PLUMBING LOAD SUMMARY

WASTE CONNECTED LOAD		QTY	DFU	TOTAL
NOT USED		0	2	0
TRENCH DRAIN		8	6	48
DRINKING FOUNTAIN		2	0.5	1
FLOOR DRAINS		9	2	18
SINKS		4	2	8
LAVATORY	PUBLIC	2	1	2
	PRIVATE	0	1	0
MOP BASINS		1	2	2
NOT USED	PRIVATE	0	5	0
NOT USED	PRIVATE	0	2	0
SHOWER	PUBLIC	1	2	2
	PRIVATE	0	2	0
NOT USED		0	2	0
URINALS (1.0 GPF)		2	2	4
WATER CLOSET TANK		2	4	8
NOT USED	PUBLIC	0	4	0
	PRIVATE	0	3	0
TOTAL DRAINAGE FIXTURE UNITS CONNECTED				93

SUPPLY CONNECTED LOAD		QTY	COLD	HOT	COMB	TOTAL
NOT USED		0	0	5	5	0
NOT USED		0	1	1	1.4	0
DRINKING FOUNTAIN		2	0.25	0	0.25	0.5
SINKS		4	3	3	4	16
LAVATORY	PUBLIC	2	1.5	1.5	2	4
	PRIVATE	0	0.5	0.5	0.7	0
MOP BASINS		1	2.25	2.25	3	3
NOT USED	PRIVATE	0	2.7	1.5	3.6	0
NOT USED	PRIVATE	0	1	1	1.4	0
SHOWER	PUBLIC	1	3	3	4	4
	PRIVATE	0	1	1	1.4	0
NOT USED		0	1	1	1.4	0
URINALS (1.0 GPF)	3/4" FV	2	5	0	5	10
WATER CLOSET TANK		2	5	0	5	10
NOT USED	PUBLIC	0	10	0	10	0
	PRIVATE	0	6	0	6	0
TOTAL SUPPLY FIXTURE UNITS CONNECTED						47.5
TOTAL PEAK DEMAND IN GPM						28.4

NOTES:

FIXTURE DEMAND UNITS BASED ON NORTH CAROLINA PLUMBING CODE.

SEMI-CIRCULAR SINK AND KITCHEN SINK = 2 EACH.

MATERIAL SCHEDULE

PIPING	DESCRIPTION
DOMESTIC WATER PIPE	ABOVEGROUND: PIPE: TYPE L HARD DRAWN TEMPER, CONFORMING TO ASTM B88 FITTINGS: WROUGHT COPPER SOLDER JOINT SEAMLESS, CONFORMING TO ASTM B75 AND ASME B16.22 SOLDER: 95-5 (95% TIN AND 5% ANTIMONY) CONFORMING TO ASTM B 32, ALLOY GRADE SB5 OR SILVER SOLDER CONFORMING TO AMS 4773C. NO LEAD OR CORED SOLDER.
WASTE AND VENT PIPE	UNDERGROUND: PIPE: RIGID SCH-40 PVC CONFORMING TO ASTM D1785 AND ASTM D2665. FITTINGS: SCH-40 DWV FITTINGS CONFORMING TO ASTM D2665. * UNDERGROUND PIPE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION RECOMMENDATIONS. ABOVEGROUND: SERVICE CLASS HUBLESS CAST IRON PIPE AND FITTINGS CONFORMING TO CISPI 301 W/ HEAVY DUTY S.S. COUPLINGS CONFORMING TO ASTM C1540
OIL WASTE AND VENT PIPE	UNDERGROUND: PIPE: RIGID SCH-40 PVC CONFORMING TO ASTM D1785 AND ASTM D2665. FITTINGS: SCH-40 DWV FITTINGS CONFORMING TO ASTM D2665. * UNDERGROUND PIPE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION RECOMMENDATIONS. ABOVEGROUND: SERVICE CLASS HUBLESS CAST IRON PIPE AND FITTINGS CONFORMING TO CISPI 301 W/ HEAVY DUTY S.S. COUPLINGS CONFORMING TO ASTM C1540 REFER TO SPEC SECTION 22-13-16 SANITARY WASTE AND VENT PIPING AND SECTION 22 13 19-SANITARY WASTE PIPING SPECIALTIES FOR ADDITIONAL REQUIREMENTS.
STORMWATER PIPE	UNDERGROUND: PIPE: RIGID SCH-40 PVC CONFORMING TO ASTM D1785 AND ASTM D2665. FITTINGS: SCH-40 DWV FITTINGS CONFORMING TO ASTM D2665. * UNDERGROUND PIPE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION RECOMMENDATIONS. ABOVEGROUND: SERVICE CLASS HUBLESS CAST IRON PIPE AND FITTINGS CONFORMING TO CISPI 301 W/ HEAVY DUTY S.S. COUPLINGS CONFORMING TO ASTM C1540 ALL ROOF DRAIN BODIES AND HORIZONTAL RAINWATER PIPE SHALL BE INSULATED.
CONDENSATE PIPE	ABOVEGROUND: TYPE L HARD COPPER ALL CONDENSATE PIPE SHALL BE INSULATED.
COMPRESSED AIR	ABOVEGROUND: SCH-40 BLACK STEEL PIPE WITH BLACK MALLEABLE IRON THREADED FITTINGS. UNDERGROUND: NORTH JONES SAE 100R1 WEARGUARD-NRP 1-WIRE BRAID NON-SKIVE, 1" LINE MODEL R1-16, ½" LINE MODEL R1-08 INSIDE 4" SCH-40 CONDUIT. 45° OR LONG SWEEP 90° FITTINGS ONLY, NO JOINTS BELOW FLOOR
NATURAL GAS	ABOVEGROUND: SCH-40 BLACK STEEL PIPE WITH BLACK MALLEABLE IRON THREADED FITTINGS.

PLUMBING LEGEND

SYMBOL	DESCRIPTION
SS	SOIL, WASTE OR SANITARY SEWER PIPING
	VENT PIPING
OW	OIL WASTE SEWER PIPING
OV	OIL VENT PIPING
	COLD WATER PIPING
	HOT WATER PIPING
	HOT WATER RETURN PIPING
G	NATURAL GAS PIPING
	ACCESSIBLE PLUMBING FIXTURE
	RISER DOWN (ELBOW)
	RISER UP (ELBOW)
	RISE OR DROP
	TRAP
A	WATER HAMMER ARRESTOR (LETTER DESIGNATES SIZE. SEE SCHEDULE)
	VENT THROUGH ROOF
FCO/GCO	FLOOR CLEAN OUT/ GROUND CLEAN OUT
WCO	WALL CLEAN OUT
	FLOOR DRAIN
	FLOOR SINK
	WALL HYDRANT (HOSE BIBB)
M	FLOW METER
	BALL VALVE
	BALANCING VALVE/CIRCUIT SETTER
	PRESSURE REDUCING VALVE
	UNION
	BACK FLOW PREVENTER
	SOLENOID OPERATED VALVE
	CHECK VALVE (ARROW INDICATES FLOW DIRECTION)
	PUMP
	RELIEF VALVE
	TEMPERATURE GAUGE
E	EMERGENCY SHUTOFF SWITCH
	WYE STRAINER WITH 3/4 INCH BALL TYPE BLOWDOWN AND HOSE CONNECTION

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

GAS REGULATORS

2 PSI TO 14"W.C. GAS REGULATORS SHALL BE EQUAL TO MAXITROL SERIES 325 LEVER ACTING DESIGN LINE PRESSURE REGULATOR WITH AUTOMATIC VENT LIMITING DEVICE. THE DEVICE SHALL BE LABELED FOR UTILIZATION WITH AN APPROVED VENT-LIMITING DEVICE AND INSTALLED PER MANUFACTURER INSTRUCTIONS IN ACCORDANCE WITH NCFGC SECTION 410.3, EXCEPTION ALLOWING VENTLESS REGULATORS. ALL REGULATORS MUST BE INSTALLED AND MOUNTED IN THE HORIZONTAL UPRIGHT POSITION.

GENERAL NOTES

1. THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. FOR DIMENSIONS, REFER TO THE ARCHITECTURAL PLANS.
2. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION OF ANY WORK.
3. VERIFY CONNECTION REQUIREMENTS, SIZES AND ROUGH-IN DIMENSIONS THE LOCATION OF ALL FOOD SERVICE EQUIPMENT AND EQUIPMENT SUPPLIED BY OTHERS. PROVIDE ALL SERVICES WEATHER OR NOT SHOWN ON P-DRAWINGS.
4. PROVIDE A DIELECTRIC UNION WHEN CONNECTING DISSIMILAR METALS.
5. NOT USED.
6. ALL NEW UNDERGROUND WATER PIPING SHALL BE INSTALLED BELOW THE FROST LINE BUT NOT LESS THAN 24" BELOW FINISHED GRADE TO PIPE CROWN.
7. ALL VENT LINES SHALL SLOPE UP TO VENT THROUGH ROOF. VENT THROUGH ROOF SHALL BE 10'-0" MINIMUM FROM ANY FRESH AIR INTAKES.
8. ALL WASTE STACKS SHALL HAVE A CLEAN OUT AT THE BASE OF THE STACK. COORDINATE LOCATION OF CLEAN OUTS WITH CASEWORK, WALL LOCATIONS AND ACCESSIBILITY TO CLEANOUT WITH OWNER/ARCHITECT.
9. PROVIDE ISOLATION VALVES AT ALL FIXTURES.
10. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS OF PLUMBING FIXTURES.
11. ALL WALL MOUNTED LAVATORIES TO HAVE INSULATION ON ANY EXPOSED PIPES.
12. COMPLETELY ROD AND FLUSH OUT ALL SANITARY WASTE LINES AFTER BUILDING IS COMPLETED.
13. PROVIDE CHROME ESCUTCHEON RINGS AT ALL PENETRATIONS IN CABINETRY, INCLUDING EXPOSED CEILING AND WALL PENETRATIONS.
14. DIMENSION ACTUAL LOCATION OF ALL UNDERGROUND WATER LINES ON AS-BUILT DRAWINGS. A MINIMUM OF TWO DIMENSIONS FROM BUILDING REFERENCE POINTS SHALL BE PROVIDED WITH A BURY DEPTH INDICATED.
15. ALL UNDERGROUND LINES OUTSIDE BUILDING FOOTPRINTS SHALL BE REQUIRED TO HAVE A MAGNETIC-TYPE WARNING TAPE INSTALLED IN THE BACKFILL AT LEAST SIX (6) INCHES BELOW GRADE.
16. ALL HW & CW PIPING SHALL BE INSULATED WITH 1" FIBERGLASS INSULATION, UNLESS OTHERWISE SPECIFIED ELSEWHERE.
17. NOT USED.
18. CONTRACTOR SHALL FIELD VERIFY ALL PLUMBING FIXTURES AND EQUIPMENT PASSES THROUGH BUILDING OPENINGS, DOORWAYS, PASSAGE WAYS, ETC. PRIOR TO ORDERING MATERIAL.
19. CONTRACTOR SHALL FIELD VERIFY MUNICIPAL WATER DELIVERY PRESSURE AND PROVIDE PRESSURE REDUCING STATION AT DOMESTIC WATER ENTRY IF REQUIRED, INCLUDING STRAINER, PRV, UP AND DOWNSTREAM PRESSURE GAUGES AND FULL SIZE BY-PASS.
20. CONTRACTOR SHALL COORDINATE AND VERIFY ALL SUMP PUMP PIT SIZES AND BASINS, DEPTHS WITH BOTH NEW AND EXISTING CONDITIONS, VERIFY ALL INVERT ELEVATIONS AND MAKE ANY REQUIRED ADJUSTMENTS FOR A FULLY FUNCTIONING SYSTEM.
21. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO SHOW THE DESIGN INTENT AS COORDINATED WITH THE OWNERS NEEDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL DESIGN AND SHOP DRAWINGS BASED ON THE INTENT INDICATED. THESE DOCUMENTS ARE NOT INTENDED TO SHOW ALL REQUIRED ITEMS AND DESIGN ISSUES, THE CONTRACTORS BID SHALL INCLUDE ALL REQUIRED ITEMS FOR A FULLY FUNCTIONAL SYSTEM. ANY ERRORS OR OMISSIONS WITHIN THESE DOCUMENTS MUST BE BROUGHT TO THE ENGINEERS ATTENTION AND RESOLVED BEFORE BID. NO ADDITIONAL COSTS WILL BE ACCEPTED AFTER BID.
22. ALL GAS PIPING AND ASSOCIATED COMPONENTS SHALL BE BRACED FOR SEISMIC CONDITIONS AS OUTLINED IN ASCE-07 AND INFORMATION INDICATED ELSEWHERE WITHIN THESE DOCUMENTS. THE SEISMIC DESIGN IS DELEGATED TO A SEISMIC ENGINEER PROVIDED BY THE CONTRACTOR. REFER TO THE APPENDIX B AND STRUCTURAL DRAWINGS FOR DESIGN CATEGORY AND IMPORTANCE FACTORS.

SHOCK ARRESTOR SCHEDULE

MANUFACTURER	SIZE TYPE	FIXTURE UNITS	CONNECTION SIZE	ARRESTOR LENGTH
SIOUX CHIEF HYDRA-RESTER	A	1-11	1/2"	1-3/8"
SIOUX CHIEF HYDRA-RESTER	B	12-32	3/4	1-3/8"
SIOUX CHIEF HYDRA-RESTER	C	33-60	1"	1-3/8"
SIOUX CHIEF HYDRA-RESTER	D	61-113	1"	2-1/8"
SIOUX CHIEF HYDRA-RESTER	E	114-154	1"	2-1/8"
SIOUX CHIEF HYDRA-RESTER	F	155-330	1"	2-1/8"

SHOCK ARRESTOR SCHEDULE NOTES:
1. PROVIDE SHOCK ARRESTORS IN ACCORDANCE WITH PLUMBING AND DRAINAGE INSTITUTE STANDARD PDI-WH-201.
2. SEE MANUFACTURERS RECOMMENDATIONS FOR SIZING OF SHOCK ARRESTORS ON LENGTHS OF PIPE OVER 20'.
3. SHOCK ARRESTOR TO BE ALL STAINLESS STEEL CONSTRUCTION.
4. SHOCK ARRESTOR TO HAVE PISTON TYPE BELLOWS.

FIXTURE	BACKFLOW PREVENTER DEVICE
WATER CLOSET	FLUSH VALVE FURNISHED WITH AN INTEGRAL VACUUM BREAKER
HAND WASHING SINKS / LAVATORIES	AIR GAP AND WATTS 288A
SERVICE / MOP SINKS	FAUCET FURNISHED WITH AN INTEGRAL VACUUM BREAKER AND WATTS 288A
DRINKING FOUNTAIN	AIR GAP
ELECTRIC WATER COOLER	AIR GAP
ICE MACHINE	WATTS 288A / 388ASC
TRAP PRIMER	FURNISHED WITH AN INTEGRAL BACKFLOW PREVENTER AND VACUUM BREAKER PORT
WALL HYDRANTS, HOSE BIBBS	FURNISHED WITH AN INTEGRAL VACUUM BREAKER

NOTES,
1. CONTRACTOR SHALL FURNISH AND INSTALL BACKFLOW PREVENTION DEVICES AT THE EQUIPMENT LISTED ABOVE.
2. DEVICES LISTED ARE MANUFACTURED BY WATTS REGULATOR COMPANY. CONTRACTOR MAY SUBMIT AN EQUAL FROM ANOTHER MANUFACTURER FOR REVIEW.
3. CONTRACTOR TO VERIFY TYPE, MODEL AND INSTALLATION REQUIREMENTS FOR ALL BACKFLOW PREVENTION DEVICES, INCLUDING MASTER BFP WITH LOCAL AUTHORITIES HAVING JURISDICTION.

PUMP SCHEDULE

MARK	BASIS OF DESIGN	GPM	FT. OF HEAD	BASIN DESIGN	RPM	HP	ELECTRICAL	REMARKS
HWRP1	TACO MODEL 009-SF	3	32	--	3250	1/8	115V/60HZ/1PH 1.4 AMPS	120°F HOT WATER RECIRCULATOR PUMP, STAINLESS STEEL, FLANGED
HWRP1	ACCESSORIES	TACO MODEL 265-1 ANALOG TIMER AND TACO MODEL 563-2 AQUASTAT						

1. PC TO PROVIDE STARTERS AND DISCONNECTS FOR HWRP1 AS REQUIRED.
2. PROVIDE AQUA STAT ON HWR PIPING.
3. PROVIDE 24 HOUR PROGRAMMABLE TIME CLOCK (ADJUSTABLE).
4. PUMP SHALL BE CONTROLLED BY THE AQUA-STAT. SET POINT ON @ 130°F AND OFF @ 140°F. POWER SHALL BE CONTROLLED BY THE TIME CLOCK. PROGRAM TIME CLOCK FOR HOURS OF OPERATION BASED ON OWNERS INPUT.

WATER HEATER SCHEDULE

MARK	BASIS OF DESIGN: MANUFACTURER	BASIS OF DESIGN: MODEL-SIZE	LOCATION	TANK: STEEL GLASS LINED	INSULATION: NON-CFC POLYURETHANE CLOSED CELL	THERMAL EFFICIENCY	GALLONS	RECOVERY: TEMP RISE (100°F)	RECOVERY: 1ST HOUR	NATURAL GAS BTU/HR	DIRECT VENT FLUE: INTAKE	DIRECT VENT FLUE: EXHAUST	ELECTRICAL V/ø/HZ
GWH1	LOCHINVAR	SNR151-100	JANITOR 105			96%	90	171 GPH	230	150,000	3"	3"	120/1/60

1. TANK TEMPERATURE SHALL BE MAINTAINED AT 140°F MINIMUM.
2. PROVIDE ASME TEMPERATURE AND PRESSURE RELIEF VALVE
3. PROVIDE UNIT WITH CONCENTRIC VENT AND CONDENSATE NEUTRALIZATION KIT.
4. PROVIDE HEATER WITH RHEEM MODEL UV12992 3/4" NPT HEAT TRAP NIPPLES OR EQUAL.

EMERGENCY SHOWER CALCULATIONS (20GPM FOR 15 MIN.-ANSI Z358 4.1.2 + 85°F-110°F TEPID WATER-IPC)
P = (Tm-Tc)/(Th-Tc) = (85°F-55°F)/(140°-55°) = .35
ACTIVATED UNIT 20 GPM x .35 = 7.06 GPM x 15 MINUTE DURATION = 105.88 GALLONS 140°F HOT WATER REQUIRED
90 GALLONS STORED + (140 GALLONS 1ST HOUR/4 = 35) = 125 GALLONS AVAILABLE IN 1ST 15 MINUTES.
P = GALLONS OF HOT WATER IN HEATER TO BE GENERATED.

EXPANSION TANK SCHEDULE

MARK	MANUFACTURER	MODEL	TOTAL VOLUME (GALLONS)	ACCEPTANCE FACTOR	DIAMETER	HEIGHT	DESCRIPTION
EX1	AMTROL	ST-12-C	6.4	.5 (3.2 GAL)	12"	13.5"	THERM-X-TROL, ASME, BLADDER TYPE EXPANSION TANK. TO BE LOCATED IN JANITOR 105

(MANUFACTURER through HEIGHT: BASIS OF DESIGN)

PLUMBING SCHEDULE

SYMBOL	DESCRIPTION	WASTE	COLD WATER	HOT WATER	SPECIFICATION
P1	WATER CLOSET FLOOR MOUNTED FLUSH TANK A.D.A. ACCESSIBLE	3"	1/2"	-	FIXTURE: EQUAL TO CHAMPION PRO MODEL [illegible].104 ADA RIGHT HEIGHT ELONGATED TOILET, VITREOUS CHINA, HET 1.28 GPF, 1000G MAP SCORE AT 1.28GPF, 10 YEAR WARRANTY. SEAT: EQUAL TO CHURCH MODEL [illegible]TDGSL HEAVY DUTY ELONGATED PLASTIC TOILET SEAT, MOLDED-IN BUMPERS, COLOR MATCH WHISPER CLOSE CHECK HINGES. STAINLESS STEEL POSTS, [illegible]-TITE FASTENING SYSTEM, ANTIMICROBIAL NUILT-IN SEAT PROTECTION, ANSI Z124.5-2013 (SEE NOTE 1)
P2	LAVATORY WALL HUNG (SENSOR FAUCET)	1 1/2"	1/2"	1/2"	FIXTURE: SLOAN, MODEL SS-3003, 18x20 WALL HUNG, VITREOUS CHINA, 4" CENTERS, LAVATORY WITH BACKSPLASH. FAUCET: SLOAN MODEL EBF-650-BDT BATTERY POWERED HAND WASH FAUCET, A.D.A., HEAVY DUTY CAST BRASS, 0.5 GPM VANDAL PROOF FLOW RESTRICTOR WITH BELOW DECK THERMOSTATIC MIXING VALVE TRAP: McQUIRE PW-2125-WC OFFSET WASTE ASSY., 17 GAUGE CHROME PLATED CAST BRASS, P-TRAP WITH CLEAN OUT PLUG. (SEE NOTE 1 AND 4 BELOW)
P3	URINAL WALL HUNG	2"	3/4"	-	FIXTURE: SLOAN WEUS-1000.1001-0.125 WALL HUNG, VITREOUS CHINA, .125 GPF URINAL FLUSH VALVE: SLOAN ROYAL FLUSHOMETER, MODEL 186-0.125, 0.125 GALLON PER FLUSH. CARRIER: JAY R. SMITH 0637 URINAL HANGER (MOUNT RIM AT 17" AFF TO MEET ADA REQUIREMENTS)
P4	SEMI-CIRCULAR WASH STATION	1 1/2"	1/2"	1/2"	FIXTURE: EQUAL TO WILLOUGHBY MODEL WWF-3606-SS-FO-FLR 3-STATION, 36" SEMI-CIRCULAR STAINLESS STEEL, DEEP BOWL, FLOOR MOUNTED WASHFOUNTAIN WITH STAINLESS STEEL COVER AND FOOT CONTROLS. (120V GFCI POWER OUTLET REQUIRED, COORDINATE WITH INSTALLATION INSTRUCTIONS.) TRAP: McQUIRE 17 GAUGE CHROME PLATED CAST BRASS, P-TRAP WITH CLEAN OUT PLUG.
P5	ELECTRIC WATER COOLER	1 1/2"	1/2"	-	FIXTURE: MURDOCK MODEL MC74-UBL, CONTOUR BI-LEVEL BARRIER FREE WALL MOUNTED WATER COOLER, 8 GPM. TRAP: MCQUIRE 8912 CMC HEAVY DUTY CAST BRASS P-TRAP AND SEAMLESS TUBULAR BRASS WALL. STOP: MCQUIRE HST07LK HEAVY DUTY ANGLE STOP, WITH WALL FLANGE.
P6	SHOWER HANDICAPPED A.D.A. ACCESSIBLE	2"	1/2"	1/2"	FIXTURE: EQUAL TO AQUARIUS G 3698 BF, 40.5"Wx39.5"D, ADA ONE PIECE OPEN TOP GELCOAT SHOWER STALL, PACKAGE ONE, WITH CHROME NO-CUALK DRAIN. SEE PLAN FOR VALVE HANDING. FAUCET: EQUAL TO SYMMONS BP-56-500-B30-V TEMPTROL II SHOWER SYSTEM AND HAND SPRAY, WITH PRESSURE BALANCE VALVE, 24" ADA GRAB BAR, HAND HELD SHOWER HEAD, ARM AND VACUUM BREAKER. (PROVIDE 1.5 GPM FLOW RESTRICTOR) DRAIN: INSTALL DRAIN PROVIDED WITH SHOWER UNIT.
P7	MOP SINK	3"	3/4"	3/4"	FIXTURE: EQUAL TO FIAT TSBC6010 24"x24" TERRAZZO NEO-CORNER BASIN, STAINLESS STEEL CURB GUARDS, WITH 1453-BB STRAINER, 832-AA HOSE, 889-CC MOP HANGER, AND MSG 24" HIGH STAINLESS STEEL WALL GUARD FAUCET: FIAT MODEL 830-AA, WALL MOUNTED SERVICE SINK FAUCET WITH SPOUT BRACE, INTEGRAL VACUUM BREAKER, 3" LEVER HANDLES
P8	DOUBLE BOWL SINK TOP MOUNT	1 1/2"	1/2"	1/2"	FIXTURE: ELKAY LUSTERTONE LRAD3319, TOP MOUNT, STAINLESS STEEL, 18 GAUGE, DOUBLE BOWL, 6" DP, 4-HOLE DRILLING FAUCET: DELTA 27C2924-R7 GOOSENECK FAUCET, 4" WRIST BLADES, 1.5 GPM LAMINAR FLOW RESTRICTOR, WITH HOSE SPRAY TRAP: MCQUIRE PW-2125-WC OFFSET WASTE ASSY., 17 GAUGE CHROME PLATED CAST BRASS, P-TRAP WITH CLEAN OUT PLUG. PROVIDE DISHWASHER TAIL PIECE, AND HOT WATER CONNECTION, INSTALL DISHWASHER DRAIN LINE PER LOCAL AHJ REQUIREMENTS
EWS1	EMERGENCY SHOWER/EYEWASH	-	1"	1"	EQUAL TO ACORN MODEL S1310-BF-ET71-2-BVS-OTG COMBINATION STATION, PLASTIC BOWL EYEWASH AND SHOWERHEAD, EYE/FACE WASH SPRAY HEADS WITH COVERS, AN INLINE STRAINER AND A STAY-OPEN ½" BALL VALVE WITH THERMOSTATIC MIXING VALVE, ASSE LISTED PER THE ASSE 1071 STANDARD. THE TEPID OUTPUT WATER COMPLIES WITH ANSI Z358.1 STANDARD. VALVE INCLUDES BALL VALVE SHUT-OFFS AND OUTLET TEMPERATURE GAUGE
CO	CLEANOUT	4"	-	-	EQUAL TO ZURN Z1440 CAST IRON CLEANOUT FERRULE WITH GAS TIGHT ABS TAPERED THREADED PLUG.
FCO	FLOOR CLEANOUT	4"	-	-	EQUAL TO ZURN Z1400 CAST IRON HEAVY DUTY "LEVEL-TROL" ADJUSTABLE FLOOR CLEANOUT, WITH GAS TIGHT ABS TAPERED THREADED PLUG AND ROUND SCORIATED NICKEL BRONZE SECURED TOP. (GCO IN DRIVEWAY AREAS PROVIDE H20 BUS LOAD DUTY TOPS.)
WCO	WALL CLEANOUT	4"	-	-	EQUAL TO ZURN Z1446 CAST IRON CLEANOUT TEE WITH GAS TIGHT ABS TAPERED THREADED PLUG AND ROUND, SMOOTH STAINLESS STEEL WALL PLATE AND SECURING SCREW.
GCO	GRADE CLEANOUT	4" OR 6"	-	-	EQUAL TO ZURN Z1406 CAST IRON HEAVY DUTY ADJUSTABLE GRADE CLEANOUT WITH GAS TIGHT TAPERED THREADED PLUG AND CAST IRON HOUSING, ROUND SCORIATED SECURED HEAVY DUTY TOP. (GCO IN DRIVEWAY AREAS PROVIDE H20 BUS LOAD DUTY TOPS.)
OS1	OIL SEPARATOR	6"	-	-	EQUAL TO HIGHLAND TANK 01000HGDWHTCG 1000 GALLON, STEEL DOUBLE WALL, SEDIMENT CHAMBER, INTEGRAL BAFFLING, PROVIDE WITH INLET/OUTLET CLEANOUT, SAMPLE, AND VENTILATION PORTS, EXTENSION COLLARS, AND FRAMES AND COVERS. EFFLUENT DISCHARGE LEVELS OF NON-EMULSIFIED SOLVENT EXTRACTABLE MATTER OF MINERAL OR SYNTHETIC ORIGIN TO A MAXIMUM OF 10 PPM AND TOTAL SUSPENDED SOLIDS, TO A MAXIMUM OF 350 PPM. PROVIDE LIQUID INTERFACE MONITOR ALARM SYSTEM TO MONITOR OIL LEVELS IN SEPARATOR. PROVIDE ANTI-FLOATATION CALCULATIONS AND PROVIDE ANTI-FLOATATION WITH STRAPS IF REQUIRED. COORDINATE WITH TANK MANUFACTURER.
SS1	SAND SEPARATOR	SEE PLAN	-	-	EQUAL TO ZURN Z1187-SI-SC-K SAND INTERCEPTOR, 20 GPM FLOW RATE, ACID RESISTANT COATED INTERIOR AND EXTERIOR FABRICATED STEEL SAND INTERCEPTOR WITH THREADED INLET AND OUTLET, COMPLETE WITH HEAVY-DUTY REINFORCED COVER(S) RATED AT 10,000 LBS. MAXIMUM SAFE LIVE LOAD, ANCHOR FLANGE, PROVIDE EXTENSIONS AS REQUIRED
FD1	FLOOR DRAIN	SEE PLAN	-	-	EQUAL TO ZURN Z-415BZ, SELF-LEVELING CHROME PLATED FLOOR DRAIN, 6" ROUND TOP FLOOR DRAIN, 9 SQ.IN. OPEN AREA (LIGHT DUTY INTERIOR DRAIN) PROVIDE WITH TRAPGUARD MODEL TG33-ZURN
FD2	FLOOR DRAIN	SEE PLAN	-	-	EQUAL TO ZURN Z507 MEDIUM DUTY CAST IRON FLOOR DRAIN WITH 7" DIAMETER CAST IRON TOP (MEDIUM DUTY MECHANICAL ROOM DRAIN), PROVIDE WITH TRAPGUARD MODEL TG33-ZURN (COORDINATE MODEL NUMBER WITH TRAPGUARD)
FD3	FLOOR DRAIN	SEE PLAN	-	-	EQUAL TO ZURN Z-610-YC, 12"x12" EXTRA HEAVY DUTY FLOOR DRAIN, 12"x12" SLOTTED GRATE, WITH CAST IRON SEDIMENT BUCKET.
TD1	TRENCH DRAIN	SEE PLAN	-	-	EQUAL TO ZURN Z806-HD-HPDE-USA 6" WIDE REVEAL FIBER REINFORCED POLYMER TRENCH DRAIN SYSTEM, EXTRA-HEAVY DUTY FRAME ASSEMBLY WITH ANCHOR STUDS AND HEEL PROOF DUCTILE IRON SLOTTED GRATE. OVERALL TRENCH WITH SUMP 14'-0", COORDINATE WITH ARCHITECTURAL PLANS.
SUMP	TRENCH DRAIN SUMP	SEE PLAN	-	-	EQUAL TO ZURN Z817-6-Y-HPDE-USA 6" WIDE REVEAL FIBER REINFORCED POLYMER CATCH BASIN, 6" x 20" SEDIMENT BASKET, EXTRA-HEAVY DUTY FRAME ASSEMBLY WITH ANCHOR STUDS AND HEEL PROOF DUCTILE IRON SLOTTED GRATE.
IM1	ICE MAKER BOX	-	1/2"	-	EQUAL TO IPS SS1B1 RECESSED STAINLESS STEEL ICE MAKER BOX WITH SHUTOFF VALVE AND ¼" COMPRESSION FITTING CONNECTION.
WF1	WATER FILTER	-	1/2"	-	EQUAL TO AQUA-PURE AP510 CARTRIDGE STYLE CHARCOAL WATER FILTER
HB1	HOSE BIBB	-	1/2"	-	EQUAL TO WOODFORD 24P ½" POLISHED CHROME HAND WHEEL WALL MOUNTED HOSE BIBB
HB2	HOSE BIBB	-	1/2"	-	EQUAL TO WOODFORD 24P ½" ROUGH BRASS HAND WHEEL WALL MOUNTED HOSE BIBB
WH1	WALL HYDRANT	-	3/4"	-	EQUAL TO WOODFORD 67 POLISHED CHROME EXPOSED FREEZELESS WALL HYDRANT, HAND WHEEL, WALL MOUNTED, BACKFLOW PROTECTED
BFP1	BACKFLOW PREVENTER	-	-	SEE PLANS	EQUAL TO ZURN 375 REDUCED PRESSURE BACKFLOW PREVENTER, BRONZE BODY CONSTRUCTION, TWO POPPET STYLE CHECK VALVES AND REPLACEABLE CHECK SEATS, WITH AN INTERMEDIATE RELIEF VALVE
DS1	DOWNSPOUT BOOT	-	-	SEE PLANS	EQUAL TO ZURN Z-191 RECTANGULAR TO ROUND DURA-COATED CAST IRON BODY WITH STRAP. COORDINATE RECTANGULAR SIZE WITH ARCHITECTURAL DOWNSPOUTS.

NOTES:
1. P.C. TO PROVIDE AND INSTALL TRUBRO "LAV-GUARD" ON ALL EXPOSED COLD AND HOT WATER PIPES, STOPS, WASTE PIPE AND P-TRAP. COORDINATE COLOR WITH ARCHITECT.
2. P.C. TO PROVIDE 3-WAY STOP ON COLD WATER SIDE OF SINK AND CONNECT COUNTER TOP COFFEE MACHINE. PROVIDE IN-LINE WATER FILTER WF1.
3. FURNISHED AND INSTALLED BY OTHERS. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL SERVICE ROUGHI-INS. FINAL CONNECTION BY EQUIPMENT INSTALLER.
4. P.C. TO PROVIDE HEAVY DUTY STOPS AND HEAVY DUTY BRASS TRAPS W/ DRAIN PLUGS.
5. ALL PIPE, FITTINGS, HANGERS, FIXTURES, EQUIPMENT, ETC. SHALL CONFORM WITH "BUY AMERICA" 49 U.S.C. 5323(J) AND 49 CFR PART 661, SHALL BE OF DOMESTIC MANUFACTURER OR ORIGIN.

BIDDING DOCUMENTS

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 27919 WILLIAM L. ALDRIDGE 02/01/18

DESIGNED BY: FACILITIES DESIGN ARCHITECTS & ENGINEERS

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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DeVita & Associates, Inc. Project: 17500-00
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DRAWING TITLE / DESCRIPTION: PLUMBING SCHEDULES

PROJECT TITLE: LUMBERTON EQUIPMENT SHOP
NCDOT HIGHWAY DIVISION 6
872 NC 711 HIGHWAY
LUMBERTON, NORTH CAROLINA 28360

STATE CONSTRUCTION ID.# 16-12916-01A

ASSET NUMBER: CO.# SITE.# BLDG.#
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