTOR SHALL CLEAN ALL CONDENSERS AFTER CONSTRUCTION HAS BEEN COMPLETED.
- ALL DUCTWORK SHALL RECEIVE DUCT WRAP INSULATION PER SPECIFICATIONS. LINED DUCTWORK IS NOT ACCEPTABLE.

PROTOTYPE: FRYER ADDITION

DIVISION: CAROLINA

VERSION: G35

DATE: 06-18-2025

REV	DATE	DESCRIPTION

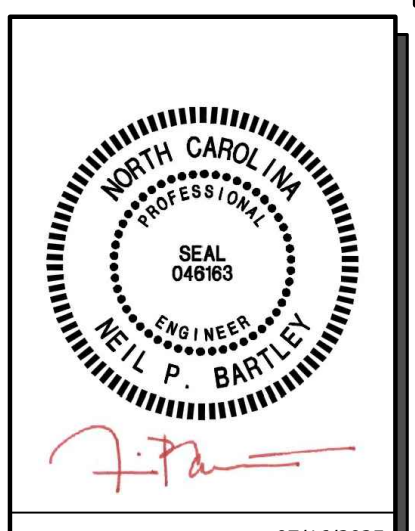
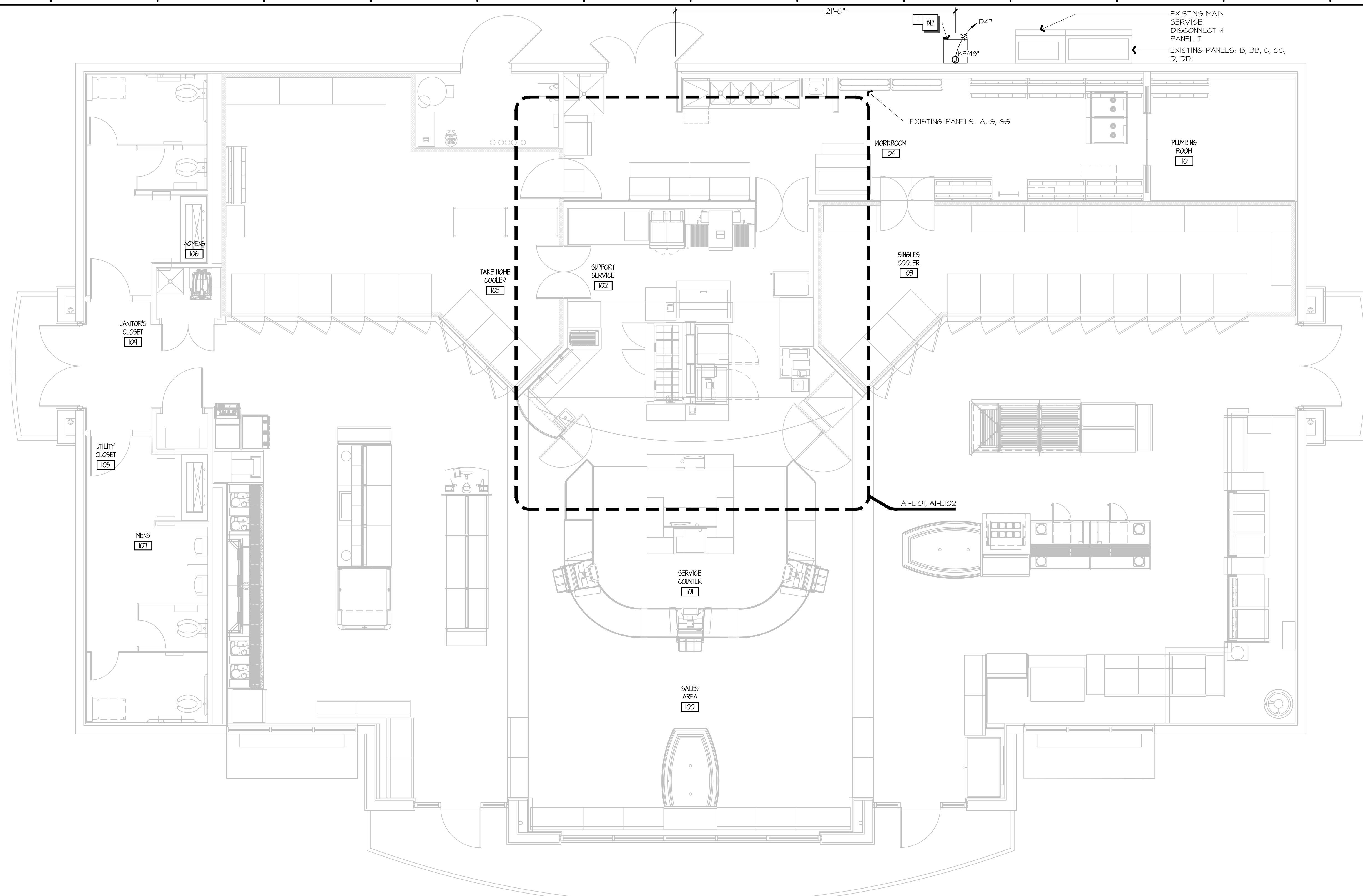
ORIGINAL ISSUE DATE: 07/16/2025

SHEET TITLE:
MECHANICAL SCHEDULES, SPECIFICATIONS, & SYMBOLS

SHEET NUMBER:
M601

A1 MECHANICAL DUCTWORK SPECIFICATIONS

A13 GENERAL NOTES



SIGNATURE DATE: 07/16/2025

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QuikTrip No. 1011

10132 BELLHAVEN BOULEVARD
 CHARLOTTE, NORTH CAROLINA

QT

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PROTOTYPE	FRYER ADDITION
DIVISION	CAROLINA
VERSION	G35
DATE	06-18-2025

REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 07/16/2025

SHEET TITLE:
ELECTRICAL POWER SCOPE OF WORK PLAN

SHEET NUMBER:
E100

1. INSTALL OWNER-FURNISHED OIL RECLAMATION TANK AND ROUTE POWER FROM PANEL ACROSS CEILING, DOWN INSIDE FACE OF EXTERIOR WALL, AND THROUGH EXTERIOR WALL TO WEATHERPROOF JUNCTION BOX. PROVIDE HARDWIRE CONNECTION TO EQUIPMENT WITH LABEL ON JUNCTION BOX INDICATING CIRCUIT NUMBER. LOCKABLE CIRCUIT BREAKER IN PANEL SHALL ACT AS MEANS OF DISCONNECT PER NEC 422.3(B). SEAL ALL PENETRATIONS THROUGH WALL AS REQUIRED. SECURE OIL RECLAMATION TANK TO GROUND AT EXTERIOR OF BUILDING.

REFER TO SHEET E601 FOR EQUIPMENT TAGS

BUILDING CODES:
 2023 NATIONAL ELECTRICAL CODE WITH NORTH CAROLINA AMENDMENTS

A1 ELECTRICAL POWER SCOPE OF WORK PLAN

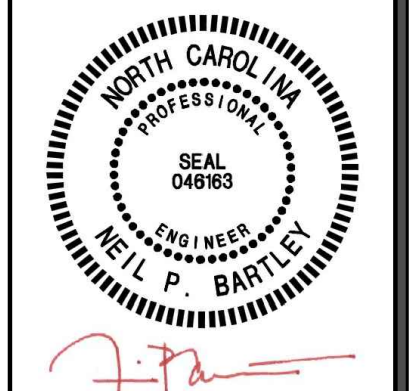
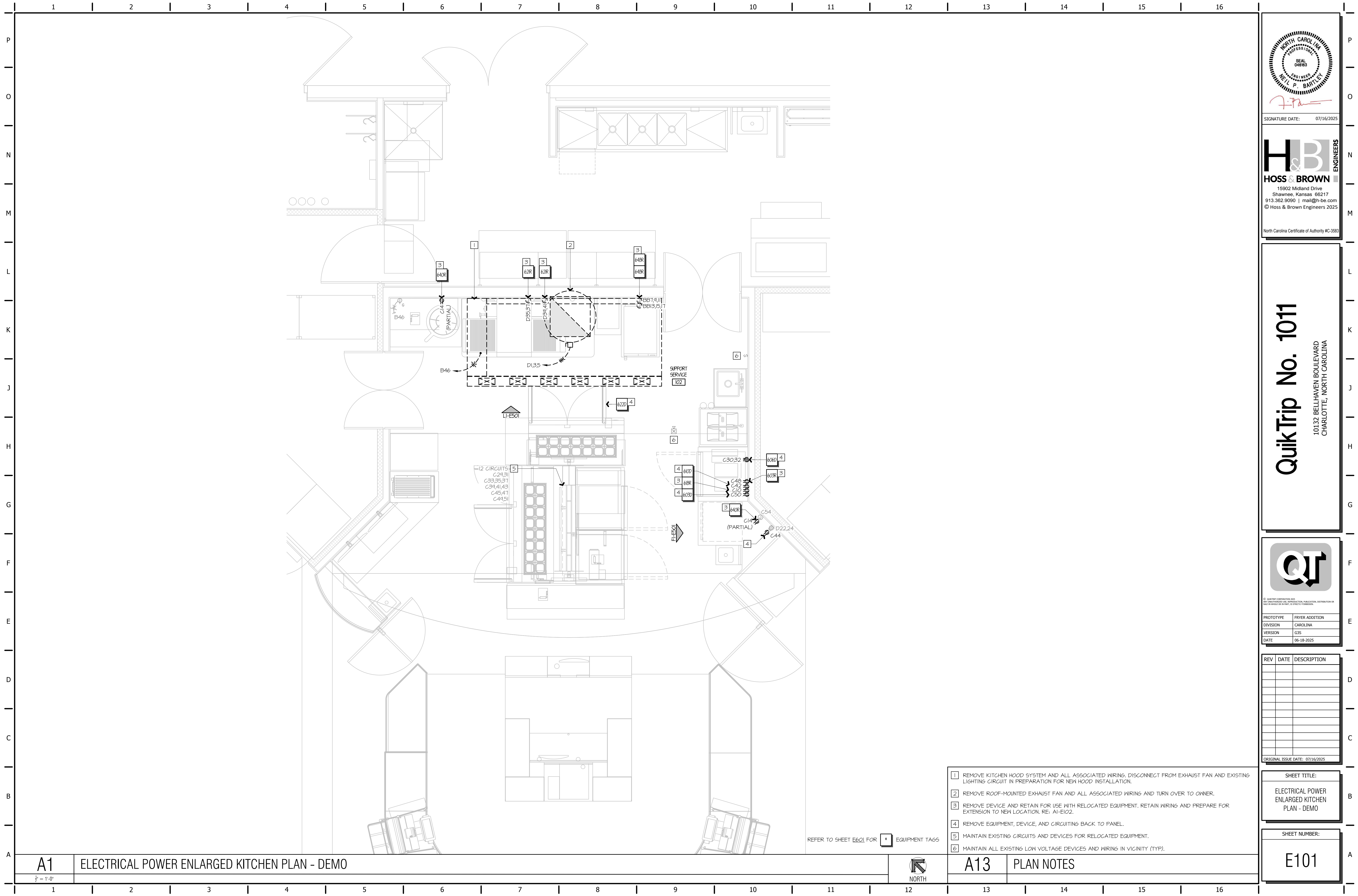
A10 BUILDING CODES

A13 PLAN NOTES

E100



1/8" = 1'-0"



SIGNATURE DATE: 07/16/2025

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PROTOTYPE	FRYER ADDITION
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VERSION	G35
DATE	06-18-2025

REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 07/16/2025

SHEET TITLE:
 ELECTRICAL POWER ENLARGED KITCHEN PLAN - DEMO

SHEET NUMBER:
E101

- 1 REMOVE KITCHEN HOOD SYSTEM AND ALL ASSOCIATED WIRING. DISCONNECT FROM EXHAUST FAN AND EXISTING LIGHTING CIRCUIT IN PREPARATION FOR NEW HOOD INSTALLATION.
- 2 REMOVE ROOF-MOUNTED EXHAUST FAN AND ALL ASSOCIATED WIRING AND TURN OVER TO OWNER.
- 3 REMOVE DEVICE AND RETAIN FOR USE WITH RELOCATED EQUIPMENT. RETAIN WIRING AND PREPARE FOR EXTENSION TO NEW LOCATION. RE: AI-E102.
- 4 REMOVE EQUIPMENT, DEVICE, AND CIRCUITING BACK TO PANEL.
- 5 MAINTAIN EXISTING CIRCUITS AND DEVICES FOR RELOCATED EQUIPMENT.
- 6 MAINTAIN ALL EXISTING LOW VOLTAGE DEVICES AND WIRING IN VICINITY (TYP).

REFER TO SHEET E601 FOR EQUIPMENT TAGS





A13 PLAN NOTES

A1 ELECTRICAL POWER ENLARGED KITCHEN PLAN - DEMO

1/8" = 1'-0"

M1 NOT USED

LIGHT FIXTURE SCHEDULE										
TYPE	IMAGE	SYMBOL	QUANTITY	MANUFACTURER	CATALOG NUMBER	LAMPS	MOUNTING	VOLTS	WATTS	REMARKS
UC-34			1	ELITE LIGHTING	EU-LED-34-1300L-35K-WH-PC5BI20	LED	SURFACE	120	14	
GENERAL NOTES (APPLY TO ALL THE ABOVE):										
A) ALL LIGHT FIXTURES ARE OWNER-FURNISHED, CONTRACTOR-INSTALLED.										
B) ALL LAMPS TO BE PROVIDED BY ELECTRICAL CONTRACTOR, OSRAM/PENNSYLVANIA ONLY, PURCHASED THROUGH NATIONAL ACCOUNT REPRESENTATIVE.										
C) ALL FLUORESCENT FIXTURES SHALL BE PROVIDED WITH 120 VOLT SOLID STATE ELECTRONIC BALLASTS.										
D) LIGHT FIXTURES IN COOLER SHALL REMAIN OFF DURING CONSTRUCTION UNTIL COOLERS ARE PERMANENTLY GOLD.										
E) ALL MOUNTING HEIGHTS AND FIXTURE PLACEMENT TO BE VERIFIED WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.										

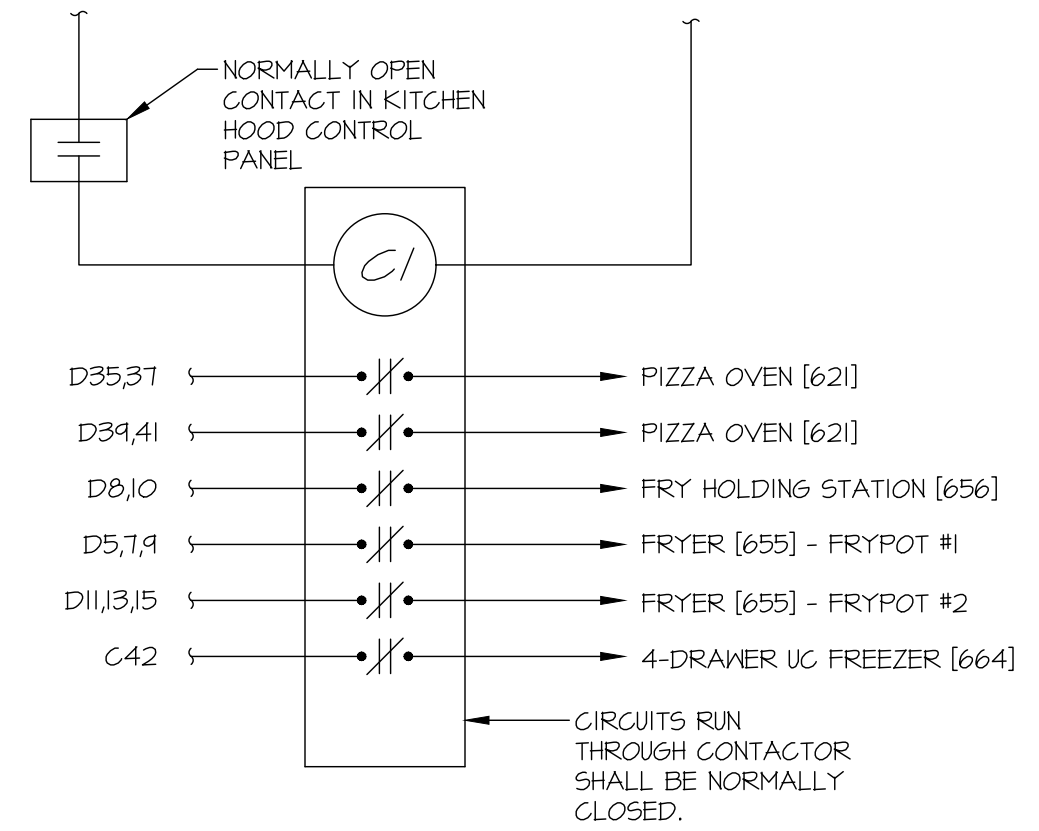
H1 LIGHTING SCHEDULE

H13 NOT USED

ELECTRICAL EQUIPMENT LIST AND CONNECTION SCHEDULE										
TAG #	DESCRIPTION	MAKE & MODEL	VOLTAGE / PHASE / WIRE	LOAD AMPS	TYPE OF CONNECTION	WIRE AND CONDUIT	MOUNTING HEIGHT (AFF)	FURNISHED BY	ITEM	REMARKS
603	BLENDER	VITAMIX #36019	120/1/3W	15.0	NEMA 5-20R	3#12 IN 1/2" C	*	-		*NOTE 1
606	ICE CREAM MACHINE	-	-	-	-	-	-	-	-	-
610	UNDERCOUNTER REFRIGERATOR	-	-	-	-	-	-	-	-	-
618	LED SCREEN	-	120/1/3W	2.0	NEMA 5-20R	3#12 IN 1/2" C	*	-		*NOTE 1
621	PIZZA OVEN	OVENTION #SHUTTLE	208/1/3W	45.0	HARDWIRED	3#8 IN 3/4" C	*	-		*NOTE 1
622	60" PIZZA GOLD PREP TABLE	-	-	-	-	-	-	-	-	-
638	12" SUB COLD PREP TABLE	TRUE #TFP-12-30M-D-2	120/1/3W	5.1	NEMA 5-20R	3#12 IN 1/2" C	*	-		*NOTE 1
640	FRITTER	-	120/1/3W	1.0	NEMA 5-20R	3#12 IN 1/2" C	*	-		*NOTE 1
648	COMBI OVEN	CONOTHERM EASYTOUGH	208/3/4W	17.9	HARDWIRED	4#10 IN 1/2" C	*	-		*NOTE 1
655	FRYER	FRYMASTER 2F0E30U	208/3/4W	48.0	HARDWIRED	3#6 4 #10 6 IN 3/4" C	*	QT		*NOTE 1,2
656	FRY HOLDING STATION	MERCO #MCG212TNN	208/1/3W	19.8	NEMA 6-20R	3#12 IN 1/2" C	*	QT		*NOTE 1
662	48" PIZZA COLD PREP TABLE	TRUE TFP-48-18M-D-2	120/1/3W	2.4	NEMA 5-20R	3#12 IN 1/2" C	*	QT		*NOTE 1
663	2-DRAWER UNDERCOUNTER FREEZER	HOSHIZAKI UF21B-D2	120/1/3W	4.0	NEMA 5-15R	3#12 1/2" C	*	QT		*NOTE 1
664	4-DRAWER UNDERCOUNTER FREEZER	UF48B-LPD4	120/1/3W	4.0	NEMA 5-15P	3#12 IN 1/2" C	*	QT		*NOTE 1
612	WASTE OIL RECLAMATION TANK	FRONTLINE INTERNATIONAL 30735Q-0	120/1/3W	15.0	NEMA 5-20R	3#12 IN 1/2" C	*	QT		*NOTE 1
414	H-1 EXHAUST HOOD	CAPTIVEAIRE 6030ND-2-F	120/1/3W	15.0	HARDWIRED	3#12 IN 1/2" C	*	QT		
415	EF-3 EXHAUST FAN	CAPTIVEAIRE D150HFA	208/1/3W	3.8	FACTORY	3#12 IN 1/2" C	*	QT		RE: MECHANICAL SHEETS

NOTES:
1) REFERENCE ELEVATIONS ON SHEET E501.
2) PROVIDE DEDICATED POWER CONNECTION FOR EACH FRYPOT AS SHOWN ON PLANS.

GENERAL NOTES (APPLY TO ALL THE ABOVE):
A) ALL ELECTRICAL DEVICES ARE PROVIDED BY ELECTRICAL CONTRACTOR. ROUGH-IN MOUNTING HEIGHTS ARE CENTER OF BOX UNLESS NOTED OTHERWISE AND SHALL BE VERIFIED WITH THE EQUIPMENT MANUALS PRIOR TO COMMENCING WORK.
B) LABEL ALL RECEPTACLES WITH THE NAME OF THE EQUIPMENT THEY SERVE AND CIRCUIT NUMBERS.
C) RECEPTACLES OR DISCONNECT SWITCHES LOCATED PER PLAN. MOUNT TO WALL OR TO BACK OF WEDGE CAVITY OR CASEWORK AS APPLICABLE.
D) FURNISHED BY: QT=QUIKTRIP, PC=PLUMBING CONTRACTOR, MC=MECHANICAL CONTRACTOR, EC=ELECTRICAL CONTRACTOR.
E) D = DEMO, R = REUSE / RELOCATE, F-FUTURE



FOR EQUIPMENT UNDER HOOD, WIRE THROUGH FACTORY INSTALLED CONTACTORS IN THE HOOD CONTROL PANEL.

IF APPLICABLE, PROVIDE AN INTERCONNECT TO THE FIRE ALARM SYSTEM FROM A CONTACT IN THE FIRE SUPPRESSION CONTROL PANEL TO A FIRE ALARM SYSTEM ZONE ADDRESSABLE MODULE.


ANY KITCHEN EQUIPMENT LOCATED BELOW THE HOOD AND IS PROTECTED BY A CIRCUIT BREAKER LARGER THAN 20A WILL REQUIRE A DEDICATED CONTACTOR WITH CONTACT RATINGS EQUAL TO OR LARGER THAN THE CIRCUIT BREAKER PROTECTING THE EQUIPMENT. THE DEDICATED CONTACTOR SHALL BE WIRED IN PARALLEL TO THE 20A MULTI-POLE CONTACTOR. ANY DEDICATED CONTACTORS THAT CANNOT BE INSTALLED IN ELECTRICAL CABINET ON HOOD SHALL BE INSTALLED ABOVE CEILING ADJACENT TO HOOD IN AN ACCESSIBLE LOCATION.

THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT, WIRING, RELAYS, AND DEVICES AS SHOWN AND AS REQUIRED TO PROVIDE CONTROL INTERFACE BETWEEN HOOD FIRE SUPPRESSION SYSTEM TO CAUSE THE FOLLOWING TO OCCUR WHEN AGENT IS RELEASED:


- DE-ENERGIZE ALL ELECTRICAL EQUIPMENT LISTED ON THIS DETAIL.
- DE-ENERGIZE RTU SERVING THE KITCHEN.
- ENERGIZE AND RAMP EXHAUST FAN AIRFLOW TO HOOD MAX ON SCHEDULED ON M601.

A1 ELECTRICAL EQUIPMENT LIST

A13 HOOD EQUIPMENT SHUTDOWN CONTACTOR



SIGNATURE DATE: 07/16/2025




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QuikTrip No. 1011

10132 BELLHAVEN BOULEVARD
CHARLOTTE, NORTH CAROLINA



PROTOTYPE: FRYER ADDITION
DIVISION: CAROLINA
VERSION: G35
DATE: 06-18-2025

REV	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: 07/16/2025

SHEET TITLE:
ELECTRICAL SCHEDULES & DETAILS

SHEET NUMBER:
E601

EXISTING MAIN DISTRIBUTION PANEL: T															
SYSTEM: 208/120V, 3PH, 4W		LOCATION: OUTSIDE ON BLDG.		CABINET MOUNTING: SURFACE		FEEDER: EXISTING TO REMAIN		MAINS: 1200 M.C.B.		LUGS: NEMA ENCLOSURE: 3R		OPTIONS:			
CODE	NOTE	LOAD DESCRIPTION	BKR SIZE	BKR POLE	WATTS	CK NO.	PHASE	CK NO.	WATTS	BKR POLE	BKR SIZE	LOAD DESCRIPTION	NOTE	CODE	
		SPACE										SPACE			
		PANEL CC	225	3	8,123	3	A	14	0		3	20	TVSS		
		PANEL DD	225	3	19,454	11	A	12	13,440		3	125	CENTRAL REFRIGERATION RACK	K	
		PANEL BB	225	3	25,413	4	A	10	13,805		3	150	RTU-1 all electric	K	
		PANEL B	225	3	16,781	1	A	8	13,805		3	150	RTU-2 all electric	K	
		PANEL C	225	3	10,984	5	A	6	13,805		3	150	RTU-3 all electric	K	
		PANEL A	100	3	1,911	3	A	4	6,648		3	150	PANEL G		
		PANEL D	225	3	33,320	1	A	2	10,800		3	600	EMERGENCY POWER MAIN (WITH KEYPAD INTERLOCK)		
		MAIN (WITH KEYPAD INTERLOCK)	1200	3	40,221	-	-	-	-						
CONNECTED WATTS		DEMAND WATTS / AMPS		LOAD		CONNECTED		NEC FEEDER LOAD							
PH A: 16,623		144,811		1200											
PH B: 17,455		145,823		1215											
PH C: 173,144		151,431		1262											

ELECTRICAL LOAD SUMMARY			
DESCRIPTION	CONNECTED TOTAL	NEC DEMAND FACTORS	NEC FEEDER LOAD
EXISTING DEMAND FROM MOST RECENT REMODEL PROJECT AS OF: 12/01/2023			132641 WATTS 364 AMPS
EXISTING DEMAND (AMPS):			
DEMOLISHED LOADS:			
KITCHEN EQUIPMENT	-4556 WATTS	0.65	-2461 WATTS
LIGHTING/SIGNAGE	-1861 WATTS	1.25	-2334 WATTS
RECEPTACLES	-500 WATTS	1.00	-500 WATTS
TOTAL DEMOLISHED LOAD (WATTS):	-6917 WATTS		-5195 WATTS
TOTAL DEMOLISHED LOAD (AMPS):	-18 AMPS		-16 AMPS
NEW LOADS:			
KITCHEN EQUIPMENT	34734 WATTS	0.65	25821 WATTS
LIGHTING/SIGNAGE	448 WATTS	1.25	1249 WATTS
MISCELLANEOUS	0 WATTS	1.00	0 WATTS
RECEPTACLES	180 WATTS	1.00	180 WATTS
MOTORS (CONT.)	0 WATTS	1.25	0 WATTS
COOLING	0 WATTS	0.00	0 WATTS
ELECTRIC HEAT	0 WATTS	1.25	0 WATTS
GREATER OF THE TWO			
TOTAL NEW LOAD (WATTS):	40412 WATTS		21255 WATTS
TOTAL NEW LOAD (AMPS):	114 AMPS		16 AMPS
GRAND TOTAL LOAD:			154156 WATTS 428 AMPS

GENERAL NOTES FOR PANELBOARDS:

NEW CIRCUIT BREAKERS FOR EXISTING PANELS SHALL BE OF SAME TYPE AND MANUFACTURER AS EXISTING BREAKERS AND SHALL HAVE A.I.C. RATINGS EQUAL TO OR GREATER THAN EXISTING BREAKERS.

PROJECT COMPLETION NOTE:

AT COMPLETION OF PROJECT, CONTRACTOR SHALL UPDATE TYPE-WRITTEN PANEL SCHEDULES AND LEAVE ONE COPY IN A PLASTIC SLEEVE WITHIN DOOR OF PANEL, AND PRESENT ONE COPY TO GT CONSTRUCTION REPRESENTATIVE.

EXISTING SUB PANEL: A															
SYSTEM: 208/120V, 3PH, 4W		LOCATION: CORRIDOR		CABINET MOUNTING: SURFACE		FEEDER: EXISTING TO REMAIN		MAINS: 125A M.L.O.		LUGS: TOP		OPTIONS:			
CODE	NOTE	LOAD DESCRIPTION	BKR SIZE	BKR POLE	WATTS	CK NO.	PHASE	CK NO.	WATTS	BKR POLE	BKR SIZE	LOAD DESCRIPTION	NOTE	CODE	
S		TRANSFER FAN 1 - SECURITY CAB. #16	20	1	264	1	A	2	0		3	20	TVSS		
R		L.V. CABINET GENERAL RCPT 1	20	1	180	3	B	4	0						
R		L.V. CABINET GENERAL RCPT 2	20	1	120	5	C	6	0						
L		EMERSON EMS	20	1	540	1	A	8	0		1	20	SPARE		
L		EMERSON LITE CONTROLS	20	1	500	4	B	10	180		1	20	GENERAL RCPT PHONE	R	
S		SECURITY SYSTEM	20	1	360	11	C	12	755		1	20	COOLER DOOR HTR-SINGLES-I	H	
R		IT RACK	20	1	360	13	A	14	755		1	20	COOLER DOOR HTR-SINGLES-I	H	
S		UPS-C POWER	20	1	1525	15	B	16	0		1	20	UPS-C BYPASS	G	
S		UPS-B POWER	20	1	975	17	C	18	0		1	20	UPS-B BYPASS	G	
CONNECTED WATTS		DEMAND WATTS / AMPS		LOAD		CONNECTED		NEC FEEDER LOAD							
PH A: 1,911		2,054		17											
PH B: 2,185		2,310		14											
PH C: 3,510		3,510		24											

NOTES: EXISTING PANEL SHOWN FOR REFERENCE.

EXISTING SUB PANEL: G															
SYSTEM: 208/120V, 3PH, 4W		LOCATION: CORRIDOR		CABINET MOUNTING: SURFACE		FEEDER: EXISTING TO REMAIN		MAINS: 225A M.L.O.		LUGS: TOP, THRU LUGS		OPTIONS:			
CODE	NOTE	LOAD DESCRIPTION	BKR SIZE	BKR POLE	WATTS	CK NO.	PHASE	CK NO.	WATTS	BKR POLE	BKR SIZE	LOAD DESCRIPTION	NOTE	CODE	
F		AIR FUEL PUMP	20	3	901	3	A	4	1,634		3	20	REGULAR #1 FUEL PUMP	F	
F		SPARE	20	3	901	5	C	6	1,634		3	20	REGULAR #2 FUEL PUMP	F	
F		SPARE	20	3	901	7	A	8	1,634		3	20	REGULAR #2 FUEL PUMP	F	
F		SPARE	20	3	901	9	B	10	1,634		3	20	4HP	F	
F		SPARE	20	3	901	13	A	14	901		3	20	PREMIUM FUEL PUMP	F	
F		SPARE	20	3	901	15	B	16	901		3	20	2HP	F	
F		SPARE	20	3	901	17	C	18	901		3	20	DIESEL FUEL PUMP	F	
F		SPARE	20	3	901	19	A	20	901		3	20	2HP	F	
F		SPARE	20	3	901	21	B	22	901		3	20	2HP	F	
F		SPARE	20	3	901	23	C	24	901		3	20	2HP	F	
M		TVSS	20	3	0	25	A	26	716		2	15	CANOPY .75 HP SUMP VENTILATION FAN	M	
CONNECTED WATTS		DEMAND WATTS / AMPS		LOAD		CONNECTED		NEC FEEDER LOAD							
PH A: 6,648		6,648		56											
PH B: 6,648		6,648		56											
PH C: 10,800		10,800		90											

NOTES: EXISTING PANEL SHOWN FOR REFERENCE.

EXISTING SUB PANEL: GG															
SYSTEM: 120V, 1PH, 3W		LOCATION: CORRIDOR		CABINET MOUNTING: SURFACE		FEEDER: EXISTING TO REMAIN		MAINS: 125A M.L.O.		LUGS: TOP		OPTIONS:			
CODE	NOTE	LOAD DESCRIPTION	BKR SIZE	BKR POLE	WATTS	CK NO.	PHASE	CK NO.	WATTS	BKR POLE	BKR SIZE	LOAD DESCRIPTION	NOTE	CODE	
S		SPARE MDP #17/28	20	1	0	1	C	2	0		1	20	TVSS		
S		EMERGENCY SWITCH (002)	20	1	100	3	C	4	10		1	20	BACKUP MAIN		
F		FUELING CONTROLS	15	1	50	5	C	6	200		1	20	MDP #1/2	F	
S		INTERCOM / WARREN ROGERS	20	1	360	7	C	8	200		1	20	MDP #3/4	F	
S		TANK MONITOR	20	1	1080	9	C	10	200		1	20	MDP #5/6	F	
S		UPS-A POWER	20	1	1530	11	C	12	200		1	20	MDP #7/8	F	
S		UPS-A BYPASS	20	1	0	13	C	14	200		1	20	MDP #9/10	F	
S		SPARE	20	1	0	15	C	16	200		1	20	MDP #11/12	F	
S		SPARE	20	1	0	17	C	18	200		1	20	MDP #13/14	F	
S		SPARE	20	1	0	19	C	20	200		1	20	MDP #15/16	F	
S		SPARE	20	1	0	21	C	22	200		1	20	SPARE MDP #17/18	F	
S		SPARE	20	1	0	23	C	24	200		1	20	SPARE MDP #19/20	F	
S		SPARE	20	1	0	25	C	26	200		1	20	SPARE MDP #21/22	F	
S		SPARE	20	1	0	27	C	28	200		1	20	SPARE MDP #23/24	F	
S		TVSS STATUS LIGHTS	15	1	100	29	C	30	0		1	20	SPARE MDP #25/26	F	
CONNECTED WATTS		DEMAND WATTS / AMPS		LOAD		CONNECTED		NEC FEEDER LOAD							
PH C: 4,820		4,820		40											

NOTES: EXISTING PANEL SHOWN FOR REFERENCE.

EXISTING SUB PANEL: BB															
SYSTEM: 208/120V, 3PH, 4W		LOCATION: EXTERIOR		CABINET MOUNTING: SURFACE		FEEDER: EXISTING TO REMAIN		MAINS: 225A M.L.O.		LUGS: BOTTOM		OPTIONS:			
CODE	NOTE	LOAD DESCRIPTION	BKR SIZE	BKR POLE	WATTS	CK NO.	PHASE	CK NO.	WATTS	BKR POLE	BKR SIZE	LOAD DESCRIPTION	NOTE	CODE	
		SPACE										SPACE			
L		EXHAUST FAN 1 - TOILETS #18	20	1	472	3	B	4	1,801		3	20	BOOSTER PUMP (50)	G	
K	12,3	COMBI OVEN (648)	30	3	2,150	1	A	8	1,801		3	10	SPARE	G	
K		COMBI OVEN (648)	30	3	2,150	4	B	10							
K	12,3	COMBI OVEN (648)	30	3	2,150	11	C	12							
K		COMBI OVEN (648)	30	3	2,150	18	A	14	4,000		3	100	WATER HEATER	L	
K		COMBI OVEN (648)	30	3	2,150	15	B	16	4,000					L	
K		COMBI OVEN (648)	30	3	2,150	17	C	18	4,000					L	
R		STEAM DRAVERS (647)	50	2	2,204	19	A	20	1,498		2	15	ELECTRIC UNIT HEATER (50)	H	
K		SPARE	20	1	4,264	21	B	22	1,498					H	
G		SPARE	20	1	23	23	C	24			1	20	SPARE		
G		POWER WASHER (800)	30	2	2,104	25	A	26	1		1	20	SPARE		
G		SPARE	20	1	2,104	27	B	28			2	15	SPARE		
K		BEVO 6LYCOL CHILLER COND. (828)	30	2	1,086	31	A	32			2	15	(PREV.)CEMAKER COND. CRUSHED		
K		SPARE	20	1	1,086	33	B	34			2	15	(PREV.)CEMAKER COND. CRUSHED		
G		AIR COMPRESSOR (507)	20	1	120	35	C	36	288		1	20	CO2 VENT FAN	G	
G		TVSS	20	3	0	37	A	38	120		1	20	ROOFTOP RCPT'S	R	
CONNECTED WATTS		DEMAND WATTS / AMPS		LOAD		CONNECTED		NEC FEEDER LOAD							
PH A: 25,413		25,713		215											
PH B: 24,753		25,053		204											
PH C: 16,781		18,334		153											

NOTES: *THIS PANELBOARD AND ALL CIRCUITS ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE. EXISTING CIRCUITS ARE SHOWN FOR REFERENCE BUT HAVE NOT BEEN FIELD-VERIFIED FOR ACCURACY. CONTRACTOR SHALL FIELD-VERIFY AND ADAPT AS REQUIRED. 1. CIRCUIT AFFECTED BY REMODEL, RELABEL CIRCUIT AS SHOWN - HIGHLIGHTED FOR REFERENCE. 2. PROVIDE CIRCUIT BREAKER WITH HANDLE LOCK OFF. 3. MAINTAIN EXISTING EQUIPMENT'S CURRENT-TRANSFORMER FOR ENABLING HOOD FAN UPON DETECTING AMP DRAW.

EXISTING SUB PANEL: B													
SYSTEM: 208/120V, 3PH, 4W		LOCATION: EXTERIOR											

EXISTING SUB PANEL:		CC		SECTION 2		CABINET MOUNTING:		SURFACE							
SYSTEM:	208/120V, 3PH, 4W	LOCATION:	EXTERIOR	MAIN:	225A M.L.O.	TYPE:	LUGS	TYPE:	BOTTOM						
FEEDER:	EXISTING TO REMAIN	AIG. RATING:	65K/OK SERIES RATED	NEMA ENCLOSURE:											
CODE	NOTE	LOAD DESCRIPTION	BKR SIZE	BKR POLE	WATTS	CK NO.	PHASE	CK NO.	WATTS	BKR POLE	BKR SIZE	LOAD DESCRIPTION	NOTE	CODE	
		SPARE	20			1	A	2	752	1	20	CHECKSTAND LIGHTS		L	
K		PASTRY CASE (600)	20	1	408	3	B	4	566	1	20	SALES LIGHTS CENTER		L	
K		END CAP FLOOR COOLER (218)	20	1	434	5	C	6	407	1	20	COOLER LIGHTS		L	
K		BUN WARMER (204)	20	1	316	7	A	8	180	1	20	GENERAL RECEPTACLE JANITOR		R	
K		ROLLER GRILL (205)	20	1	1430	9	B	10	360	1	20	GENERAL RECEPT-TRASH ROOM		R	
K		ROLLER GRILL (205)	20	1	1430	11	C	12	480	1	20	SALES FLOOR COFFEE LIGHTS		L	
R		GENERAL RCPT	20	1	180	13	A	14	648	1	20	SALES FLOOR FOUNTAIN LIGHTS		L	
R		BUN WARMER (204)	20	1	1430	15	B	16	451	1	20	FOUNTAIN COFFEE DIRECTION LIGHTS		L	
K		GENERAL RCPT	20	1	516	17	C	18	330	1	20	R/S, ATM/LOTTO SPOT LIGHTS		L	
K		ROLLER GRILL (205)	20	1	1430	19	A	20	180	1	20	WOMEN'S ROOM LIGHTS		L	
K		GENERAL RCPT	20	1	180	21	B	22	234	1	20	MEN'S ROOM LIGHTS		L	
K		BUN WARMER (204)	20	1	516	23	C	24	1420	1	20	WINDOW SHADES		G	
K		ROLLER GRILL (205)	20	1	1430	25	A	26	152	1	20	2-DOOR FREEZER (410)		K	
K		GENERAL RCPT	20	1	180	27	B	28	152	1	20	2-DOOR FREEZER (410)		K	
K		GENERAL RCPT	20	1	180	29	C	30	180	1	20	GENERAL RCPT CB-1		K	
K		GENERAL RCPT	20	1	180	31	A	32	460	1	20	CHILI-CHEESE (205)		K	
K		BUN WARMER (204)	20	1	516	33	B	34	180	1	20	GENERAL RCPT CB-1		K	
K		GENERAL RCPT	20	1	180	35	C	36	1400	1	20	MICROWAVE 1 (207)		K	
K		GENERAL RCPT	20	1	180	37	A	38	480	1	20	COLD BAR (213)		K	
K		TV55	20	3	0	39	B	40	1800	1	20	MICROWAVE 2 (207)		K	
					0	41	C	42	360	1	20	COFFEE LID BAR GEN RCPT		K	
CONNECTED WATTS		DEMAND WATTS / AMPS		LOAD		CONNECTED		NEG FEEDER LOAD							
PH A 0,123		6,375		53		25451 WATTS		11941 WATTS							
PH B 0,673		6,521		54		11 AMPS		55 AMPS							
PH C 0,663		7,034		54											

EXISTING SUB PANEL:		C		SECTION 1		CABINET MOUNTING:		SURFACE							
SYSTEM:	208/120V, 3PH, 4W	LOCATION:	EXTERIOR	MAIN:	225A M.L.O.	TYPE:	LUGS	TYPE:	TOP, DUAL FEED THRU LUGS						
FEEDER:	EXISTING TO REMAIN	AIG. RATING:	65K/OK SERIES RATED	NEMA ENCLOSURE:											
CODE	NOTE	LOAD DESCRIPTION	BKR SIZE	BKR POLE	WATTS	CK NO.	PHASE	CK NO.	WATTS	BKR POLE	BKR SIZE	LOAD DESCRIPTION	NOTE	CODE	
K		TAKE HOME EVAP 1 & 2	20	1	442	1	A	2	0	3	20	TV55		L	
K		SINGLES COOLER EVAP 1,2,3	20	1	448	3	B	4	0	0	0			L	
K		END CAP FLOOR COOLER (218)	20	1	540	5	C	6	0	0	0			L	
R		RMCR2 - POS-1 (300)	20	1	120	7	A	8	540	1	20	MENU BOARDS		R	
R		RMCR2 - POS-2 (300)	20	1	120	9	B	10	480	1	20	LCD SCREEN (618)	1,3	R	
R		RMCR2 - POS-3 (300)	20	1	120	11	C	12	330	1	20	GENERAL RCPT		R	
R		RMCR2 - SAFE (306)	20	1	1440	13	A	14	180	1	20	PRINTER	1,3	R	
R		RMCR2 - SAFE (307)	20	1	1440	15	B	16	408	1	15	AIR DOOR (520)		G	
R		RMCR2 - LOTTO (305)	20	1	360	17	C	18	180	1	20	LACTATION OUTLET		R	
R		RMCR2 - COUNTERTOP REF (311)	20	1	180	19	A	20	230	1	20	COLD WELL CONDENSATE PUMP		K	
R		RMCR2 - PRINTER (310)	20	1	360	21	B	22	1224	1	20	ICE HERMADISPOSER (405)		K	
R		RMCR2 - CHECKSTAND SPARE	20	1	180	23	C	24	1070	1	20	COLD WELL (220)		K	
R		RMCR2 - CHECKSTAND SPARE	20	1	180	25	A	26	648	1	20	NOVELTY ICE CREAM (406)		K	
K		GLYCOL CHILLER (551)	30	1	2520	27	B	28	180	1	20	GENERAL RECEPT AT (406)		R	
R		ISLAND RECEPTACLES TOP-1	20	1	450	29	C	30	0	2	20	SPARE (PREV. ICE CREAM (606))	1	R	
R		ISLAND RECEPTACLES TOP-2	20	1	450	31	A	32	0	0	0			R	
R		ISLAND RECEPTACLES MID-1	20	1	180	33	B	34	120	1	20	ALTRONIX BOX		R	
R		ISLAND RECEPTACLES MID-2	20	1	180	35	C	36	4,680	2	60	DISHWASHER (611)		K	
R		ISLAND RECEPTACLES MID-3	20	1	180	37	A	38	4,680	1	20			K	
R		ISLAND RECEPTACLES MID-4	20	1	180	39	B	40	360	1	20	REAR PSC GENERAL RCPT		K	
R		ISLAND RECEPTACLES MID-5	20	1	180	41	C	42	480	1	20	4-DRAWER ICF FREEZER (664)	1,2,3,4	K	
R		ISLAND RECEPTACLES MID-6	20	1	180	43	A	44	1,260	1	20	SPARE (PREV. EMERSON CONTROL)	1	R	
R		ISLAND RECEPTACLES MID-7	15	1	468	45	B	46	1,260	1	20	6-STEP MICROWAVE		K	
K		ISLAND REC BOTTOM - GOLD PREP	15	1	436	47	C	48	1,800	1	20	BLENDER-1 (603)	1,3	K	
K		ISLAND REC BOTTOM - GOLD PREP	15	1	436	49	A	50	1,800	1	20	SPARE (PREV. BLENDER-2)	1	K	
K		ISLAND RECEPT BOTTOM	20	1	276	51	B	52	1,800	1	20	NITROGEN GENERATOR (552)		K	
G		TV55 STATUS LIGHT	15	3	0	53	C	54	1,800	1	20	PIZZA HOLDING CABINET (636)		K	
CONNECTED WATTS		DEMAND WATTS / AMPS		LOAD		CONNECTED		NEG FEEDER LOAD							
PH A 10,984		8,444		71		30,611 WATTS		2,915 WATTS							
PH B 13,071		10,571		88		106 AMPS		81 AMPS							
PH C 14,106		10,250		85											

E1		ELECTRICAL PANEL SCHEDULES	
ELECTRICAL SYSTEM	SECTION 16400	ONLY.	CONDUIT (RNG) SCHEDULE 40 PVC OR RIGID STEEL CONDUIT BELOW GRADE. ALL ELECTRICAL CONDUIT 1-1/2" OR SMALLER SHALL BE RIGID METALLIC WHEN RUN THROUGH BUILDING SLAB. CONDUIT SHALL BE SIZED TO COMPLY WITH NEC FOR NUMBER AND SIZE OF CONDUCTORS INSTALLED, MINIMUM 1/2" ABOVE GRADE, 3/4" BELOW GRADE. EMT CONNECTORS AND COUPLINGS 2" AND SMALLER SHALL BE SET-SCREW TYPE. CLAMP CONDUIT TO BOXES WITH BUSHING INSIDE AND LOCKNUT OUTSIDE. UNDERGROUND CONDUIT TO GASOLINE PUMPS & DISPENSERS SHALL COMPLY WITH ARTICLE 514 OF NEC. ALL GASOLINE RELATED CONDUIT MUST TRANSITION TO RIGID STEEL BELOW SLAB AND SHALL BE RIGID STEEL THROUGH CONCRETE SLAB WITH THREADED SEAL-OFFS WHERE EMERGING FROM SLAB IN ACCORDANCE WITH ARTICLES 514 & 501.
THE WORK INCLUDES PROVIDING NEW MATERIALS, FIXTURES, DEVICES AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING ELECTRICAL SYSTEM. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES OR ORDINANCES AND SUBJECT TO INSPECTION.		ALL DISCONNECT SWITCHES SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR (EXCEPT HVAC DISCONNECT SWITCHES ARE FURNISHED WITH EQUIPMENT) SWITCHES SHALL BE SIZED ACCORDING TO EQUIPMENT SPECIFICATIONS. BOXES AND WIREWAYS SHALL BE CODE GAGE STEEL WITH GRAY BAKED ENAMEL FINISH. WIREWAYS SHALL BE OF ANGLE SIZE FOR APPLICATION AND CONTAIN KNOCKOUTS FOR CONDUIT CONNECTIONS AS REQUIRED. FRONTS SHALL BE CODE GAGE STEEL WITH GRAY BAKED ENAMEL FINISH AND SCREWED FASTENERS.	DEVICES SHALL BE MANUFACTURED BY HUBBELL OR EQUAL. ALL DEVICES AND COVER PLATES SHALL BE STAINLESS STEEL. STANDARD DUPLEX RECEPTACLES SHALL BE GROUNDING TYPE, 20A, NEMA WD-2 STANDARD 5-20R, BACK AND SIDE WIRED.
THE INTENT OF THE DRAWINGS IS TO INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. THE DRAWINGS FOR ELECTRICAL WORK ARE DIAGRAMMATIC, SHOWING THE LOCATION, TYPE, DEVICES AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. PROVIDE ALL FIXTURES, DEVICES ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE SYSTEMS FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT FURNISHED BY OTHERS.		GROUNDING SYSTEM: PERMANENTLY AND EFFECTIVELY GROUND ALL METALLIC CONDUIT, SUPPORTS, CABINETS, PANELBOARDS AND SYSTEM NEUTRAL CONDUCTORS. MAINTAIN CONTINUITY OF EQUIPMENT GROUND THROUGHOUT THE SYSTEM. GROUND CLAMPS SHALL BE APPROVED TYPE, SPECIFICALLY DESIGNED FOR GROUNDING, WHERE GROUNDING CONDUCTOR IS ENCLOSED IN CONDUIT. GROUND CLAMP SHALL BE OF A TYPE WHICH GROUNDS BOTH CONDUCTOR AND CONDUIT. ALL CIRCUITS SHALL INCLUDE A GROUND WIRE SIZED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE. USE GROUND WIRE WITH GREEN INSULATION FOR GENERAL EQUIPMENT GROUNDING AND GREEN WIRE WITH YELLOW STRIPE FOR ISOLATED GROUND WIRE. SYSTEM GROUND ROD SHALL BE HORIZONTAL ELECTROLYTIC GROUND ROD AS DETAILED IN THE PLANS WITH A MEASURED RESISTANCE OF NOT MORE THAN 10 OHMS. WHERE THE GROUNDING ELECTRODE CONDUCTOR IS TO BE CONNECTED TO AN UNDERGROUND METAL WATER PIPE, THE CONNECTION SHALL BE MADE BEFORE ANY JOINTS IN THE WATER PIPE.	CONCEAL WIRING SYSTEM ABOVE SUSPENDED CEILING OR IN WALL OR FLOOR CONSTRUCTION WHERE POSSIBLE. INSTALL CONDUIT PARALLEL TO BUILDING LINES, AND TO CLEAR ALL OPENINGS, DEPRESSIONS, PIPES, DUCTS, STRUCTURE, ETC. INSTALL CONDUIT CONTINUOUS BETWEEN BOXES AND CABINETS WITH NO MORE THAN FOUR (4) 90 DEGREE BENDS. SECURELY FASTEN IN PLACE WITH STRAPS, HANGERS AND STEEL SUPPORTS AS REQUIRED. DO NOT SUPPORT CONDUIT FROM SUSPENDED CEILING GRID OR SUSPENSION WIRES. REAM CONDUIT ENDS BEFORE INSTALLATION AND THOROUGHLY CLEAN BEFORE INSTALLATION. OPENINGS SHALL BE PLUGGED OR COVERED TO KEEP CONDUIT CLEAN. TEST SHALLS ON SWITCHES AND OUTLETS SHALL NOT BE USED TO FEED THRU TO THE NEXT SWITCH OR OUTLET. THE DISCONNECT OR REMOVAL OF A RECEPTACLE, FIXTURE, OR OTHER DEVICE FEED FROM A BOX SHALL NOT INTERFERE WITH OR INTERRUPT THE CONDUCTOR CONTINUITY.
COORDINATE WITH THE WORK OF OTHER SECTIONS, VERIFY EXISTING CONDITIONS BEFORE BIDDING, AND MAKE ALL CONNECTIONS TO EQUIPMENT FURNISHED BY OTHERS, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.		CONDUCTORS: INSULATED SOFT ANNEALED 98% PURE COPPER, STRANDED (UNLESS OTHERWISE INDICATED), WITH COLOR CODING, MINIMUM #12 UNLESS OTHERWISE INDICATED. ALUMINUM CONDUCTOR WILL NOT BE ALLOWED. THIN MAY NOT BE USED UNDERGROUND, AT SERVICE ENTRANCE, OUTSIDE, OR IN MET LOCATIONS. ALL INSULATION TO BE RATED FOR 600V AND TYPES AS FOLLOWS:	ADJUSTING AND TESTING: ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED AND TESTED FOR PROPER OPERATION. COMPLETED WIRING SYSTEM SHALL BE FREE FROM SHORT CIRCUITS, TOUCH-UP OR REFINISH DAMAGED SURFACES OF FIXTURES AND EQUIPMENT, EXPOSED TO VIEW. CLEAN ALL FIXTURES, GLASSWARE AND LAMPS, READY FOR USE.
ROOF PENETRATIONS SHALL COMPLY WITH SMACNA AND NRCA STANDARDS, WITH REQUIREMENTS OF THE ROOFING WARRANTY OR GUARANTEE. DO NOT PERFORM ROOFING PENETRATIONS IN A MANNER WHICH WOULD VOID OR OTHERWISE LIMIT THE ROOFING WARRANTY OR GUARANTEE IN FORCE, IF IT EXISTS.		INDOOR: THIN-2 OR THIN	END OF SPECIFICATIONS
PANELBOARDS SHALL BE NEW SQUARE D NQOD OR GE SERIES A TO MATCH EXISTING IN THE STORE, MEETING UL STANDARDS 50 AND 61, WITH UL LABEL.		OUTDOOR: THIN-2	
BREAKERS: THERMAL MAGNETIC TYPE, QUICK-MAKE, QUICK-BREAK, BOLT-IN TYPE OF SINGLE UNIT CONSTRUCTION, TWO AND THREE POLE BREAKERS SHALL BE SINGLE UNIT COMMON TRIP TYPE. BREAKERS USED AS SWITCHES FOR 120V LIGHTING CIRCUITS SHALL BE APPROVED FOR THAT USE AND MARKED "SWD". PROVIDE A PLASTIC COVERED TYPEWRITTEN SCHEDULE IDENTIFYING ALL BRANCH CIRCUITS INSIDE EACH CABINET.		UNDERGROUND: USE-THIN-2, XHHW-2	
DISCONNECT SWITCHES SHALL BE MANUFACTURED BY SQUARE D (NO EXCEPTIONS), TYPE HEAVY DUTY LOCK DOWN		WIRE THROUGH FLUORESCENT FIXTURES OR WITHIN 3" OF HEATING EQUIPMENT: THIN	

A1		ELECTRICAL SPECIFICATIONS	
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EXISTING SUB PANEL:		DD		SECTION 2		CABINET MOUNTING:		SURFACE							
SYSTEM:	208/120V, 3PH, 4W	LOCATION:	EXTERIOR	MAIN:	225A M.L.O.	TYPE:	LUGS	TYPE:	BOTTOM						
FEEDER:	EXISTING TO REMAIN	AIG. RATING:	65K/OK SERIES RATED	NEMA ENCLOSURE:											
CODE	NOTE	LOAD DESCRIPTION	BKR SIZE	BKR POLE	WATTS	CK NO.	PHASE	CK NO.	WATTS	BKR POLE	BKR SIZE	LOAD DESCRIPTION	NOTE	CODE	
K		ICE-MAKER (104, 106) (EXISTING/CLUE)	20	2	1444	1	A	2	2070	2	30	ICE-MAKER (105A, 111A) (CRUSHED)		K	
K		ICE-MAKER (105A, 111A) (CRUSHED)	30	2	2270	3	B	4	468	1	20	FOUNTAIN GENERAL RECEPTACLE		K	
K		BEVO GLYCOL CHILLER (553)	30	2	1748	4	B	10	240	1	20	LOTTO (18)		R	
R		LOTTO TICKET READER (16)	20	1	180	13	A	14	1,664	2	20	MULTI-FLAVOR (126)		K	
R		FCB MACHINE-1 (106)	30	2	2,342	15	B	16	1,664	2	20	MULTI-FLAVOR (126)		K	
K		FCB MACHINE-2 (106)	30	2	2,342	17	C	18	1,664	2	20	MULTI-FLAVOR (126)		K	
K		GTEA (125)	30	2	2,446	23	C	24	180	1	20	COFFEE BAR GEN RCPT #1		K	
K		FOUNTAIN CABINET (127)	20	1	600	21	B	28	2,500	2	30	COFFEE HEAT EXCHANGER #1 (122)		K	
K		FOUNTAIN CABINET (127)	20	1	600	31	A	32	2,500	2	30	COFFEE HEAT EXCHANGER #2 (122)		K	
R		GENERAL RECEPT-FOUNTAIN	20	1	360	33	B	34	2,500	2	30	COFFEE HEAT EXCHANGER #3 (122)		K	
G		TV55	20	3	0	35	C	36	2,500	1	20	COFFEE BAR GEN RCPT #2		R	
					0	37	A	38	180	1	20	COFFEE BAR GEN RCPT #3		R	
					0	41	C	42	180	1	20	COFFEE BAR GEN RCPT #4		R	
CONNECTED WATTS		DEMAND WATTS / AMPS		LOAD		CONNECTED		NEG FEEDER LOAD							
PH A 11,640		12,455		108		57566 WATTS		37136 WATTS							
PH B 11,454		12,118		108		180 AMPS		105 AMPS							
PH C 18,462		12,063		101											

EXISTING SQUARE-D SUB PANEL: D		SECTION 1		SECTION 2		CABINET MOUNTING:		SURFACE	
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