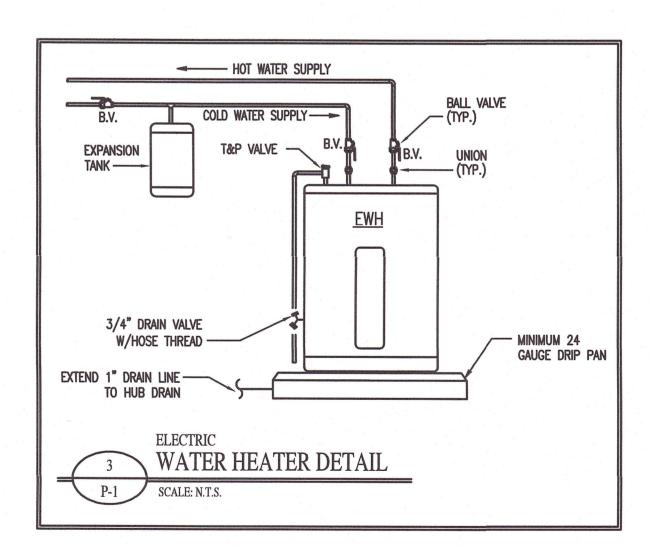
## PLUMBING NOTES:

- 1. PLUMBING TO BE INSTALLED IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
- 2. PLUMBING CONTRACTOR TO COORDINATE ALL WORK WITH OTHER TRADES.
- 3. ALL WASTE AND VENT PIPING TO BE SCHEDULE 40 P.V.C.
- 4. WATER LINES TO BE COPPER TYPE K (SOFT DRAWN) BELOW SLAB, AND TYPE L HARD COPPER ABOVE SLAB. CROSSLINKED POLYETHYLENE OR CPVC MAY BE USED WHERE CONCEALED.
- 5. ALL P.V.C. UNDER SLAB SHALL BE A MINIMUM OF 2" NPS.
- 6. COPPER PIPING TO BE INSULATED WHERE IT PASSES THROUGH CONCRETE.
- 7. CONTRACTOR TO VERIFY NEED FOR BACKFLOW PREVENTER ASSEMBLY (BFPA) WITH LOCAL AUTHORITIES. IF REQUIRED BFPA TO BE DOUBLE CHECK TYPE. IF BUILDING BFPA IS INSTALLED, INSTALL EXPANSION TANK OR THERMAL EXPANSION VALVE UPSTREAM OF WATER HEATER. BFPA TO BE MOUNTED 12"—72" A.F.F. AND 6" OF CLEARANCE ON EACH END AND MEET MANUFACTURERS RECOMMENDED ACCESS REQUIREMENTS.
- 8. PLUMBING CONTRACTOR SHALL (OR HAVE LOCAL MUNICIPALITY) PERFORM A WATER PRESSURE TEST. IF RESIDUAL WATER PRESSURE IS MORE THAN 60 PSI OR LESS THAN 40 PSI, CONTACT ENGINEER TO ASSESS NEED FOR A PRESSURE REDUCING VALVE (PRV) OR A PRESSURE BOOSTER SYSTEM.
- 9. INSULATE HOT AND COLD WATER LINES IN ACCORDANCE WITH NC PLUMBING AND ENERGY CODES. INSULATE COLD WATER LINES WHERE SWEATING WOULD RESULT IN STRUCTURAL DAMAGE TO BUILDING DUE TO ROTTING OF WOOD OR STAINING OF CEILING TILES.
- 10. TRAP PRIMERS SHALL BE INSTALLED ON HUB DRAINS UNLESS OTHERWISE INDICATED.
- 11. LAVATORIES ARE TO BE EQUIPPED WITH CLEAN-OUT TEES BELOW.
- 12. ALL FIXTURES ARE TO BE EQUIPPED WITH SHUT-OFF VALVES ON SUPPLY LINES.
- 13. ANY FIRE RATED ASSEMBLY PENETRATIONS ARE TO BE PER CODE. CONTRACTOR SHOULD REVIEW ALL FIRE RATING PENETRATIONS.
- 14. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL PIPING AND EQUIPMENT WITH ALL OTHER TRADES PRIOR TO BEGINNING INSTALLATION TO AVOID CONFLICTS AND INTERFERENCE WITH OTHER TRADES.
- 15. FINAL UTILITY CONNECTIONS (ELECTRIC, WATER ETC.) TO EQUIPMENT SHALL BE MADE BY THE CONTRACTOR INSTALLING THE EQUIPMENT REQUIRING THE UTILITIES.
- 16. PLANS AND ISOMETRICS ARE DIAGRAMMATIC. THERE IS NO INTENT TO INDICATE ALL FITTINGS REQUIRED.
  GENERALLY, PIPING SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO AND PLUMB WITH WALL CONSTRUCTION.
- 17. SOIL AND WASTE PIPING SHALL BE LAID ON MINIMUM 1/4" PER FT. SLOPE FOR PIPE SIZES LESS THAN 3", AND MINIMUM 1/8" PER FT. FOR PIPE 3" AND LARGER UNLESS OTHERWISE NOTED.
- 18. UNLESS OTHERWISE NOTED, PLUMBING CONTRACT SHALL TERMINATE AT A POINT FIVE (5) FEET OUTSIDE THE BUILDING. FOR WORK BY OTHER CONTRACTORS OUTSIDE THE 5 FOOT TERMINATION, REFER TO SITE UTILITY
- 19. VALVES AND DEVICES INSIDE CHASES OR WALLS OR ABOVE NON-ACCESIBLE CEILINGS SHALL BE PROVIDED WITH APPROPRIATELY SIZED ACCESS PANEL COMPATIBLE WITH SURROUNDING FINISHES. SUCH ACCESS PANELS SHALL BE
- FURNISHED BY THE PLUMBING CONTRACTOR FOR INSTALLATION BY THE GENERAL CONTRACTOR.

  20. PLUMBING VENT PIPING PENETRATING ROOF SHALL BE INSTALLED BY THE PLUMBING CONTRACTOR. CUTTING OF HOLES AND FLASHING OF PENETRATIONS SHALL BE BY THE GENERAL CONTRACTOR.
- 21. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS OF WALLS AND PARTITIONS AND FOR PARTITION THICKNESS AND CONSTRUCTION MATERIALS.
- 22. IF THE CONTRACTOR ELECTS TO USE FIRE PENETRATION PRODUCTS DIFFERENT THAN WHAT IS SHOWN ON THE DRAWINGS, IT IS THEIR RESPONSIBILITY TO VERIFY IT MEETS UL STANDARDS FOR THE ASSEMBLY AND FIRE RATING VALUE IT IS BEING APPLIED TO.
- 23. WATER HAMMER ARRESTORS SHALL BE INSTALLED ON COLD WATER LINES SERVING ICE MAKERS, DISHWASHERS, AND CLOTHES WASHING MACHINES. THE WATER HAMMER ARRESTOR SHALL BE ACCESSIBLE FOR MAINTENANCE AND REPLACEMENT.



WATER HEATER SCHEDULE								
MARK	TANK VOLUME	RECOVERY	TEMPERATURE RISE	ELEMENT SIZE	POWER	MANUFACTURER	MODEL	
EWH-1	38 GAL.	21 GPH	90°	4.5 KW	208V/1	RHEEM	XE38S06ST45U1	
EWH-2	38 GAL.	21 GPH	90°	4.5 KW	208V/1	RHEEM	XE38S06ST45U1	

PLUMBING FIXTURE SCHEDULE									
ITEM NO.	O. FIXTURE DESCRIPTION *MANUFACTURER		*MODEL NO.	CONNECTION SIZES				*DEMARKS	
IILW NO.	TIXTONE DESCRIPTION	MANOTACTORER	MODEL NO.	C.W.	H.W.	WASTE	VENT	*REMARKS	
<u>WC-1</u>	WATER CLOSET - TANK TYPE	PROFLO	PF5112WHM	1/2"		3"	2"	FLOOR MTD. 1.6 GAL/FLUSH, STANDARD HEIGHT	
<u>TB-1</u>	TUB AND SHOWER COMBO	AQUATIC BATH	6036STTM	1/2"	1/2"	1-1/2"	1-1/2"	BY OTHERS	
<u>LV-1</u>	COUNTER MOUNT LAVATORY	SELECT SOURCE	1611	1/2"	1/2"	1-1/2"	1-1/2"	SINGLE LEVER FAUCET, TRUEBRO PIPING COVERS (WHERE PIPING IS EXPOSED)	
<u>SK-1</u>	SINGLE COMP. KITCHEN SINK	AMERISINK	AS1126	1/2"	1/2"	1-1/2"	1-1/2"	SINGLE LEVER FAUCET, TRUEBRO PIPING COVERS (WHERE PIPING IS EXPOSED)	
<u>HD-1</u>	HUB DRAIN	CHARLOTTE PLASTICS	4" x 2"			2"	-	EQUIPPED WITH TRAP PRIMER	
<u>WB-1</u>	WASHER BOX	OATEY	38105	1/2"	1/2"	2"	1-1/2"	2 CHROME 1/4 TURN ADAPTER BALL VALVES, WITH HAMMER ARRESTOR	
<u>IB-1</u>	ICE MAKER BOX	OATEY	39127	1/2"				CHROME 1/4 TURN ADAPTER BALL VALVES, WITH HAMMER ARRESTOR	
<u>DW</u>	DISHWASHER	_			1/2"	1"		COORDINATE MAKE/MODEL WITH OWNER	

<sup>\*</sup> FIXTURE MODEL NUMBERS LISTED ARE FOR DESCRIPTION ONLY, COORDINATE SPECIFICATIONS WITH OWNER.

		W	ater Fixtu	ire Unit Calcu	lation (Unit	(A)				11
	Bathroom Group	Extra Lavatory	Kitchen Sink	Dishwasher	Clothes Washer	Ice Maker	Total/Apt. Unit	# of Apt Unit Types	Other FU	Tota FU
Fixture Unit Value>	2.7	0.7	1.4	1.4	1.4	1.0				1
Unit Type			Fixtur	e Quantity			N 1	1	(Total Apts)	
AorB	1		1	1	1	1	7.9	1		7.9
Hose Bibb (1 FU x 1)									0	0
Total Fixture Units					8 - 10 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				12	7.9

Note 1 - Total GPM = 8.0 (NCPC Table E103.3(3). 3/4" water line adequate for 8.0 GPM (NCPC Figure E103.3(5))

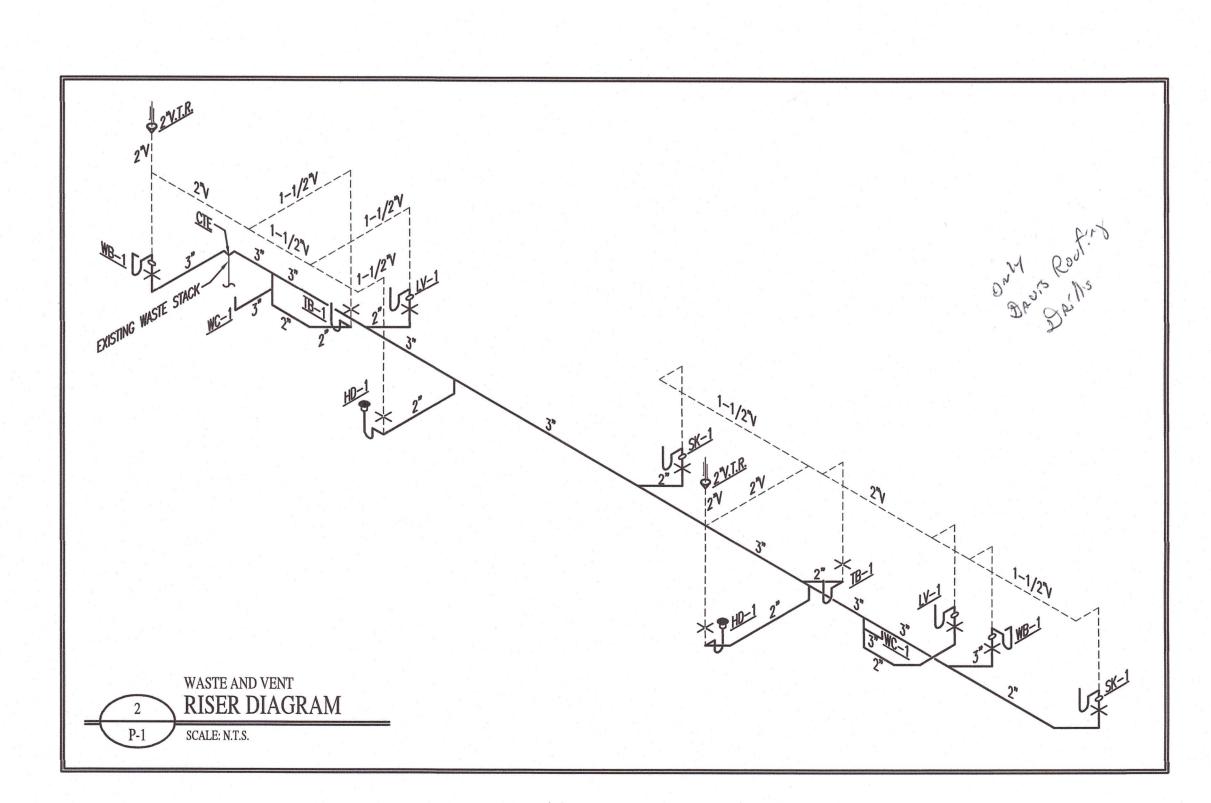
	2 10 1 20	W	ater Fixt	ure Unit Calcu	lation (Unit	t B)				
	Bathroom Group	Extra Lavatory	Kitchen Sink	Dishwasher	Clothes Washer	Ice Maker	Total/Apt. Unit	# of Apt Unit Types	Other FU	Tota FU
Fixture Unit Value>	2.7	0.7	1.4	1.4	1.4	1.0				
Unit Type		4	Fixtur	e Quantity			1	(Total Apts)		
AorB	1		1	1	1	1	7.9	1		7.9
Hose Bibb (1 FU x 1)	A . A .								0	0
Total Fixture Units							2.5	1 0		7.9

Note 1 - Total GPM = 8.0 (NCPC Table E103.3(3). 3/4" water line adequate for 8 GPM (NCPC Figure E103.3(5))

			Waste	Fixture Unit C	alculation			e Processor de Consciuya de veló ficiales e que la encomo casada en		
	Bathroom	Extra	Kitchen Dishwasher	Dishwashar Clothes	Clothes	es Hub	Total/Apt.	# of Apt	Other FU	Total
	Group	Lavatory	Sink	Distiwasilei	Washer	Drain	Unit	Unit Types	otherro	FU
Fixture Unit Value>	5.0	1.0	2.0	2.0	2.0	2.0	1 N			
Unit Type		Fixture Quantity						2	(Total Apts)	
A/B	1		1	1	1	1	13	2		26
Sprinkler Room Floor Drain (4")		12.0							0	0
Total FU (Note 2)						1			1 41	26

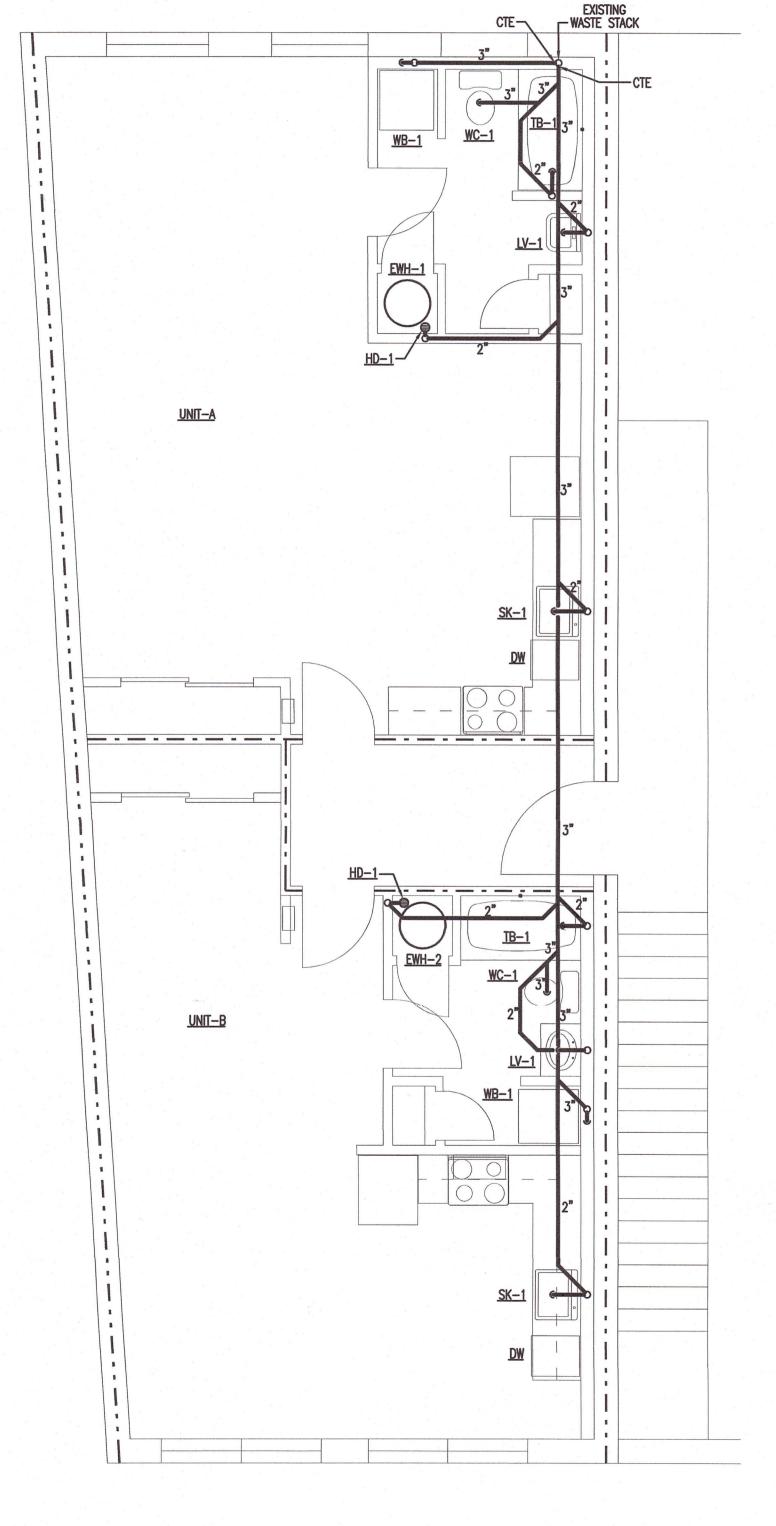
Note 1 - Semicontinuous flow less than 1 gpm (NCPC 709.3)

Note 2 - 3" waste line sloped at 1/8" per foot is adequated for 36 fixture Units (NCPC Table 710.1(1))



WALL	LEGEND
SYMBOL	DESCRIPTION
	1-HOUR RATED FIRE WALL
MANAGEMENT AND THE PROPERTY AND THE PROPERTY AND	2-HOUR RATED FIRE WALL

PIPING	LEGEND
SYMBOL	DESCRIPTION
	SEWER PIPING
	VENT PIPING





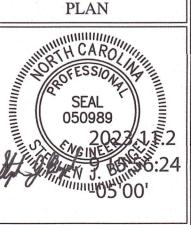
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BENFIELD APARTMENTS
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Gibsonville, NC 27249

DRAWING NAME
PLUMBING



DRAWN
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SCALE
AS NOTED
JOB NO.
23052

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