

- SOIL AND WASTE PIPE SHALL SLOPE 2% MINIMUM, UNLESS OTHERWISE NOTED OR REQUIRED BY CODE.
- ALL DRAWN WATER & GAS LINES SHALL BE KEPT TIGHT TO THE UNDERSIDE OF EQUIPMENT & SECURED IN PLACE.
- VERIFY THE LOCATION OF THE SANITARY SEWER ON THE SITE PLAN AND SHALL REVISE THE SEWER SYSTEM AS REQUIRED.
- PROVIDE TRAP PRIMERS FOR FLOOR DRAINS IN RESTROOMS, AND ELSEWHERE AS REQUIRED BY LOCAL CODE. TRAP PRIMERS IN RESTROOMS SHALL BE INSTALLED BELOW THE LAVATORIES IN AN ACCESSIBLE LOCATION. TRAP PRIMERS IN OTHER AREAS SHALL BE INSTALLED SUCH THAT THEY ARE ACCESSIBLE FOR MAINTENANCE. COORDINATE PROVISION OF ANY REQUIRED ACCESS PANELS WITH ARCHITECTURAL DRAWINGS. PROVIDE DEEP SEAL TRAPS FOR FLOOR DRAINS WITHOUT TRAP PRIMERS.
- ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC. AND THE OWNERS REPRESENTATIVE PRIOR TO ANY INSTALLATION.
- ALL VALVES, TRAP PRIMERS, WATER HAMMER ARRESTORS OR OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILING SHALL BE INSTALLED BEHIND AN ACCESS PANEL.
- ALL PLUMBING FIXTURE VENTS SHALL TERMINATE A MINIMUM OF 12 INCHES FROM ANY VERTICAL SURFACE AND 10 FEET FROM ANY OUTSIDE AIR INTAKE.
- PROVIDE GAS PIPING TO UNITS AND ALL FINAL CONNECTIONS REQUIRED FOR OPERATION.
- INSTALL SHUT-OFF VALVES ON ALL HOT & COLD WATER LINES TO FIXTURE OR APPLIANCE. ALL EXPOSED WATER AND WASTE LINES TO BE CHROME PLATED.
- PROVIDE A LEVER HANDLE GAS SHUT-OFF VALVE IN THE BRANCH PIPING OF EACH APPLIANCE OR PIECE OF EQUIPMENT. FOR EACH APPLIANCE INSTALL QUICK DISCONNECT, FLEXIBLE PIPE WHEN ALLOWED BY CODE AND RESTRAINING DEVICE FURNISHED BY OWNER. PROVIDE PRESSURE REDUCING VALVES AT EACH PIECE OF EQUIPMENT OR APPLIANCE. IF GAS PRESSURE GREATER THAN 10"wc IS USED DOWNSTREAM FROM THE GAS METER.
- ALL VALVES, UNIONS, ETC. SHALL BE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.
- REFER TO KITCHEN EQUIPMENT DRAWINGS FOR PLUMBING ROUGH IN SCHEDULE & FOR ADDITIONAL WORK TO BE FURNISHED & INSTALLED BY CONTRACTOR. ALL ROUGH-IN PLUMBING AND FINAL CONNECTIONS TO KITCHEN EQUIPMENT SHALL BE MADE BY THE CONTRACTOR U.O.N.
- REFER TO MECHANICAL SHEETS FOR HVAC AND HOOD PLUMBING REQUIREMENTS.
- ALL GAS LINES SHALL BE SUPPORTED SEE SPECS.
- ALL FLOOR SINKS AND FLOOR DRAINS IN TRAFFIC AREAS SHALL BE INSTALLED FLUSH TO FLOOR SURFACE.
- PROVIDE WATER HAMMER ARRESTOR FOR ALL HAND SINKS AND URINAL WATER LINES.
- PROVIDE AIR GAPS FOR INDIRECT DRAINS AS REQUIRED BY CODE. AIR GAP SHALL BE MINIMUM 2 TIMES THE DIAMETER OF THE INDIRECT DRAIN.
- PRIOR TO COMMENCING WORK ON THIS PROJECT, VERIFY DEPTH, SIZE, LOCATION AND CONDITION OF ALL EXISTING UTILITIES IN FIELD. SHOULD CONDITIONS EXIST OTHER THAN THOSE INDICATED WHICH WOULD CAUSE THE DESIGN TO BE ALTERED, CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY.
- COORDINATE INSTALLATION OF PLUMBING WORK WITH ALL OTHER TRADES SO AS TO AVOID UNNECESSARY DELAY OR INTERFERENCES. CONTRACTOR SHALL REVIEW ARCHITECTURAL AND EQUIPMENT SHEETS.
- FURNISH & INSTALL ALL BACKFLOW PROTECTION DEVICES REQUIRED BY AGENCIES HAVING JURISDICTION. BACKFLOW DEVICES REQUIRING TESTING SHALL BE INSTALLED NO LOWER THAN 12" AND NO HIGHER THAN 5'-0" A.F.F.
- PROVIDE CONDENSATE DRAIN FROM A/C UNITS TO APPROVED DRAIN, GAS PIPING TO UNITS AND ALL FINAL CONNECTIONS REQUIRED FOR OPERATION.
- THE OWNER OR KITCHEN EQUIPMENT SUPPLIER MAY SUBSTITUTE EQUIPMENT OR THE EQUIPMENT MAY VARY FROM WHAT IS SHOWN. THEREFORE, VERIFY ALL CRITICAL DIMENSIONS WITH THE OWNER PRIOR TO CONSTRUCTION. FAILURE OF THE CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION DIRECTLY UPON THE CONTRACTOR.
- ALL WATER LINES SHALL BE RUN OVERHEAD U.O.N.
- ALL WATER LINES SHALL BE FLUSHED PRIOR TO CONNECTING ANY FIXTURES OR EQUIPMENT.
- PROVIDE ESCUTCHEON PLATES AND SILICONE SEALANT AT ALL UTILITY PENETRATIONS INTO WALLS, CEILINGS, AND FLOORS. DO NOT USE CAULKS OR EXPANDING FOAMS FOR SEALANT.
- CPVC SCHEDULE 40 WASTE PIPE CAN BE SUBSTITUTED FOR BLACK IRON WASTE PIPE WHERE ALLOWED BY LOCAL MUNICIPALITIES.
- DOMESTIC WATER PIPING SHALL BE:  
UNDERGROUND: TYPE K COPPER, HARD DRAWN  
ABOVE GROUND: TYPE L COPPER, HARD DRAWN TYPE M COPPER MAY BE USED WHERE APPROVED BY OWNER AND ENGINEER AND ALLOWED BY ALL AUTHORITIES HAVING JURISDICTION.
- ALL COMPONENTS OF THE POTABLE WATER SYSTEM SHALL COMPLY WITH THE LEAD FREE REQUIREMENTS AS NOTED IN SECTION 1417 OF THE SAFE DRINKING WATER ACT.
- NO PEX OR PVC PIPING ALLOWED TO BE USED FOR WATER PIPING.
- IF GEN POWER SOAK SINK USED THEN ADD A MIXING VALVE TO SINK ABOVE SUSPENDED CEILING.

**GENERAL NOTES E**

SYMBOLS	ABBREV.	DESCRIPTION
	Y.B.	YARD BOX
	R.D.	ROOF DRAIN
	A.P.	ACCESS PANEL
	V.T.R.	VENT THRU ROOF
	V.B.F.	VENT BELOW FLOOR
	U.T.R.	UP THRU ROOF
	V.C.P.	VITRIFIED CLAY PIPE
	C.I.	CAST IRON
	A.C.P.	ASBESTOS CEMENT PIPE
	(N)	NEW
	(E)	EXISTING
⊕	F.D.	FLOOR DRAIN
⊙	H.D.	HUB DRAIN
⊕	O.F.D.	OVERFLOW DRAIN
⊗	F.S.	FLOOR SINK
	G.L.	GAS LINE
	A.F.F.	ABOVE FINISHED FLOOR
(X-X) 0000		PLUMBING EQUIPMENT DESIGNATION
(XXX)		KITCHEN EQUIPMENT NUMBER: REFER TO KITCHEN EQUIP. DRAWINGS FOR DESCRIPTION.
—SS—	◇	SOIL OR WASTE (SANITARY) WASTE STUB
—GW—	◇	SOIL OR WASTE (GREASE WASTE) WASTE STUB
—G—	G	GAS / GAS STUB
—CW—	CW	COLD WATER / CW STUB
—HW—	HW	HOT WATER / HW STUB
—HWR—	H.W.R.	HOT WATER RETURN
—V—	V	SANITARY VENT
—SD—	S.D.	STORM DRAIN
—CD—	C.D.	CONDENSATE DRAIN
⊕	F.C.O.	FLOOR CLEANOUT OR CLEANOUT TO GRADE
⊕	W.C.O.	WALL CLEANOUT
—FW—		
—F1—	FW	FILTERED WATER
—F2—		
—F3—		
—TW—	TW	PREMIXED TEMPERATURE WATER
+	H.B.	HOSE BIBB
+	S.O.V.	SHUT-OFF GATE VALVE
+	S.O.C.	SHUT-OFF GAS COCK
+	C.V.	CHECK VALVE
+	P.T.R.V.	PRESS-TEMPERATURE RELIEF VALVE
+	B.V.	BALL VALVE
+	C.W.	COLD WATER BEHIND GRADE
⊕	E.C.O.	EXTERIOR CLEAN OUT
⊕	B.F.P.	BACKFLOW PREVENTER
⊕	F.U.	FIXTURE UNIT

**PLUMBING LEGEND C**

EQUIPMENT #	QTY	SAN. FU.	TOTAL
MOP SINK	1	5	5
3-COMP SINK (FS)	1	5	5
PREP SINK (FS)	1	5	5
RE THERMALIZER (FS)	1	5	5
SODA/ICE DISPENSER (FS)	1	5	5
AREA FLOOR DRAINS		5	20
TOTAL FIXTURE UNITS			22.5 GPM
45 DFU/2 =			22.5 GPM
22.5 GPM X 3 MINUTE RETENTION TIME =			67.5 GALLONS
1,000 GALLON EXTERIOR GREASE INTERCEPTOR TO BE PROVIDED			
NOTE: CAPACITY BASED ON 100% CONVERTED TO GPM PER SECTION 1417 OF THE 2012 INDIANA PLUMBING CODE.			
GREASE INTERCEPTOR SIZED FOR A 30 MINUTE RETENTION TIME PER PDI-BL PRINCIPLES.			
(FS) INDIRECT CONNECTION TO A FLOOR SINK			

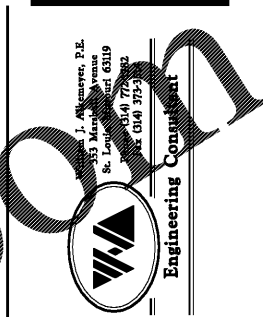
EQUIPMENT #	QTY	SAN. FU.	TOTAL
MOP SINK	1	5	5
3-COMP SINK (FS)	1	5	5
PREP SINK (FS)	1	5	5
HAND SINK	2	2	4
RE THERMALIZER (FS)	1	5	5
WATER CLOSET	2	4	8
LAVATORY	2	2	4
HUB DRAIN (WATER HEATER CONDENSATE)	1	0.5	0.5
SODA DISPENSER (FS)	1	5	5
AREA FLOOR DRAINS	4	5	20
EMERGENCY FLOOR DRAINS	2	0	0
TOTAL FIXTURE UNITS			61.5
NOTE: CALCULATION BASED ON THE 2012 INDIANA PLUMBING CODE.			

FIXTURE	QTY	F.U.	TOTAL
MOP SINK BASIN	1	3	3
3-COMP SINK (FAUCET)	1	4	4
PREP SINK	1	4	4
HAND SINK	2	2	4
RE THERMALIZER	1	1	1
WATER CLOSET (FLUSHMETER TANK TYPE)	2	4	4
LAVATORY	2	2	4
HOSE BIBB	2	2	4
TOTAL			28
28 FIXTURE UNITS = 23.3 GPM = 1-1/2" DOMESTIC WATER SERVICE PER THE 2012 INDIANA PLUMBING CODE.			

**SERVICE CALCULATIONS D**

ITEM	FIXTURE	SOIL OR WASTE	VENT	COLD WATER	HOT WATER	TEMPD WATER	WASTE FU	WATER FU	DESCRIPTION	MANUFACTURER / MODEL NUMBER
(CO) 1	EXTERIOR CLEANOUT	--	--	--	--	--	--	--	CAST IRON CLEANOUT WITH THREADED ADJUSTABLE HOUSING, ROUND SCORATED HEAVY CAST IRON COVER.	JOSAM / MODEL: 56000 WADE / MODEL: 6000Z ZURN / MODEL: Z-1400
(FS) 1	FLOOR SINK	4"	2"	--	--	--	6	--	LIGHT DUTY, ACID RESISTANCE, WHITE PVC FLOOR SINK W/ 12" SQUARE WHITE PVC HALF GRATE AND STAINLESS STEEL DEBRIS BUCKET WITH LIFTING HANDLE.	SIoux CHIEF / MODEL: 861-4PNDW
(FS) 2	FLOOR SINK	4"	2"	--	--	--	6	--	PVC 12" SQUARE FLOOR SINK, 6" DEEP, WITH ALUMINUM DOME STRAINER AND NICKEL BRONZE HINGED TOP.	SIoux / MODEL: 861-4-PND
(FD) 1	FLOOR DRAIN (3")	3"	2"	--	--	--	2	--	LIGHT DUTY ADJUSTABLE PVC WITH THREADED ADAPTOR AND 5" DIAMETER NICKEL BRONZE RING AND FASTENED GRATE.	ZURAM / MODEL: FD-2210 SIoux CHIEF: 842
(CO) 1	FLOOR CLEANOUT	--	--	--	--	--	--	--	CAST IRON CLEANOUT WITH THREADED ADJUSTABLE HOUSING, ROUND SCORATED AND NICKEL BRONZE COVER.	JOSAM / MODEL: 56000 WADE / MODEL: 6000Z ZURN / MODEL: Z-1400
(WC) 1	WALL CLEANOUT	--	--	--	--	--	--	--	CAST IRON CLEANOUT TEE WITH INLET/OUTLET SPIGOT AND THREADED BRASS PLUG, WITH STAINLESS STEEL ACCESS COVER.	JOSAM / MODEL: 56510 WADE / MODEL: 6560E ZURN / MODEL: Z-1446-BP
(HB) 1	HOSE BIBB	--	--	3/4"	--	--	--	2.5/1	NON-FREEZE WALL HYDRANT WITH INTEGRAL VACUUM BREAKER, BRASS CASING AND NICKEL BRONZE BOX.	JOSAM / MODEL: 71000 WADE / MODEL: 8600L ZURN / MODEL: Z-1300
(WC) 1	WATER CLOSET	4"	2"	1/2"	--	--	4	2	WHITE VITREOUS CHINA FLOOR MOUNTED FLUSHMETER TANK (PRESSURE ASSISTED) TYPE, ELONGATED BOWL, ADA COMPLIANT, 1 GPF, WITH 18" WIDE FRONT STAINLESS COVER, OLSENITE #55 OR EQUIVALENT - 1.6 GPM FLOWMETER TO MEASURE FLOW RATE OR EQUAL PROVIDE TANK WITH 2 SINKS. FLUSH COVERS SHALL BE RIGHT AND OR LEFT HAND AS REQUIRED TO CORRELATE WITH ACCESS FROM WIDEST SIDE OF STALL. VERIFY FLUSH SIDE REQUIREMENTS.	AM. STD. "CADET" / MODEL: 2467-100 KOHLER "HIGHLINE" / MODEL: K-3519 CRANE "ECONOMISER" / MODEL: 31886
(L) 1	LAVATORY	1-1/4"	2"	1/2"	--	1/2"	2	1.5	WHITE VITREOUS CHINA, WALL MOUNT, WITH CONCEALED ARMS SUPPORT, 4" CENTERS, WITH INTEGRAL BACK SPLASH, ACCESSIBLE. FLAT GRID STRAINER, BRAIDED WATER LINES AND 0.5 GPM AERATOR FAUCET. FURNISHED BY OWNER-INSTALLED BY G.C. SENSOR ACTIVATED, SLOAN NSF-235. VERIFY POWERED, ADA COMPLIANT. SEE 8/P6.0 FOR LAV SUPPORT DETAIL.	A.S. COMRADE / MODEL: 0124-131 CRANE "HARWICH" / MODEL: 1412V
(S) 1	HAND SINK	1-1/2"	2"	1/2"	--	1/2"	2		S-1: STAINLESS STEEL HAND SINK, WALL HUNG, INCLUDES A 6" GOOSENECK STAINLESS FAUCET, BRAIDED WATER LINES AND 0.5 GPM AERATOR.	--
(S) 2	MOP SINK	3"	4"	1/2"	1/2"	--	3	3	MOP SINK: AERO - 3MP-2121-6 W/ 48" HIGH S.S. LEFT SIDE AND BACK-SPLASH. FURNISHED BY OWNER, INSTALLED BY G.C.	--
(S) 3	3-COMP. SINK	INDIRECT	--	1/2"	--	--	-/-	3	SINK, FAUCET, 0.65 GPM NOZZLE, DRAIN, & GEN IV POWER SOAK STANDARD, GEN III IS AN OPTION FOR FRANCHISES.	--
(S)	PREP SINK	INDIRECT	--	1/2"	1/2"	--	--	2	SINK, FAUCET, 0.65 GPM NOZZLE, & DRAIN	--
(GI) 1	GREASE INTERCEPTOR	1"	--	--	--	--	--	--	JENSEN PRECAST 1,000 GALLON GREASE INTERCEPTOR WITH SAMPLE BOX FINAL SIZE TO BE DETERMINED BY LOCAL BUILDING AUTHORITY	--
(MV) 1	MIXING VALVE	--	--	1/2"	1/2"	--	--	--	THERMOSTATIC, 1.25 P516, 200VFF BRONZE BODY, STAINLESS STEEL PISTON LINER, CHECK VALVES SIZE PER PIPE CONNECTIONS.	POWERS SERIES LF-496 LAWLER SERIES 310 LEONARD SERIES 170
(WH) 1	WATER HEATER	--	--	3/4"	3/4"	--	--	--	NAVIEN NPE240A - GAS FIRED INSTANTANEOUS WATER HEATER, 97% THERMAL EFF. 199,900 BTUH INPUT THIS MODEL PROVIDED WITH BUILT-IN 0.5 GALLON BUFFER TANK AND HOT WATER RECIRCULATION PUMP.	NAVIEN NPE240A/ BTH 199,900
(WH) 2	WATER HEATER	--	--	3/4"	3/4"	--	--	--	NAVIEN NPE240A - GAS FIRED INSTANTANEOUS WATER HEATER, 97% THERMAL EFF. 199,900 BTUH INPUT THIS MODEL PROVIDED WITH BUILT-IN 0.5 GALLON BUFFER TANK AND HOT WATER RECIRCULATION PUMP.	NAVIEN NPE240A/ BTH 199,900
(GFP) 1	BACKFLOW PREVENTOR	--	--	VERIFY	--	--	--	--	REDUCED PRESSURE ZONE BACKFLOW PREVENTER, CAST BRONZE CONSTRUCTION WITH QUARTER TURN FULL-PORT BALL VALVES AND BRONZE STRAINER.	WATTS / MODEL: 009M20TS WILKINS / MODEL: 975XLS FEBCO / MODEL: 860
(SA) 1	SHOCK ARRESTOR	--	--	1/2"	--	--	--	--	STAINLESS STEEL CASING WITH STAINLESS STEEL BELOW, PRECHARGED WITH NITROGEN SIZED PER PDI-WH201	WADE / SHOKSTOP JOSAM / MODEL: 75000
(RO) 1	REVERSE OSMOSIS	INDIRECT	--	1/2"	--	--	--	--	REVERSE OSMOSIS FILTER SYSTEM BY OWNER SEE TO DETAIL 9/P6.0	ZURN / SHOKTROL WADE / SHOKSTOP JOSAM / MODEL: 75000 ZURN / SHOKTROL
(HD) 1	HUB DRAIN	3"	2"	--	--	--	2	--	CAST IRON DEEP SEAL P-TRAP WITH FUNNEL, NO-HUB OUTLET AND BRASS GASKETED CLEANOUT PLUG.	JOSAM / MODEL: 88213 WADE / MODEL: 2453EF ZURN / MODEL: Z-1019
(WS) 1	WATER SOFTENER	--	--	1-1/2"	--	--	--	--	3M CF8M1254 WATER SOFTENER	--

**PLUMBING SCHEDULE A**



PERMIT/CONSTRUCTION SET  
DATE: FEB. 28, 2018

CONTRACT DATE: XX-XX-XX  
BUILDING TYPE: EXPLORER LITE 40  
PLAN VERSION: DECEMBER 2017  
SITE NUMBER: XXX-XXX  
STORE NUMBER: XXXXX

TACO BELL  
101 MONTGOMERY CROSSING  
BISCOE, NC 27209



**PLUMBING SCHEDULES AND NOTES**

**P1.0**

PLOT DATE: