

## **Demolition Note:**

The existing locations shown on the demolition plan to be removed or relocated are for reference only and shall be field verified by contractor prior to beginning work. Any items required to be relocated or removed shall be included in contractor's cost, whether shown on this plan or not. Unless noted otherwise, where a fixture or device is noted to be demolished, the work shall include removing all associated piping, fittings, hangers, insulation etc. and shall include all patch, repair, paint or refinishing necessary to restore the location to match the surroundings. The contractor may reuse any existing piping, fittings, valves etc. where they have been inspected and are determined to be acceptable to the owner and/or are in like-new condition.

## **Renovation Notes:**

- 1. Contractor shall visit site to verify existing conditions.
- 2. See architectural for scope of demolition work. Cap and/or plug all waste/vent lines installed during shell that will not be used for fitup. Confirm all capped piping will be concealed and/or will not conflict with new layout. Ensure that all waste lines being removed are plugged such that no sewer or gases will escape sanitary system.
- 3. Contractor shall camera the existing under slab sewer piping prior to cutting concrete. Engineer shall be contacted if the existing lines are not in the location shown on plans or are not in proper working order.
- 4. All new piping shall be concealed in walls, above ceiling, or below slab where possible. Otherwise, contractor shall run water lines as close to structure as possible and coordinate routing with other trades.
- 5. Any slab cutting for plumbing access requires soil compaction, vapor barrier and embedded #4 rebar dowels no less than 18" on center.
- 6. Contractor shall reconnect any existing fixtures/piping to remain where the existing piping or surrounding area is affected by the new or demolition work by other trades.

#### General Notes:

- 1. Existing building water piping is copper. Contractor shall provide Type L annealed copper piping with 95/5 solder joints.
- 2. Existing building S,W, & V are PVC. Contractor shall provide PVC Schedule 40 DWV (conforming to ASTM D2665) fittings for S,W, & V indicated on plans. Contractor may run 3" waste pipe at 1/8" slope where 2 1/2" or smaller would be
- acceptable for the DFUs but not allow for the proper code required 1/4" sloping and fit in the given space. 4. Contractor shall include all fittings, extensions, etc necessary to connect all plumbing equipment (including equipment furnished by others).

#### Plan Notes:

- 1. Extend and connect to existing waste as indicated.
- 2. Extend and connect to existing vent as indicated.
- 3. Provide new master tempering valve, Watts # LFN170 up high on wall. Provide check valve on the 140°F hot water and the cold water incoming supplies. Hot water exiting mixing valve to be set at 120°F.

(All notes not used on all sheets)

- 4. Provide Trap Primer for floor drain, hub drain, and/or floor sink. Provide distribution box as necessary.
- 5. Route CW & HW down wall and below slab to half height wall at bar.
- 6. Route Type 'K' soft copper below slab.
- 7. Provide 2 new gas instantaneous hot water heaters. Plumbing Contractor shall provide piping, offsets, and fittings required for the installation; and a complete and working system. Water heater and all piping must be installed to meet ADA clearance requirements. See riser diagram and "Gas Tankless Water Heater Detail" for additional information.
- 8. New Trapzilla TZ-600, rated for 75 GPM, with a grease retention of 635 pounds. See interceptor details for more information. Provide extension collar if necessary for invert. Foot traffic rated.
- Provide new gas tank type water heater on stand, with safety pan, and expansion tank. Mounted on stand such that drain pan is above edge of mop sink. Safety pan shall discharge into mop sink, indirect. See riser diagram and "Gas Tank Type Water Heater Detail" for additional information.
- 10. Install Hyfab eMVPjr-1LX21 booster pump on platform above mop sink to increase water pressure to 70 psi. Coordinate exact location and mounting with general contractor and other trades. Install pump per manufacturer's installation instructions
- and clearances. 11. Route new 1" water line up within wall and continue through ceiling space to booster
- pump above mop sink. 12. Continue new 1" water line across site to existing water meter and connect 1" line to existing 3/4" water meter.





See architectural sheets for more information on ratings and additional rated constructions including structure where applicable. Protect all rated constructions as required.

Existing Wall to Remain	
New Wall being Constructed	
One Hour Fire Barrier	
Existing Wall being Demolished	

These drawings will be at the scale indicated when plotted at 24" x 36"



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## # Plan Notes: (All notes not used on all sheets)

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- New Trapzilla TZ-600, rated for 75 GPM, with a grease retention of 635 pounds. See interceptor details for more information. Provide extension collar if necessary for invert. Foot traffic rated.
- 9. Provide new gas tank type water heater on stand, with safety pan, and expansion tank. Mounted on stand such that drain pan is above edge of mop sink. Safety pan shall discharge into mop sink, indirect. See riser diagram and "Gas Tank Type Water Heater Detail" for additional information.
- Install Hyfab eMVPjr-1LX21 booster pump on platform above mop sink to increase water pressure to 70 psi. Coordinate exact location and mounting with general contractor and other trades. Install pump per manufacturer's installation instructions and clearances.
- 11. Route new 1" water line up within wall and continue through ceiling space to booster pump above mop sink.
- 12. Continue new 1" water line across site to existing water meter and connect 1" line to existing 3/4" water meter.



# Wall Ratings and Types Legend

See architectural sheets for more information on ratings and additional rated constructions including structure where applicable. Protect all rated constructions as required.

Existing Wall to Remain	
New Wall being Constructed	
One Hour Fire Barrier	
Existing Wall being Demolished	

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Tag	
WC	
L1	
wco	
FCO	
FDB	
FDI	
FS	
TP	
SA	
VB	

2-3 Compartment Sink



Plumbing Fixtures, Equipment, & Accessories					
			Water Lir	e & Conned	ction Siz
Description		Fixture Specification	CW	HW	W
Water Closet, Tank Type, Floor Mounted ADA		<u>Toilet:</u> Toto Eco Drake CST744EL, 1.28 GPF, Colonial White, Vitreous china, chrome side trip lever, 12" rough-in. 16 1/2" tall without seat. <u>Seat:</u> Bemis #7850TDG, heavy duty, antimicrobial elongated seat with open front. <u>Valve:</u> McGuire #LFB02. Provide flexible 3/8" supply line between angle stop and fixture.	1/2"	-	4'
Lavatory Wall Hung ADA		Lavatory Basin: Toto #LT307, Vitreous china, top of rim at 34" AFF for ADA <u>Faucet</u> : Delta #15769LF-SP, single hole faucet, 1.2 GPM flow rate. <u>Trap &amp; Suppliers</u> : McGuire #8902, 17 gauge 1 1/4" x 1 1/2" P-trap and nipple. McGuire #LFB02 angle supply stops. Mount P-trap such that ADA clearance requirements are maintained. <u>Accessories</u> : Truebro 82192 Lav Guard 2 molded insulation # 101-EZ, 3 piece interlocking trap assembly and 2 piece interlocking hot water angle valve assembly, with nylon type fasteners.	1/2"	1/2"	2"
Wall Clean Out		Zurn #Z1446 wall cleanout tee, dura-coated cast iron body, gas and watertight ABS tapered thread plug, and round, smooth stanless steel wall access cover with securing screw.	-	-	see pla
Floor Clean Out		Zurn Z1400 'Leveltrol' adjustable floor clean out, cast iron with gas and watertight ABS tapered thread plug, and round, polished nickel bronze top that is adjustable to final finished grade.	-	-	see pla
Floor Drain		Zurn #Z415B floor drain. Dura-Coated cast iron body with bottom outlet, combination invertible membrane clamp and adjustable collar with seepage slots and type "B" polished nickel bronze, light duty heel proof strainer. Connect to trap primer as required.	-	-	see pla
Floor Drain		Zurn #Z415I floor drain. Dura-Coated cast iron body with bottom outlet, combination invertible membrane clamp and adjustable collar with seepage slots and type "I" polished nickel bronze, light duty heel proof strainer. Connect to trap primer as required.	-	-	see pla
Floor Sink		Plastic Oddities PFS400H 14"x14" PVC floor sink with 4" outlet. Provide half plastic grate as well as secondary strainer	-	-	4"
Trap Primer		Watts #200 Flow through trap primer	1/2"	-	-
Shock Absorber		Watts series #15M2 water hammer arrestor, sized to match associated line. Shock absorber shall meet all requirements ASSE 1010, ANSI A1 12.261M as well as the 2018 NCSBC and the 2018 NCSPC, section 604.9	see plans	see plans	-
Vacuum Breaker		Watts #SD-3 vacuum breaker, sized to match associated line. Vacuum breaker shall meet all requirements ASSE 1022, as well as the 2018 NCSBC and the 2018 NCSPC, section 608.16.1.	-	-	-
The	intention of the depicted imag	es above are to show the general appearance of the fixtures being specified. Exact representation is not necessarily			

shown nor are accessories for models or some variation of the model. The fixture specification should take precedent over the photo.

Tag	Description
$\langle 1 \rangle$	Hand Sink
8	Mop Sink
14	Ice Maker
(15)	Prep Slnk
18	3 Compartment Sink
(19)	Prep Slnk
23	Dishwasher
24	Pre Rinse
37	Hand Sink
39	Coffee Maker
40	Soda Dispenser
43	Ice Bin
42	Beer Dispenser
44	Glass Washer
46	Ice Maker

- 1/2" Min. Cold water supply (Avoid direct connections to prevent foreign material from entering primer valve) FLOW Watts #200 flow through primer valve with integral vaccum breaker —— Vacuum breaker Distribution unit(4-way max.) — Union connection - 1/2" Trap primer lines to drains, typical. Trap Primer Detail <sup>/</sup>Scale: None Interior — Tapered thread wall bronze plug Cleanout – Round stainless steel wall access cover 12" MIN. Finished floor Δ. Δ.  $\nabla$ V. 4 Long sweep 1/4 bend or combination Y

olean	outo	145 01	pipes	



Wall Cleanout with Sweep Bend or Combinationy Detail Scale: None

Plumbing Legend and Abbreviations			
GW	Grease Waste Piping 'GW'		
	Sanitary Sewer Piping 'W'		
	Existing Sanitary Sewer Piping 'EX W'		
	Vent Piping 'V'		
	Existing Vent Piping 'EX V'		
	Cold Water Piping 'CW'		
	Existing Cold Water Piping 'EX CW'		
	Hot Water Piping 'HW'		
140	Hot Water Piping 140°F 'HW'		
	Existing Hot Water Piping 'EX HW'		
	Hot Water Return Piping 'HWR'		
	Existing Hot Water Return Piping 'EX HWR'		
SD	Roof Drain / Storm Piping		
——— A ———	Compressed Air Piping		
RO	RO water piping		
CO2	CO2 piping (by others)		
	Check Valve		
ā	Ball Valve		
⊀	Pressure Reducing Valve 'PRV'		
——————————	Gate Valve 'GV'		
O	Tee Turns Up		
<del></del>	Tee from Below		
0	Ell Turns Up		
C	Ell Turns Down		
E	Capped Line		
•	Connect to Existing		
ETR	Existing to Remain		
EWH	Electric Water Heater		
GWH	Gas Water Heater		
IWH	Instantaneous Water Heater		
RP	Recirculation Pump		
VTR	Vent Through Roof		
AAV	Air Admittance Valve		
RD	Primary Roof Drain		
SRD	Secondary Roof Drain		

Kitchen Equipment, Fixtures, & Accessories						
Equipment/Fixture	Furnished By:	Water	Line & Connec	tion Size		
1/2" cold water and 1/2" hot water located at 16" AFF. 1 1/2" direct drain, Mount rim per ADA	Tenant/Owner	1/2"	1/2"	1 1/2"		
1/2" cold water and 1/2" hot water located at 36" AFF. 3" direct drain	Tenant/Owner	1/2"	1/2"	3"		
1/2" cold water located at 16" AFF. 1 1/2" drain to floor sink (indirect connection)	Tenant/Owner	1/2"	-	1 1/2"		
1/2" cold water and 1/2" hot water located at 16" AFF. 1 1/2" indirect drain to floor sink, Mount rim per ADA	Tenant/Owner	1/2"	1/2"	1 1/2"		
1/2" cold water and 1/2" hot water located at 16" AFF. 1 1/2" drain to floor sink (indirect connection), Mount rim per ADA	Tenant/Owner	1/2"	1/2"	1 1/2"		
1/2" cold water and 1/2" hot water located at 16" AFF. 1 1/2" indirect drain to floor sink, Mount rim per ADA	Tenant/Owner	1/2"	1/2"	1 1/2"		
<ul><li>1/2" hot water located at 16" AFF. , deployed in water box, see plumbing schedule.</li><li>2" drain or hose from unit to floor sink (indirect connection)</li></ul>	Tenant/Owner	-	1/2"	2"		
1/2" cold water and 1/2" hot water located at 16" AFF. 1 1/2" drain to floor sink (indirect connection), Mount rim per ADA	Tenant/Owner	1/2"	1/2"	1 1/2"		
1/2" cold water and 1/2" hot water located at 16" AFF. 1 1/2" direct drain, Mount rim per ADA	Tenant/Owner	1/2"	1/2"	1 1/2"		
1/2" cold water located at 16" AFF.	Tenant/Owner	1/2"	-	-		
1/2" cold water located at 16" AFF.	Tenant/Owner	1/2"	-	-		
1 1/2" drain to floor sink (indirect connection)	Tenant/Owner	-	-	1 1/2"		
1 1/2" drain to floor sink (indirect connection)	Tenant/Owner	-	-	1 1/2"		
1/2" cold water and 1/2" hot water located at 16" AFF. 1" drain to floor sink (indirect connection)	Tenant/Owner	<u>-</u>	1/2"	1"		
1/2" cold water located at 16" AFF. 1 1/2" drain to floor sink (indirect connection)	Tenant/Owner	1/2"	-	1 1/2"		

Coordinate exact requirements and locations with equipment vendor/supplier and owner.

## Plumbing Specifications:

- 1. These plans are diagrammatic only. Contractor shall provide all necessary offsets, elbows, tees, etc for a complete working system.
- 2. Contractor shall obtain and pay all fees related to permitting, inspections, taps, etc.
- Coordinate with GC to confirm none of these costs are covered by them. 3. All work shall be coordinated with all other trades prior to installation. Contractor shall
- coordinate routing of all piping with existing and new conditions and shall provide any necessary rerouting, offsets, etc. required for a completely coordinated and working system 4. The plumbing system shall be installed in accordance with 2018 NC plumbing code and
- local AHJ requirements. 5. New portion of the domestic water system shall be purged of damaging matter and disinfected in accordance with 2018 NC Plumbing code. Remove dirt and debris as work
- progresses. Submit third-party witness reports of purging and disinfecting activities. 6. All plumbing systems shall be tested as required per 2018 NC Plumbing Code.
- 7. All piping systems shall be strapped and supported as required by 2018 NC Plumbing Code & the manufacturer's recommendations.
- 8. Plumbing contractor shall provide cleanouts in compliance with IPC section 708, as well as the following locations: - as indicated on plans
- at the base of the waste stack - at every two 90° turns or every four 45° turns
- on all horizontal waste line, no further than 100 feet apart
- 9. Plumbing fixtures with automatic or quick-closing valves and kitchen equipment shall have a shock arrestors, piston type water hammer arrestor, sized according to manufacturer's recommendations & PDI standards.
- 10. All overhead domestic water piping (above slab) shall be type "L" copper with 95/5 lead free solder. All below grade water piping shall be type "K" soft copper. Each complying with ASTM B-88. All piping shall have manufacturers name and the applicable standard to which it was made clearly labeled on each length. Contractor shall use brazed joints on all piping 1 1/2" and larger.
- 11. Water piping shall be insulated with closed cell (Armacell) type insulation with a smoke density rating not exceeding 50 and a flame density rating not exceeding 25. Thickness for cold water piping insulation shall be 1/2" thick, thickness for hot water & return piping insulation shall be 1" thick.
- 12. Branch lines and base of risers shall have, shut-off valves. All domestic water ball valves shall be a brass body, full port, with a chrome plated ball, Teflon seals, 600 WOG, for sizes 1/2" thru 3". Sizes above 3" shall be a bronze gate valve, NRS, solid disc, cutoff valve, screw-over bonnet, 400 WOG. Provide valve handle extensions if necessary due to insulation.
- Storm, waste & vent piping, underground, shall be PVC Schedule 40 DWV with piping and fittings conforming to ASTM D-2665.
- 14. The backflow prevention device shall be installed as required per local AHJ. Purge water piping before setting backflow preventer.
- 15. Sanitary sewer piping shown is below slab or within walls unless otherwise noted. Sanitary vent piping shown is within wall and above ceiling unless otherwise noted. 16. Domestic water piping shown on drawing is above ceiling or within walls unless otherwise
- 17. The plumbing contractor shall coordinate all underslab plumbing piping with all structural foundations and footings and all underslab plumbing piping elevation inverts with site utility.
- 18. All piping penetrations thru new or existing walls and/or floors shall be sealed to equal the rating of the new or existing wall or floor.
- 19. All vent thru the roof penetrations shall be coordinated with the general contractor. Plumbing contractor shall provide all flashing material required for vent thru roof. Vents thru the roof shall be located a minimum of 10'-0" away from all fresh air intakes.
- 20. Contractor shall coordinate any plumbing work requiring shutdown with the owner 72 hours in advance. If other users will be affected, coordinate with owner/building management at the beginning of the project to find a workable solution.
- 21. Plumbing contractor shall provide shop drawings to the engineer for review and approval prior to beginning work.

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document has been unlocked for the case of use of the AHJ, contractor, etc. and was originally accompanied with the actual certified document meeting the boards rule for electronic signatures	
A Tenant Alteration for A Tenant Alteration for A Tenant Alteration for BARADANS STEAKHOUSE :# BOHNS STEAKHOUSE :# DATE: 07/28/23 BOH: NC Angier, NC	
PLUMBING DETAILS SHEET NUMBER	
P2.1	

Provide Navien Plumb Easy valve set #30009323A, typical for all.

Two Rinnai Sensei gas water heaters, models #CU199e and CUR199e for outdoor wall mounting. Provide with the following: internal recirculation pump for one unit, overheat prevention, and pressure relief valve. Units shall be capable of providing 18 GPM @ 80°F rise with default temperature setting of 140°F. Each heater has a minimum gas input of 15 MBH and a maximum of 199 MBH. Coordinate all requirements with and install per manufacturer's instructions.





Mop Sink Break Sink Dishwasher (R Bath Tub Shower Floor Drain 

Plumbing Line Sizing Table								
Occupancy Quantity Drainage Fixture Units Water Supply Fixture Units								
Each Total CW HW CW & HW Total								
Tank Type)	Public	2	4	8	2	-	2	
	Private	7	1	7	0.5	0.5	0.7	
	Public	1	2	2	2.25	2.25	3	
	Private	3	2	6	1.5	1.5	2	
Residential Style)	Private	2	2	4		1.4	1.4	
	Private	0	2	0	1	1	1.4	
	Public	0	2	0	3	3	4	
		3	2	6	-	-	-	

Total DFUs	33			
Total WFSUs	20.7			
GPM				
Total GPM	19.9	from table	e E103.3(3)	
·				

Minumum Building Drain Size	4"			
Minimum Water Line Size	1"			
* buidling drain and water meter are existing				

These drawings will be at the scale indicated when plotted at 24" x 36"

PLUMBING DETAILS

SHEET NUMBER

P2.2

Sink Compartments (	Length x Width x H
Sink #1:	
3 Compartment 18" x 24 Sink #2:	4" x 18"
1 Compartment 24" x 24 Sink #3:	4" x 14"
1 Compartment 24" x 24	4" x 14"
Flowrate	
Type of Fixture	# (
Sink Compartments	
Floor Drains/Floor Sinks	
Mop Sink	
Hand Sink	
Pre-Rinse Sink	
Dishwasher	
Required Flowrate	
Grease Output	
Grease Output Field	
Grease Output Field Restaurant Type	Bar Grill
Grease Output Field Restaurant Type Plates	Bar Grill Silverware
Grease Output Field Restaurant Type Plates Customers per Day	Bar Grill Silverware 120 to 200 per Da
Grease Output Field Restaurant Type Plates Customers per Day Capacity	Bar Grill Silverware 120 to 200 per Da
Grease Output Field Restaurant Type Plates Customers per Day Capacity Other Requirements	Bar Grill Silverware 120 to 200 per Da
Grease Output Field Restaurant Type Plates Customers per Day Capacity Other Requirements Requirement	Bar Grill Silverware 120 to 200 per Da
Grease Output Field Restaurant Type Plates Customers per Day Capacity Other Requirements Requirement Model Position	Bar Grill Silverware 120 to 200 per Da







louse nt)	
Fixtures	GPM
3	64.05
0	0
1	3.75
0	0
1	3.75
1	2
	73.55
Field	
Fryer	No
Pump Outs	30 Days
	33.6 lb
Requirement	
Pipe Size	4"
Drain Time	2 Minute(s)



Gas control valve, on/off switch, and

Support Water heater and safety pan with prefab stand rated for this size heater or kendorf racking stand size appropriately to support this size heater. Basis of design is Holdrite Quick Stand #40-S-24-A.







4 Grease Trap Section Details Scale: NTS













FD/FS