

8.1 - APPENDIX 1 - WATER SAVINGS CALCULATION TABLE

This Table Reflects Water-Use For A New Home Including Savings From High Efficiency Showerhead and Kitchen Faucet.					
Total Savings of 31%.					
Indoor Features	Standard Water-Use Including Kitchen Faucet	Water Sense Standard Use Including Miami-Dade Flow for Kitchen Faucet (gallons/day)	Water Sense Flows Plus Miami-Dade Criteria for Kitchen Faucet and Showerheads	Miami-Dade Expected Use Including Showerhead and Kitchen Faucet (gallons/day)	Miami-Dade Expected Water Savings Including Showerhead and Kitchen Faucet (gallons/day)
Toilets	1.6 gpd	6.16 ¹⁴	1.28 gpd	6.53	1.63 (20%)
Bathroom faucets	2.2 gpm	11.21 ¹⁵	1.5 gpm ¹⁶	10.64	0.57 (5%)
Kitchen faucets	2.5 gpm	7.36 *	1.5 gpm (Miami-Dade) ¹⁷	4.2 ¹⁸	2.8 (40%)
Showerheads	2.5 gpm	10.33 ¹⁷	1.5 gpm (Miami-Dade) ¹⁹	7.22 ²⁰	4.85 (40%) ²¹
Hot water delivery systems	~10 gallons per day per household wasted ²²	3.85 ²³	Assume 10% water savings for insulation and between 15-30% water savings for improved design ²⁴	2.89	0.96 (25%)
Dishwashers	8.6 gallons per load ²⁵ (6 gallons per cycle) ²⁶	1.04	5.8 gallons per load (4 gallons per cycle) ²⁷	0.69	0.35 (33%)
Clothes washers	39.6 gallons per load ²⁸ (12 gallons per cycle per cubic foot) ²⁹	15.35	24 gallons per load (8 gallons per cycle per cubic foot) ³⁰	8.44	6.91 (45%)
Total Indoor		57.30		40.66	18.07 (31% savings)

¹⁴Assumes 5.1 flushes/day/person per Mayer, P. DeDro, W. et al 2000 and 2003.
¹⁵Assumes flow of 1.2 gpm and average use of 6.59 minutes/person/day per Mayer, P. DeDro, W. et al 2000 and 2003.
¹⁶Assumes flow of .97 gpm and average use of 10.37 minutes/person/day per Mayer, P. DeDro, W. et al 2000 and 2003.
¹⁷Assumes flow of 1.5 gpm, average use of 1.58 min/showers/person, and .58 showers/person/day per Mayer, P. DeDro, W. et al 2000 and 2003.
¹⁸Kein, Gary Hot Water Distribution Considerations for BMPs. Presentation made on August 21, 2008 to the California Urban Water Conservation Council.
¹⁹Assumes 2.8 persons per household and U.S. Department of Housing and Urban Development 2005.
²⁰Assumes 1.5 min. of Demand Controlled Pumping. Home Energy, September/October 2006.
²¹Assumes 8.84 gallons/head and 17 loads/person per Mayer, P. DeDro, W. et al 2000, 2003, and 2004.
²²ENERGY STAR Frequently Asked Questions on Dishwashers. energystar.ca.gov/energy_star.cdp/cpl/induser/tot_adp.php?y_faq=2538&no_created... accessed 2/15/08.
²³Idid.
²⁴Assumes 39.36 gallons/head and .20 loads/person per Mayer, P. DeDro, W. et al 2000, 2003, and 2004.
²⁵Assumes 24.15 gallons/head and .20 loads/person per Mayer, P. DeDro, W. et al 2000, 2003, and 2004.
²⁶WaterSense savings for a new home is 21%. Miami-Dade savings for a new home are calculated at 31%, this is possible by including showerheads and kitchen faucets at the water saving rate of 1.5 gpm per minute respectively. WaterSense has not yet certified showerheads or kitchen faucets.
²⁷From the Environmental Protection Agency's "Water Efficiency Single-Family New Home Specification Supporting Statement" May 14, 2008, p. 14.
²⁸Mayer, Peter, private communication, 2005. Derived by the subtraction of laundry faucets (3.4 gpcd) and seldom-used utility sink faucets.
²⁹Idid, based on Miami-Dade County Criteria.
³⁰Assumes flow of 1.58 PM based on Miami-Dade County criteria and average use of 2.8 min/person/day based on standard use per capita of 7 gal/person/day and a standard flow of 2.58 PM.
³¹Assumes flow of 1.58 PM based on Miami-Dade County criteria and an average use per person of 4.85 min/person/day based on data in footnote 22.
³²Miami-Dade utilized the Methodology used by WaterSense to calculate the saving values for Showerheads and Kitchen Faucets. 92/08 Code of Miami-Dade County.

FIXTURE UNITS PER FIXTURE

IDENT. SYMBOL	TYPE OF FIXTURE	FIXTURE UNITS	FIXTURE UNITS TOTAL	REMARKS
W.C.	WATER CLOSET	4	8	NEW
SHOWER	SHOWER	2	4	
JACUZZI				
LAV.	LAVATORY	1	3	
W	WASHER	4	4	
TOTAL			21	

PLUMBING FIXTURE SCHEDULE

IDENT. SYMBOL	TYPE OF FIXTURE	No. REQ.	MANUFACTURER AND CATALOG No.	PIPE CONNECTION SIZES CW HW S & W VENT TRAP	REMARKS
WC	WATER CLOSET	1	AS PER OWNER REQUEST	1/2" 1/2" 3" 3" -	
SH	SHOWER	1		1/2" 1/2" 2" 2" 2"	PROVIDE W. MACH. BOX
JACUZZI					
LAV.	LAVATORY	1		1/2" 1/2" 1 1/2" 2" 1 1/2"	
W.	WASHER	1		1/2" 1/2" 2" 2" 2"	PROVIDE W. MACH. BOX

WATER LEGEND

COLD WATER ———
HOT WATER ———

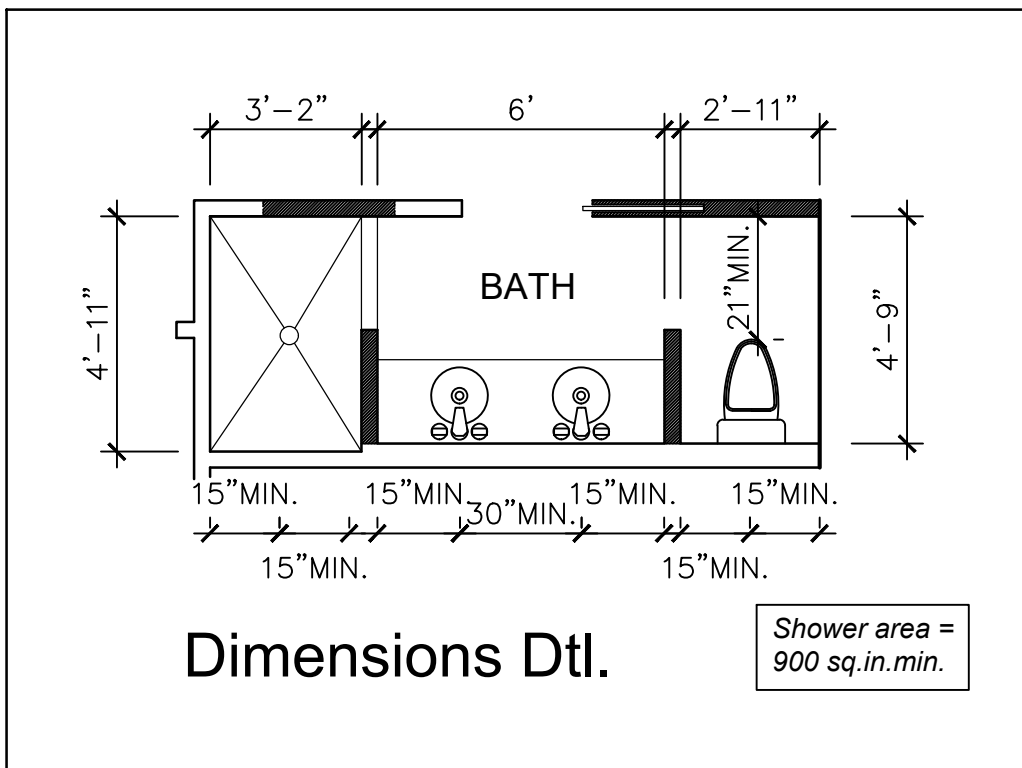
DRAINAGE LEGEND

EXIST. SEWER ———
NEW SEWER ———

3" @ 1/8" SLOPE
2" @ 1/4" SLOPE
1-1/2" @ 1/4" SLOPE

SCOPE OF PLUMBING WORK

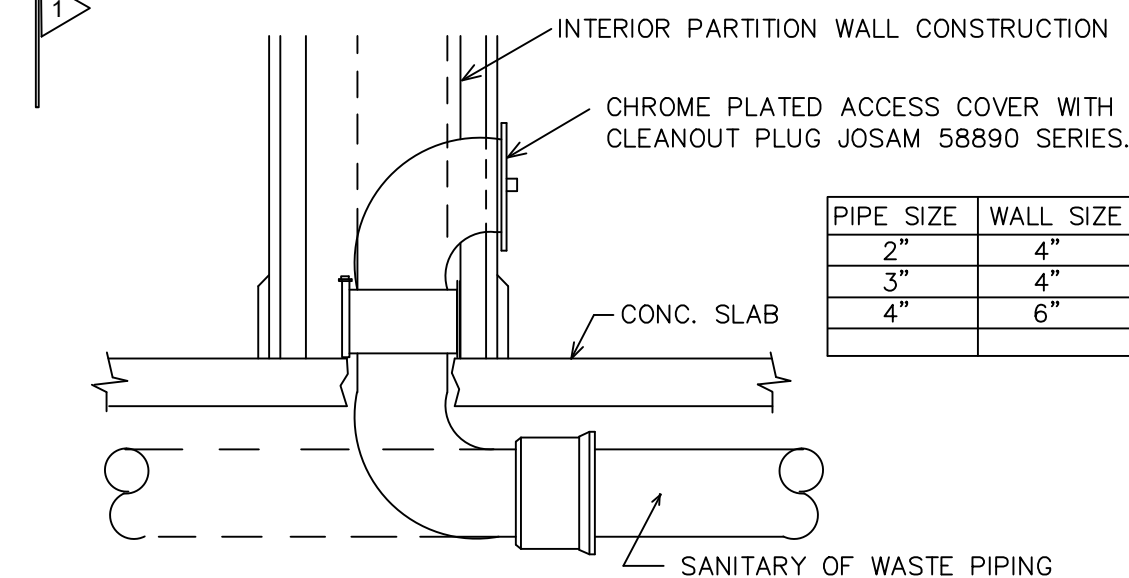
- PROVIDE A DOUBLE SINK AT MASTER BATHROOM AND RELOCATE TOILET & NEW BIGGER SHOWER REPLACE ALL CAST IRON PIPES BY NEW PVC SCH.40
- AT INTERMEDIATE BATHROOM REPLACE EXISTING BATHTUB BY A NEW SHOWER. REPLACE ALL CAST IRON PIPES BY NEW PVC SCH.40



NOTE:
THERE ARE NO PERTINENT FIXTURES ON ADJACENT PROPERTIES AND ACROSS THE STREET THAT MAY AFFECT THE ONSITE SEWAGE SYSTEM INSTALLATION

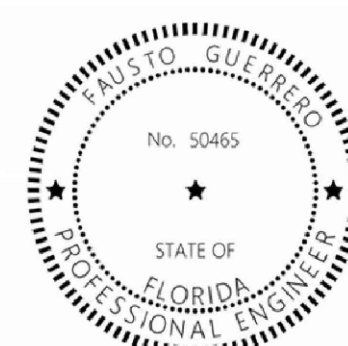
EXISTING SEPTIC TANK

EXISTING DRAINFIELD



wall cleanout detail

N.T.S.



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FAUSTO GUERRERO

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SEAL

CONSULTANT:

PROJ. MANAGER:
PEDRO PUERTO/C.B.S.
305-262-8075

PROJECT INFORMATION

ADDITION & INT. REMODELING

FOR RESIDENCE OF

VANESSA SHAPIRO

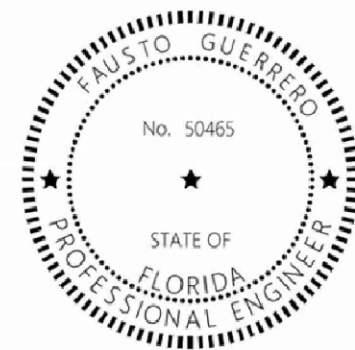
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REVISION: DATE: DESCRIPTION:
07-17-25

DATE: 05-02-25
JOB NUMBER: 25-10

TITLE:

P-1



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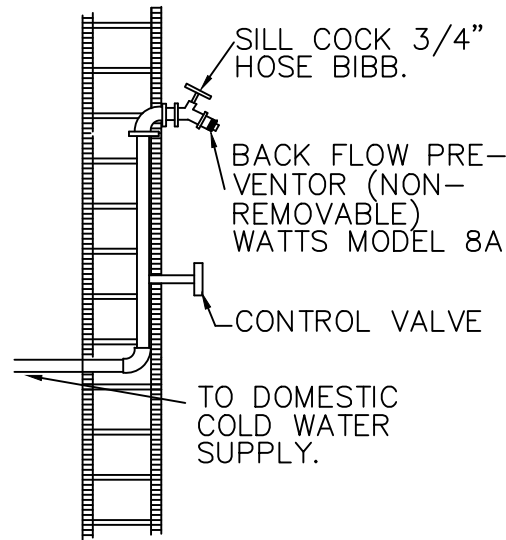
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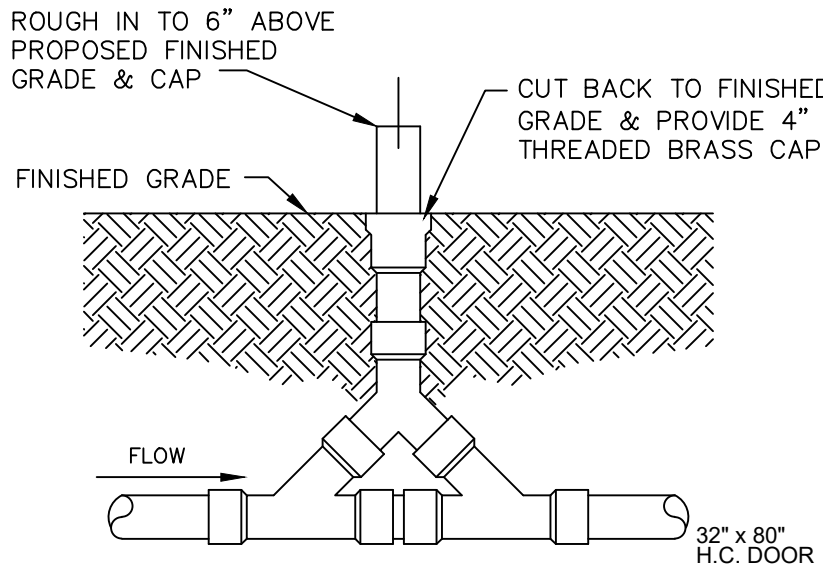
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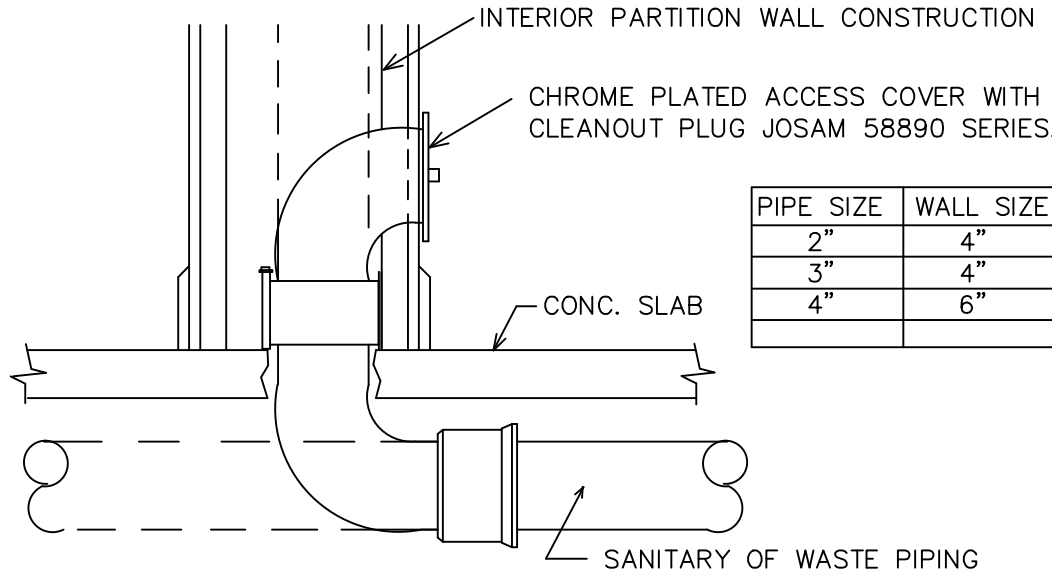
hose bibb detail

N.T.S.



2-Way Clean -Out Detail

N.T.S.



wall cleanout detail

N.T.S.

NOTE: PROVIDE ANTI-SCALD VALVES
AT SHOWER. PRESSURE CONTROL
AS PER FBC P2708.3

PLUMBING NOTES:

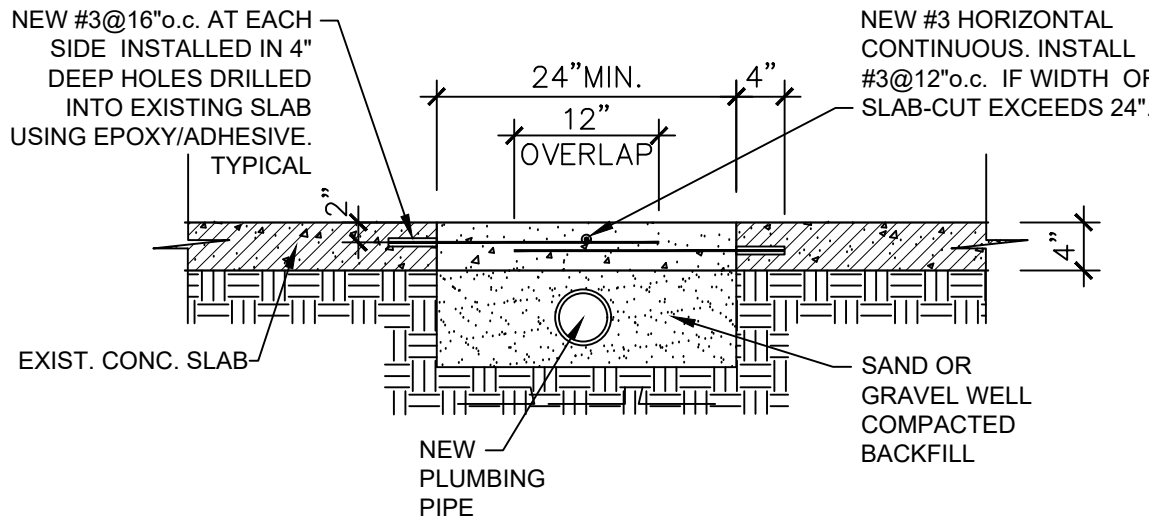
- ALL PLUMBING SHALL BE DONE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, STATE AND LOCAL ORDINANCES.
 - FIXTURES ARE TO COMPLY WITH FBC
 - PROVIDE CLEANOUTS AS PER FBC
- PLUMBING CONTRACTOR SHALL PAY ALL FEES, INSPECTION AND CONNECTION CHARGES REQUIRED.
- PLUMBING CONTRACTOR SHALL GUARANTEE ALL WORK FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE.
- SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL OF ALL EQUIPMENT, MATERIALS AND LAYOUTS PRIOR TO INSTALLATION.
- OFFSET PIPING AS REQUIRED TO CLEAR BUILDING STRUCTURE, DUCTWORK, ETC. AS REQUIRED BY FIELD CONDITIONS. COORDINATE WITH ALL EXISTING AND NEW WORK.
- PLUMBING CONTRACTOR SHALL VERIFY ALL SPACE CONDITIONS AND DIMENSIONS AT JOB SITE PRIOR TO FABRICATION AND INSTALLATION OF MATERIALS AND EQUIPMENT.
- COORDINATE WORK WITH OTHER TRADES.
- FURNISH AND INSTALL PLUMBING FIXTURES AS SPECIFIED IN FIXTURE SCHEDULE, OR EQUAL.
- EACH PLUMBING FIXTURE SHALL BE PROVIDED WITH AIR CHAMBERS AS PER F.B.C.
- PROVIDE SHUT OFF VALVE FOR EACH FIXTURE.
- WHEREVER DISSIMILAR METALS ARE TO BE JOINED, A DIELECTRIC FITTING SHALL BE PROVIDED TO CONNECT BOTH TYPES OF PIPES.
- PROVIDE PIPING AS FOLLOWS:
DOMESTIC COLD/HOT WATER PIPING AND EWH P&T RELIEF DRAIN PIPE:
COPPER TUBE TYPE L OR M ABOVEGROUND WITH SOLDERED JOINTS, MIN. 125 LB. WOG BRONZE VALVES.

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				CW	HW	S & W	VENT	TRAP	
WC	WATER CLOSET	1	AS PER OWNER REQUEST	1/2"	1/2"	3"	3"	-	PROVIDE W. MACH. BOX
SH	SHOWER	1		1/2"	1/2"	2"	2"	2"	
JACUZZI									
LAV.	LAVATORY	1		1/2"	1/2"	1 1/2"	2"	1 1/2"	
W.	WASHER	1		1/2"	1/2"	2"	2"	2"	PROVIDE W. MACH. BOX



TYPICAL SLAB REPAIRS AT PLUMBING TRENCH
SCALE: 3/4" = 1'- 0"

- NOTES:
- CONCRETE COMPRESSIVE STRENGTH = 3,000 PSI
 - REINFORCING TO BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
 - CLEAN AND ROUGHEN CONTACT THE SURFACE WITH NEW CONCRETE AND PROVIDE BONDING AGENT. TYPICAL.