

Harnett County Department of Public Health Improvement Permit

A building permit cannot be issued with only an Improvement Permit

ISSUED TO: KB Homes Raleigh-Durham Inc. PROPERTY LOCATION: 186 Rawls Meadow Ln. (Rawls Church Rd
 SUBDIVISION Mason Pointe LOT # 57
 NEW REPAIR EXPANSION Site Improvements required prior to Construction Authorization Issuance:
 Type of Structure: Existing SFD
 Proposed Wastewater System Type: 25% Reduction System
 Projected Daily Flow: 480 GPD
 Number of bedrooms: 5 Number of Occupants: 10 max
 Basement Yes No
 Pump Required: Yes No May be required based on final location and elevations of facilities
 Type of Water Supply: Community Public Well Distance from well NA feet Permit valid for: Five years
 Permit conditions: No expiration
Session Laws 2013-413 and 2014-120: Flow reduction - 480gpd for 5-bedroom residence

Authorized State Agent: [Signature] Date: 10/13/2020 SEE ATTACHED SITE SKETCH
 The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This site is subject to revocation if the site plan, plat, or the intended use changes. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit.

Construction Authorization

(Required for Building Permit)

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by references into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

ISSUED TO: KB Homes Raleigh-Durham Inc. PROPERTY LOCATION: 186 Rawls Meadow Ln. (Rawls Church I
 SUBDIVISION Mason Pointe LOT # 57
 Facility Type: Existing SFD New Expansion Repair
 Basement? Yes No Basement Fixtures? Yes No
 Type of Wastewater System** 25% Reduction System (Initial) Wastewater Flow: 480 GPD
 (See note below, if applicable
25% Reduction System (Repair)
 Installation Requirements/Conditions
 Septic Tank Size 1250 (Min) gallons Exact length of each trench NA feet Trench Spacing: NA Feet on Center
 Pump Tank Size Ext. 412 gallons Trenches shall be installed on contour at a Soil Cover: NA inches
 Maximum Trench Depth of: NA inches (Maximum soil cover shall not exceed
 (Trench bottoms shall be level to +/-1/4" 36" above the trench bottom)
 in all directions)
 Pump Requirements: _____ ft. TDH vs. _____ GPM Aggregate Depth: NA inches below pipe
NA inches above pipe
NA inches total
 Conditions: Session Laws 2013-413 and 2014-120
Flow reduction - 480gpd for 5-bedroom residence

**WATER LINES (INCLUDING IRRIGATION) MUST BE 10FT. FROM ANY PART OF SEPTIC SYSTEM OR REPAIR AREA.
 NO UTILITIES ALLOWED IN INITIAL OR REPAIR DRAIN FIELD AREA.**

**If applicable: I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.
 Owner/Legal Representative Signature: _____ Date: _____

This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be transferred when there is a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit. SEE ATTACHED SITE SKETCH

Authorized State Agent: [Signature] Date: 10/13/2020
Andrew Curran Construction Authorization Expiration Date: 10/13/2025

Harnett County Department of Public Health Site Sketch

Property Location: 186 Rawls Meadow Ln (Rawls Church Road - SR 1415)

Issued To: KB Home Raleigh-Durham Inc.

Subdivision Mason Pointe

Lot # 57

Authorized State Agent:

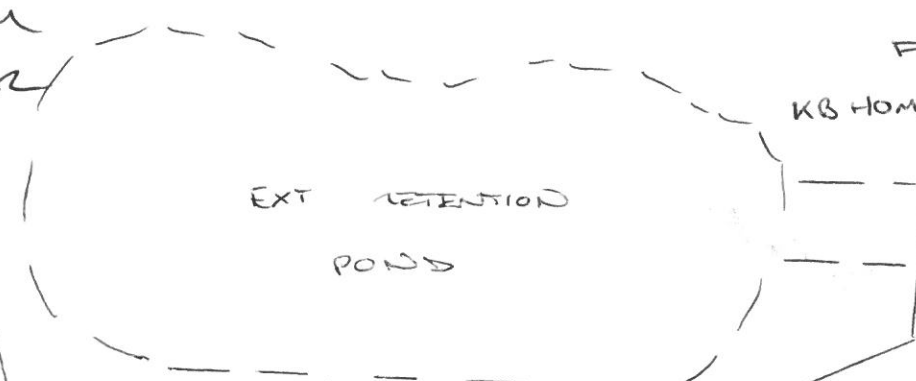
[Signature]
ANDREW CORBIN

Date: 10/13/2020

* CUTSHEETS OF SEPTIC *
TANKS AND PUMP TANKS
REQUIRED FROM
MANUFACTURER

SEPTIC TANK 12
AREA (0040)

* SEPTIC PROPOSAL BY *
CENTRAL CAROLINA
SOIL CONSULTING, PLLC



OPTIONS :

- 1) ABANDON EXT 1000gal concrete SEPTIC TANK, REPLACE W/ 1250gal CONCRETE SEPTIC TANK
- 2) ABANDON EXT 1000gal concrete SEPTIC TANK, REPLACE W/ 1250gal PLASTIC SEPTIC TANK [NO TANK THICKNESS]
- 3) ADD 1000gal concrete or plastic SEPTIC TANK TO EXT concrete TANK TO MEET 1250+ gal CAPACITY



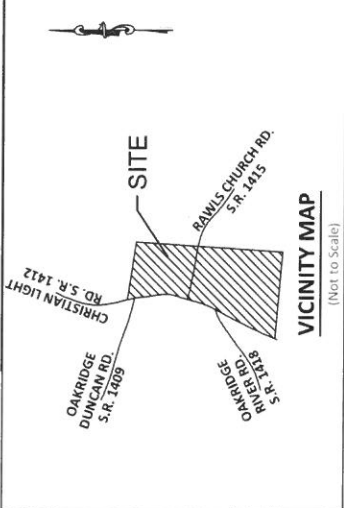
SESSION LAW 2014-120
SECTION 53:

NEITHER THE STATE NOR ANY LOCAL HEALTH DEPARTMENT SHALL BE LIABLE FOR ANY DAMAGES CAUSED BY A SYSTEM APPROVED OR PERMITTED PURSUANT TO THIS SECTION [DUE TO FLOW REDUCTION]

SPECIFIED LOWER-FLOW FIXTURES, LOW FLOW TECHNOLOGIES, OR REPLACEMENT W/ EQUAL OR LESS FLOW RATES ARE TO REMAIN IN USE FOR THE LIFE OF THE SEPTIC SYSTEM

This drawing is for illustrative purposes only. System installation must meet all pertinent laws, rules, and regulations.

RAWLS MEADOW LN



I, STEVEN P. CARSON, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY DIRECT SUPERVISION FROM A SURVEY MADE UNDER MY SUPERVISION (PLAT BOOK REFERRED IN TITLE BLOCK); THAT THE BOUNDARIES NOT SURVEYED ARE IDENTIFIED AS DRAWN FROM INFORMATION LISTED UNDER REFERENCE; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARD OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA - 4752 DATED:

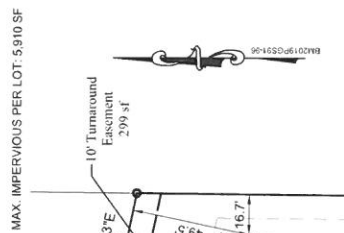
LEGEND
 PO = PORCH
 CP = COVERED PATIO
 SW = SIDEWALK
 DW = CONG DRIVEWAY
 SP = SCREENED PORCH
 P = CONCRETE PATIO
 ○ = COMPUTED POINT
 ● = IRON PIPE SET
 ○ = DRILL HOLE FOUND
 ○ = WATER METER
 ○ = CLEAN OUT
 ○ = AIR CONDITIONER
 ○ = CABLE BOX
 ○ = TELEPHONE PEDESTAL
 CB = CATCH BASIN
 G = GAS METER
 E = ELECTRIC METER
 YI = YARD INLET

This map is of an existing parcel of land and is only intended for the parties and purposes shown. This map not for recordation. No title report provided.

FINAL SURVEY
 FOR
KB HOMES

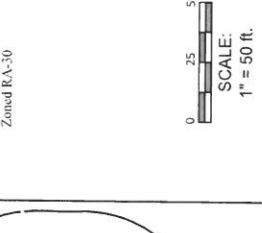
MASON POINTE - PHASE 1B - LOT 57
 186 RAWLS MEADOW LANE, FUQUAY-VARINA, NC
 HECTORS CREEK TOWNSHIP, HARNETT COUNTY
 DATE: 1/2/20 DRAWN BY: BMN CHECKED BY: SPC
 REFERENCE: BK 2019, PGS. 91-98 BCS# 190102 SCALE: 1" = 50'

BUILDING SETBACKS
 FRONT 30'
 REAR 20'
 SIDE 10'
 SIDE CORNER 20'
 MAX HEIGHT 35'
 MAX IMPERVIOUS PER LOT: 5.910 SF



NOTES:

- THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
- THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
- PROPERTY LINES SHOWN WERE TAKEN FROM EXISTING FIELD EVIDENCE, EXISTING DEEDS AND/OR PLATS OF PUBLIC RECORD, AND INFORMATION SUPPLIED TO THE SURVEYOR BY THE CLIENT.
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
- THIS MAP IS NOT FOR RECORDATION AND SHOULD BE REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
- THE BASIS OF NORTH AND ALL EASEMENTS, RIGHTS-OF-WAYS, BUFFERS, SETBACKS AND ADJOINERS, ETC. REFERENCED IN TITLE BLOCK.
- NO INVESTIGATION INTO THE EXISTENCE OF JURISDICTIONAL WETLANDS OR RIPARIAN BUFFERS PERFORMED BY THIS FIRM.
- SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
- THE PROPERTY LIES IN ZONE "X" PER NATIONAL FLOOD INSURANCE PROGRAM F.I.R.M. MAP #3720064400, DATED OCTOBER 3, 2006.
- ZONING IS: RA-30
- PROPERTY OWNER: KB HOME RALEIGH-DURHAM INC.
 4506 S. MARIAN BLVD. #100
 DURHAM, NC 27703



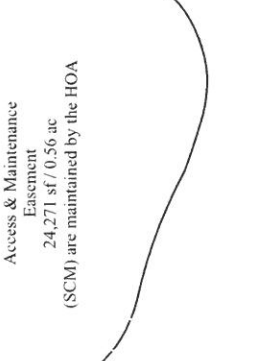
Curve #	Length	Radius	Direction	Chord
C12	29.64	325.00	S75°45'36"E	29.63



LOT INFORMATION:
 PIN: 0644-38-048-000
 TOTAL LOT AREA = 1.54 AC = 66,939 SF
 HOUSE = 1,974 SF
 PORCH = 56 SF
 SIDEWALK = 52 SF
 DRIVEWAY = 838 SF
 AC PAD = 9 SF
 COVERED PORCH = 252 SF
 PATIO = 233 SF
 EXISTING IMPERVIOUS = 3,364 SF
 PERCENT IMPERVIOUS = 5.0%

Gary L. & Martha R. Adkins
 Pin: 0644-48-22-10
 Rod: 0059489
 DB: 1157, PG: 760
 Zoned: KA-30

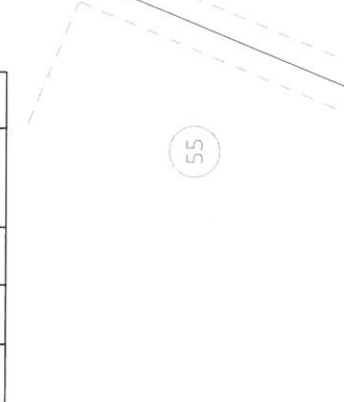
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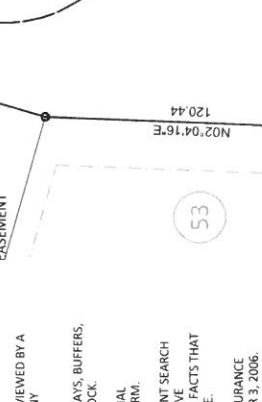
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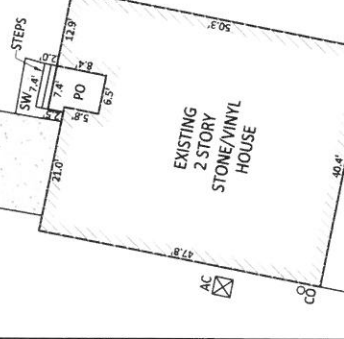
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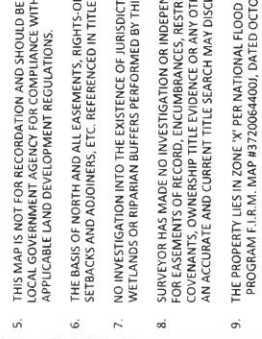
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 DURHAM, NC 27703

HTE# SFD1905-0037

Harnett County Department of Public Health

25929

PERMIT # NA

Operation Permit

521412

New Installation Septic Tank Nitrification Line Repair Expansion

PROPERTY LOCATION: 186 Pearly Meadows Ln (Christen Ln Rd)

Name: (owner) KB Homes Carolina SUBDIVISION Mason Pointe LOT # 57

System Installer: Thornton Plumbing Registration # _____

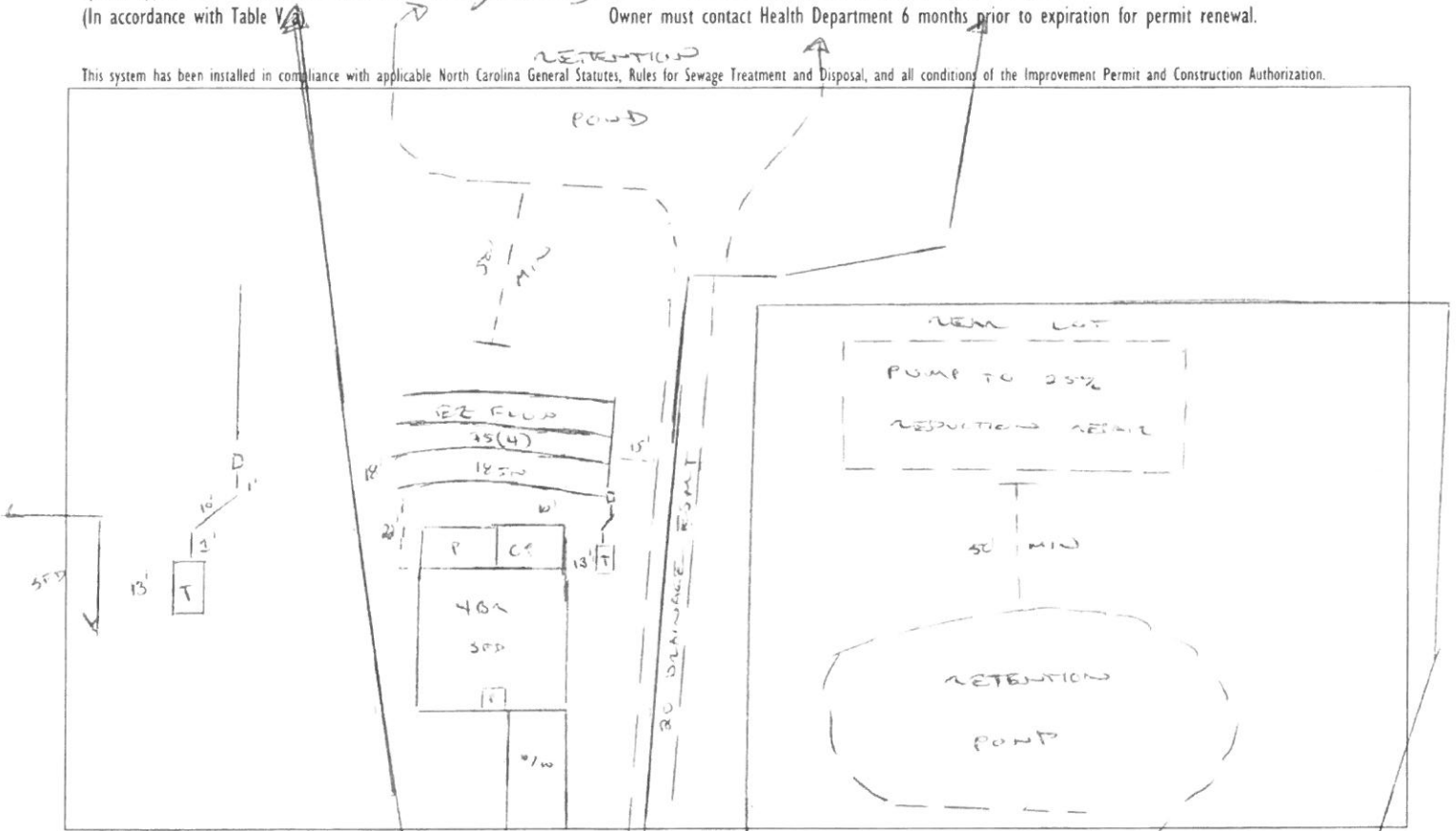
Basement with plumbing: Garage Number of Bedrooms 4

Type of Water Supply: Community Public Well Distance from well NA feet

System Type: 25% Reduction Sys. IIIg Types V and VI Systems expire in 5 years.

(In accordance with Table V) Owner must contact Health Department 6 months prior to expiration for permit renewal.

This system has been installed in compliance with applicable North Carolina General Statutes, Rules for Sewage Treatment and Disposal, and all conditions of the Improvement Permit and Construction Authorization.



PERMIT CONDITIONS:

- I. Performance: System shall perform in accordance with Rule .1961.
- II. Monitoring: As required by Rule .1961.
- III. Maintenance: As required by Rule .1961. Other: _____
Subsurface system operator required? Yes No
If yes, see attached sheet for additional operation conditions, maintenance and reporting.
- IV. Operation: _____
- V. Other: _____

D-Box Pump Alarm H2O Line PWR Line

Following are the specifications for the sewage disposal system on the above captioned property.

Type of system: Conventional Other EZ FLOW IIIg Septic Tank: 1000 gallons Pump Tank: _____ gallons
 Subsurface No. of exact length width of depth of
 Drainage Field ditches 4 of each ditch 75 feet ditches 3 feet ditches 18 inches
 French Drain Required: _____ Linear feet

Authorized State Agent

[Handwritten Signature]

Date

12/02/2019



Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, NC 27587
919-569-6704/fax 919-569-6703

September 23, 2020

Harnett County Staff
Harnett County Environmental Health Department
900 S 9th St
Lillington, NC

RE: Flow Reduction Certification and As-built

Mason Pointe Lot 57
186 Rawls Meadow Lane, Fuquay Varina, Harnett County, North Carolina
Project #:2031

Dear Harnett County Staff:

Central Carolina Soil Consulting (CCSC) in conjunction with Bateman Civil Survey Company are proposing wastewater daily flow calculations for a single-family home located at Mason Pointe Lot 57 pursuant to session law 2014-120 and 2013-413. The home has **5** bedrooms and under the current flow calculations provided in the state rules would have a daily flow of **600** gallons per day. That would be based on 120 gallons per bedroom.

Household flow rates from the 15 NCAC 18A section of the state rules relied on fixture flow rates from 1982, and calculated the flows for common fixtures to established average flows for the purpose of calculating household daily flows and septic system based on those flows. The data for the historic fixture flows was taken from the EPA 2002 Onsite Wastewater Treatment Systems Manual.

The attached spreadsheet contains the flow reducing fixtures that KB Homes installed in the home. The table includes flow rates for the existing flow reducing fixtures as well as flow rates from the state rules and the percentage of water savings. On average the proposed fixtures provide a 39% savings.

We are requesting a reduction of **20%** for the use of low flow fixtures. This will provide an adjusted daily flow of 96 gallons per bedroom per day and a total flow of **480** gallons per day for the proposed 5-bedroom house. Central Carolina Soil Consulting, PLLC (CCSC) employees in conjunction with Bateman Civil Survey Company, reviewed fixture receipts from Thornton's Plumbing, Inc. that were installed in the house for KB Homes.

These fixtures or equivalent flow fixtures are required for the life of the home. Any change in fixtures that results in a change of the flow rates must be approved by an Engineer and Harnett County Environmental Health Services. In addition, the existing 1000-gallon septic tank shall be replaced with a 1250-gallon septic tank to comply with septic tank sizing for a 5-bedroom home.

With respect to increased effluent strength, we do not believe that the effluent strength will increase with the addition of a bedroom. The fixtures that are currently installed in the home are standard low flow fixtures that are installed in all of the homes built by KB Homes. These fixtures or fixtures with similar flow rates are used in houses all over the country and have been used for several decades. The additional bedroom will increase the volume of effluent, but will not change the strength of the effluent and should be consistent with levels required for residential waste in 15A NCAC 18A .1970 b, table 8.

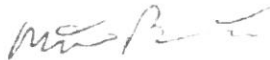
We have reviewed the design and installation of the system located at 186 Rawls Meadow Lane and are satisfied that the drain field is installed per the original design and are capable of handling the additional bedroom with the installation of the proposed 1250-gallon septic tank. When the new 1250 gallon septic tank is installed we will certify the installation separately.

Attached are email communications with the home owners and representatives from KB Homes indicating their knowledge of Session Law 2014-120 Section 53.

If you need further information or have any questions please contact Matt Burdette at (919) 422-2827 or Tom Speight at 919-577-1080 2524 Reliance Ave, Apex NC 27539

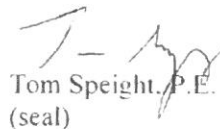
Sincerely,

Central Carolina Soil Consulting, PLLC



Matt Burdette
Environmental Specialist

Bateman Civil Survey Company
NCBELS# C-2378.



Tom Speight, P.E.
(seal)



Matt Burdette

From: Cavalear, Rachel <rcavalear@kbhome.com>
Sent: Wednesday, September 09, 2020 1:42 PM
To: Matt Burdette
Subject: FW: Mason Pointe Lot 57 - 186 Rawls Meadow Lane Fuquay Varina, NC 27526 - Septic Tank/Flow Reduction

Hi Matt –

See below from Lot 57 acknowledging the Flow Reduction

Thank you
Rachel

From: Kagen Cole <kagencole@gmail.com>
Sent: Wednesday, September 9, 2020 1:42 PM
To: Customer Service - Raleigh <RalCustomerService@kbhome.com>
Subject: Re: Mason Pointe Lot 57 - 186 Rawls Meadow Lane Fuquay Varina, NC 27526 - Septic Tank/Flow Reduction

EXTERNAL MAIL DANGER: Links to external domains unless you recognize the sender of the email. Do not click on links or open attachments unless you recognize the sender of the email.

I can confirm that I have been made aware of this. Please proceed with the changes discussed.

Thank you so much for your help and your close attention to this matter!

Have a great day!

-Kagen Cole
919.285.8615

On Wed, Sep 9, 2020 at 11:06 AM Customer Service - Raleigh <RalCustomerService@kbhome.com> wrote:

Hello Kagen,

Per our earlier conversation please confirm I have made you aware of the following so that we can proceed with approval from the state for the flow reduction and septic tank size change.

This email is to confirm you have been made aware that KB Home is updating your septic permit from a 4 bedroom to a 5 bedroom to be consistent with how your home was built via a Flow Reduction submitted to the County and the State for review and approval. Per the state please acknowledge you have also been made aware of Session Law 2014-120 Section 53 which states "Neither the State nor any local health department shall be liable for any damages caused by a system approved or permitted pursuant to this section".

Once we receive your approval we can proceed with the process.

Let me know if you have any further questions or call 919 768 7995

Thank you
Rachel Cavalear



888-KB-HOMES
kbhome.com

Consider the environment before printing this email.

Mason Pointe Lot 57 AS BUILT

Item	Gal/min. or flush	Number of Fixtures	Base Flow From 1982	Percent Water Savings
Optional Bath				
Tub/Shower Trim	1.8 gal/minute	1	5.5 gal/minute	67%
Lavatory Faucet	1.5 gal/minute	1	3.0 gal/minute	50%
Master Bath				
Lavatory Faucet	1.5 gal/minute	2	3.0 gal/minute	50%
Shower Trim	1.8 gal/minute	1	5.5 gal/minute	67%
Kitchen				
Kitchen Sink Faucet	1.5 gal/minute	1	3.0 gal/minute	50%
Bath 2				
Tub/Shower Trim	1.8 gal/minute	1	5.5 gal/minute	67%
Lavatory Faucet	1.5 gal/minute	1	3.0 gal/minute	50%
Laundry				
Laundry Sink Faucet	1.2 gal/minute	1	3.0 gal/minute	60%
Toilets				
Optional Master Bath 2	1.28 gal./flush	3	3.5 gal/minute	63%

FIXTURES	TOILET	FAUCET	SHOWER	CLOTHES WASHER	LEAK	BATH	OTHER	DISHWASHER	TOTALS
PERCENT OF HOUSE HOLD WATER USE	24%	20%	20%	16%	12%	3%	3%	2%	100%
GALLONS PER DAY (600 BASE)	144	120	120	96	72	18	18	12	600
PERCENT OF SAVINGS FROM WATER SAVING FIXTURES	63%	52% avg	67%	0	0%	0%	0%	0%	39%
ADJUSTED FLOW (GALLONS)	53	58	40	96	72	18	18	12	367



Buy it for looks. Buy it for life.®

Specifications

There is more than 1 version of this model.
Page down to identify the version you have.

DESCRIPTION

- Metal construction with various finishes identified by suffix
- 1/2" IPS connections
- Includes metal pop-up waste assembly

OPERATION

- Lever style handles
- Maximum handle(s) rotation angle is 90° to full on
- Rotate hot side counterclockwise to open (clockwise to close)
- Rotate cold side clockwise to open (counterclockwise to close)

FLOW

- Water usage is limited to these maximum flow rates as indicated by the corresponding product markings
 - 1.2 gpm max (4.5L/min) at 60 psi
 - 1.5 gpm max (5.7L/min) at 60 psi

CARTRIDGE

- 1234 cartridge design
- Nonmetallic and stainless steel material

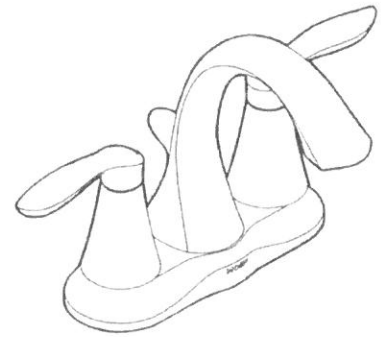
STANDARDS

- Third party certified to WaterSense®, ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein
- Certified to NSF 61/9 & 372
- Products marked with 1.2 gpm are compliant with California water efficiency regulations
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act

- **ADA**  for lever handles

WARRANTY

- Lifetime limited warranty against leaks, drips and finish defects to the original consumer purchaser
- 5 year warranty if used in commercial installations



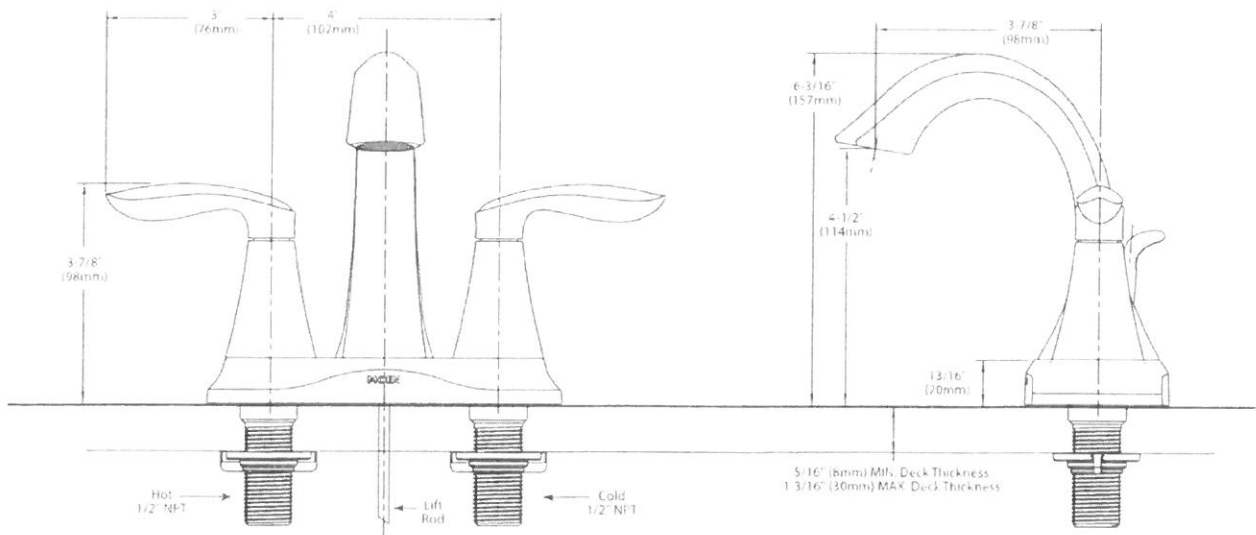
EVA™ 4" Lavatory Faucet with Metal Waste Assembly

Models: 6410 series

Bulk Models: 66410, 66411*
(Bulk packed 6 per carton),
50/50 waste assembly

*Includes hot (red) and cold (blue) indicators.

**NOTE: THIS FAUCET IS DESIGNED TO BE
INSTALLED THRU 3 HOLES, 1" MIN. DIA.**



CRITICAL DIMENSIONS

(DO NOT SCALE)



Buy it for looks. Buy it for life.®

Specifications

DESCRIPTION

- Metal construction with various finishes identified by suffix
- 1/2" IPS connections
- Includes metal pop-up waste assembly

OPERATION

- Lever style handles
- Maximum handle(s) rotation angle is 90° to full on
- Rotate hot side counterclockwise to open (clockwise to close)
- Rotate cold side clockwise to open (counterclockwise to close)

FLOW

- Flow is limited to 1.5 gpm max (5.7L/min) at 60 psi, for products made before October 2008 flow is limited to 2.2 gpm max (8.3 L/min)

CARTRIDGE

- 1224 cartridge design
- Nonmetallic and stainless steel material

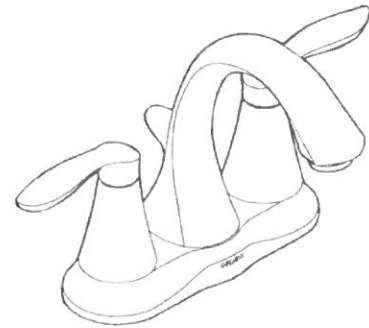
STANDARDS

- Third party certified to WaterSense®, ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein
- Certified to NSF 61/9 & 372
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act

- **ADA**  for lever handles

WARRANTY

- Lifetime limited warranty against leaks, drips and finish defects to the original consumer purchaser
- 5 year warranty if used in commercial installations



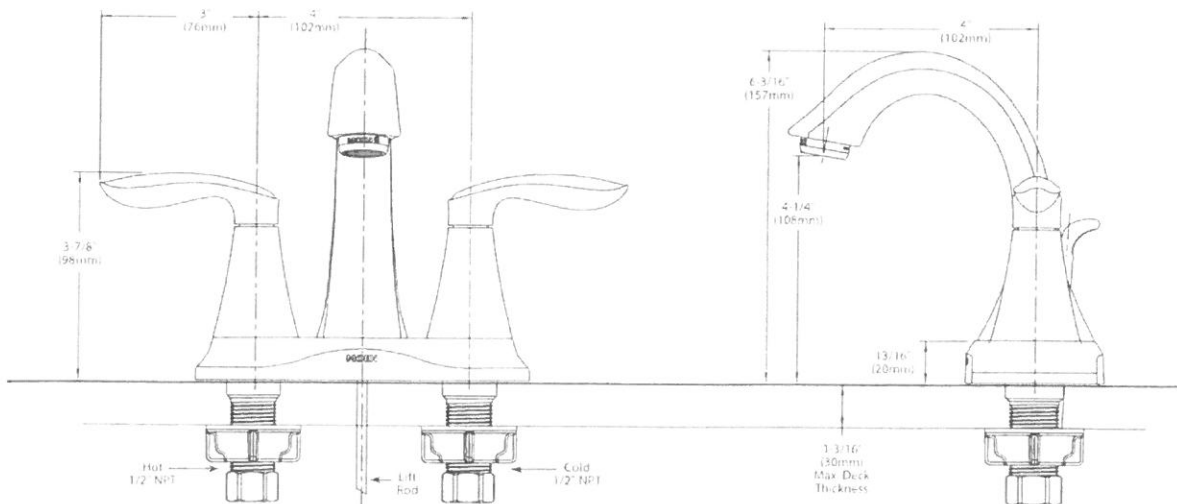
EVA™
4" Lavatory Faucet
with Metal Waste Assembly

Models: 6410 series

Bulk Models: 66410, 66411*
(Bulk packed 6 per carton),
50/50 waste assembly

*Includes hot (red) and cold (blue) indicators.

NOTE: THIS FAUCET IS DESIGNED TO BE
INSTALLED THRU 3 HOLES, 1" MIN. DIA.



CRITICAL DIMENSIONS

(DO NOT SCALE)



Buy it for looks. Buy it for life.®

Specifications

DESCRIPTION

- Metal construction with various finishes identified by suffix
- Includes showerhead, arm, flange and diverter spout

OPERATION

- Handle operates counterclockwise through a 270° arc with off at 6 o'clock and maximum hot at the 9 o'clock position. Shut off in clockwise direction
- Adjustable temperature limit stop to control maximum hot water temperature
- Pressure balancing mechanism maintains selected discharge temperature to ± 3°

FLOW

- Showerhead is limited to 2.5 gpm (9.5 L/min) at 80 psi
- EP suffix models are limited to 1.75 gpm (6.6 L/min) at 80 psi
- NH suffix models contain no showerhead

CARTRIDGE

- 1222 cartridge design
- Nonmetallic/nonferrous and stainless steel materials
- Accommodates back to back installations

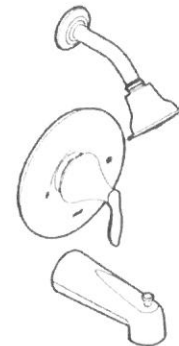
STANDARDS

- Third party certified to meet ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein
- EP suffix models are third party certified to WaterSense®

- ADA for lever handle

WARRANTY

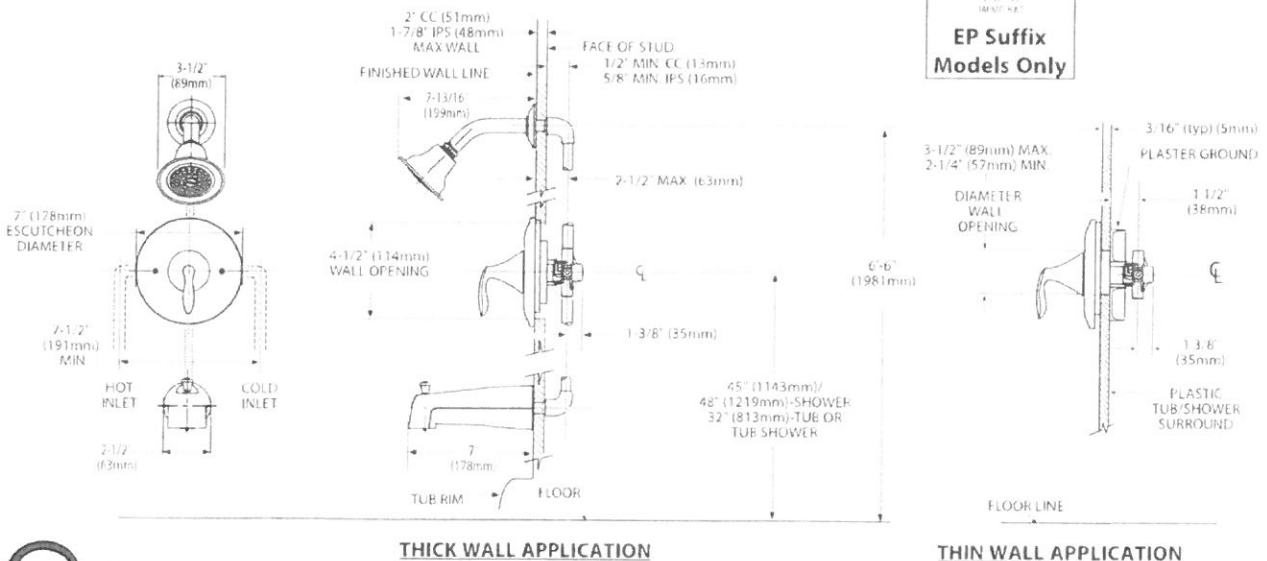
- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
 - 10 year limited warranty when used in a multifamily installation
 - 5 year limited warranty when used in a commercial installation
- Visit www.moen.com/support for complete details and limitations



EVA™ POSI-TEMP® Single-Handle Tub/Shower Trim Kit

- Models:** T2131 series - valve trim only
T62131 (Bulk Packed 12 per carton)
- T2132 series - shower trim only
T62132 (Bulk Packed 12 per carton)
- T2133 series - tub/shower trim
T62133 (Bulk Packed 12 per carton)

- Valves:** 62300 series
2500 series



CRITICAL DIMENSIONS (DO NOT SCALE)

MOEN®

There is more than one version of this model.
Page down to identify the version you have.

FAUCET DESCRIPTION

- Reflex™ pulldown system offers smooth operation, easy movement and secure docking
- Metal construction with various finishes identified by suffix
- Duralock™ quick connect system
- Pullout spray with 68" braided hose
- Flexible supply lines with 3/8" compression fittings
- High arc spout provides height and reach to fill or clean large pots while pull out wand provides the maneuverability for cleaning or rinsing
- 360° rotating spout
- Power Boost™ Spray Technology

OPERATION

- Lever style handle
- Temperature controlled by 100° arc of handle travel
- Operates with less than 5 lbs. of force
- Operates in stream or spray mode in the pullout or retracted position


FLOW

- Flow is limited to 1.5 gpm (5.7 L/min) at 60 psi

CARTRIDGE

- 1255™ Duralast™ cartridge for Single-Handle Faucets

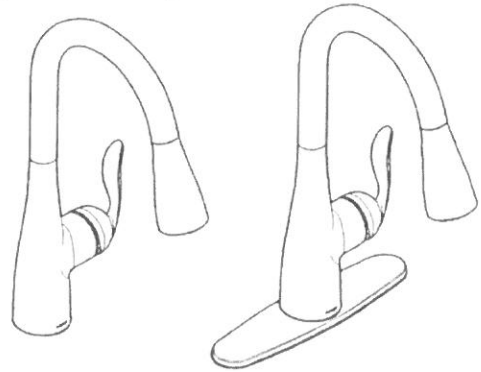
STANDARDS

- Third party certified to IAPMO Green, ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein
- Certified to NSF 61/9 & 372
- Meets CalGreen and Georgia SB370 requirements
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- The backflow protection system in the device consists of two independently operating check valves, a primary and a secondary which prevent backflow
- ADA  for lever handle

WARRANTY

- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
 - 10 year limited warranty when used in a multifamily installation
 - 5 year limited warranty when used in a commercial installation
- Visit www.moen.com/support for complete details and limitations

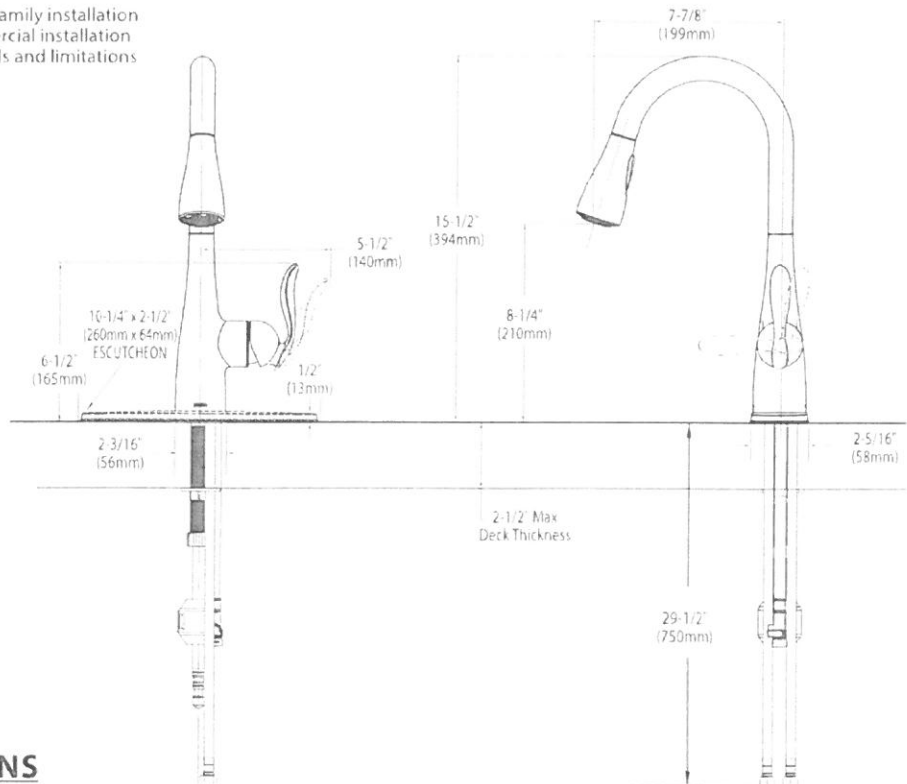
Specifications



ARBOR™ Single Handle High Arc Pulldown Kitchen Faucet

Models: 7594 series

NOTE: THIS FAUCET IS DESIGNED TO BE INSTALLED THROUGH 1 OR 3 HOLES, 1-1/2" (38mm) MIN. DIA.



CRITICAL DIMENSIONS

(DO NOT SCALE)

FAUCET DESCRIPTION

- Reflex™ pulldown system offers smooth operation, easy movement and secure docking
- Metal construction with various finishes identified by suffix
- Quick connect system
- Pullout spray with 68" braided hose
- Flexible supply lines with 3/8" compression fittings
- High arc spout provides height and reach to fill or clean large pots while pull out wand provides the maneuverability for cleaning or rinsing
- 360° rotating spout
- Power clean spray

OPERATION

- Lever style handle
- Temperature controlled by 100° arc of handle travel
- Operates with less than 5 lbs. of force
- Operates in stream or spray mode in the pullout or retracted position
- When filling a vessel outside the sink, the pause feature conveniently stops the flow of water as the wand passes over the counter top


FLOW

- Flow is limited to 1.5 gpm (5.7 L/min) at 60 psi

CARTRIDGE

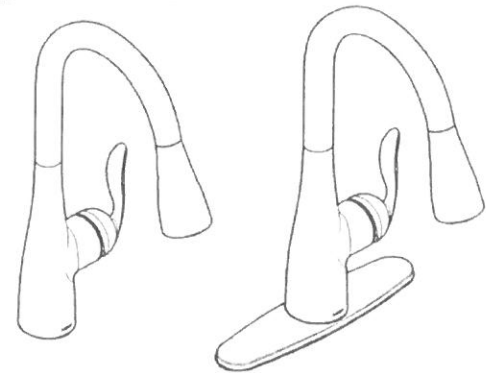
- 1255™ Duralast™ cartridge for Single-Handle Faucets

STANDARDS

- Third party certified to IAPMO Green, ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein
- Certified to NSF 61/9 & 372
- Meets CalGreen and Georgia SB370 requirements
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- The backflow protection system in the device consists of two independently operating check valves, a primary and a secondary which prevent backflow
- ADA  for lever handle

WARRANTY

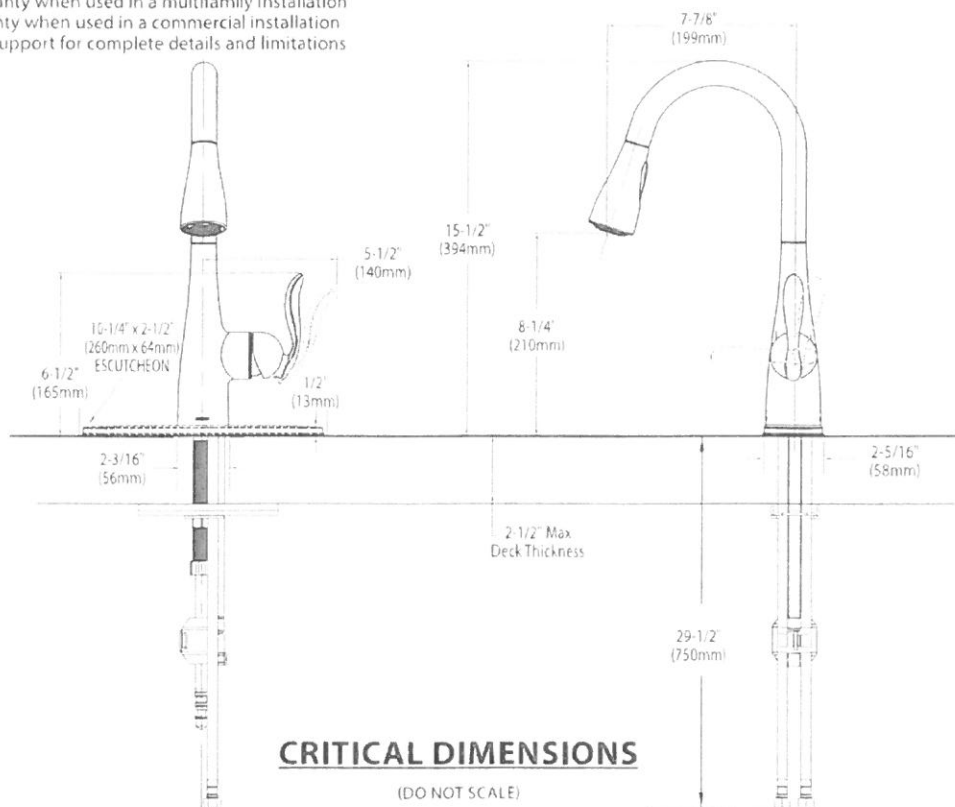
- Lifetime limited warranty against leaks, drips and finish defects to the original homeowner
 - 10 year limited warranty when used in a multifamily installation
 - 5 year limited warranty when used in a commercial installation
- Visit www.moen.com/support for complete details and limitations



ARBOR™
Single Handle High Arc
Pulldown Kitchen Faucet

Models: 7594 series

NOTE: THIS FAUCET IS DESIGNED TO BE INSTALLED THROUGH 1 OR 3 HOLES, 1-1/2" (38mm) MIN. DIA.



TO ORDER PARTS CALL: 1-800-BUY-MOEN
www.moen.com

PFWSC1120 Series

Two Handle Laundry Faucet

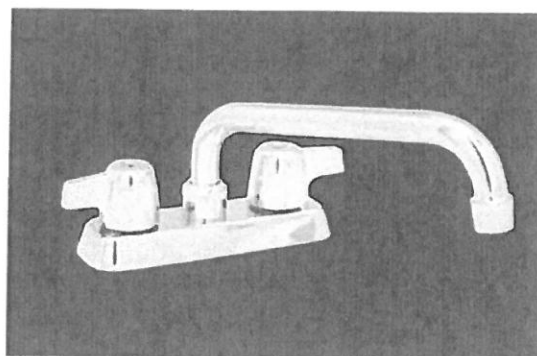


Product Features

- Ceramic Cartridges
- Metal Lever Handles
- Flow Rate (with hose thread adapter): Min. 4.0 GPM
- Flow Rate (with optional aerator): Max. 1.2 GPM
- Meets ANSI: A112.18.1M
- ADA Compliant

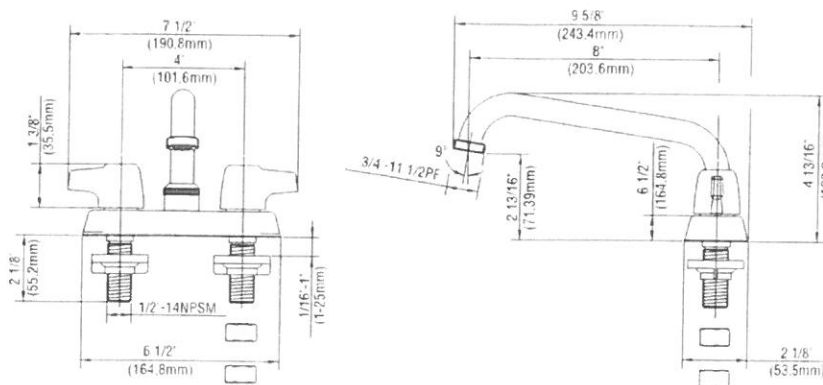
Model Numbers

PFWSC1120CP Polished chrome



PFWSC1120CP

Product Specifications



Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. This PROFLO faucet carries a limited lifetime warranty when installed in residential applications.

The warranty is five years in commercial applications.

This product meets ANSI: A112.18.1M.

Compliant with lead content requirements of California AB 1953.



* All measurements are nominal. Please verify before actual installation.



VITREOUS CHINA

TOILET
WS-20-918



MAXWELL® 1.28 ErgoHeight™, Elongated Toilet

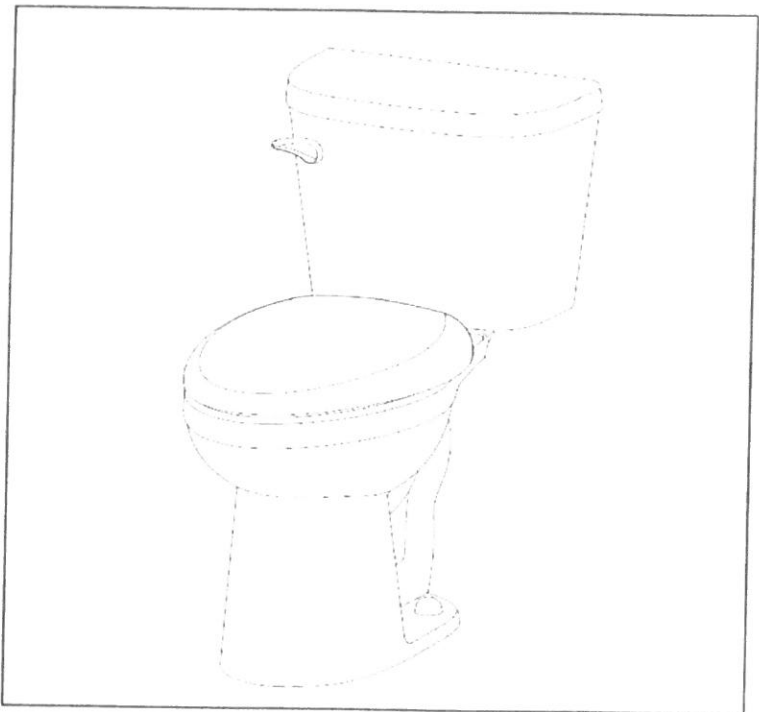
12" Rough-in

Features:

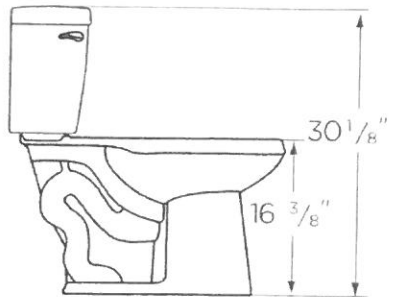
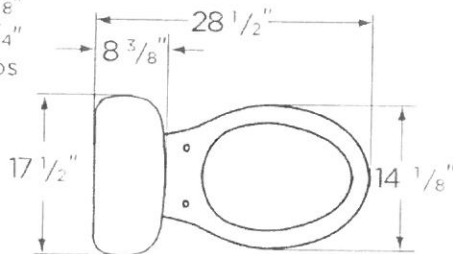
- 1.28 gpf/4.8 Lpf high efficiency two-piece toilet
- Elongated ErgoHeight™ bowl
- Dual-fed siphon jet
- Pilot fill valve
- 3" flush valve
- 2" glazed trapway
- Color matched front tank lever
- Optional insulated non-sweating tank (28-992)
- Optional right-handed trip lever (28-990-97)
- Available in White, Bone and Biscuit
- 2 bolt caps
- ADA Compliant
- Seat not included

Dimensions:

- Height 30 1/8"
- Width 17 1/2"
- Depth 28 1/2"
- Rough-in 12"
- Water Surface from Rim 6 1/2"
- Trapway 2"
- Water Surface 8 7/8" x 7 3/8"
- Water Seal 2 1/4"
- Shipping Weight 85.5 lbs



Specifications: Bowl—#MX-21-928 Front Bowl Tank—#28-990



THIS FIXTURE QUALIFIES ACCORDING TO ASME TEST PROCEDURES AS A HIGH EFFICIENCY WATER CLOSET WITH AN AVERAGE CONSUMPTION OF 1.28 gpf (4.8 Lpf) OR LESS.



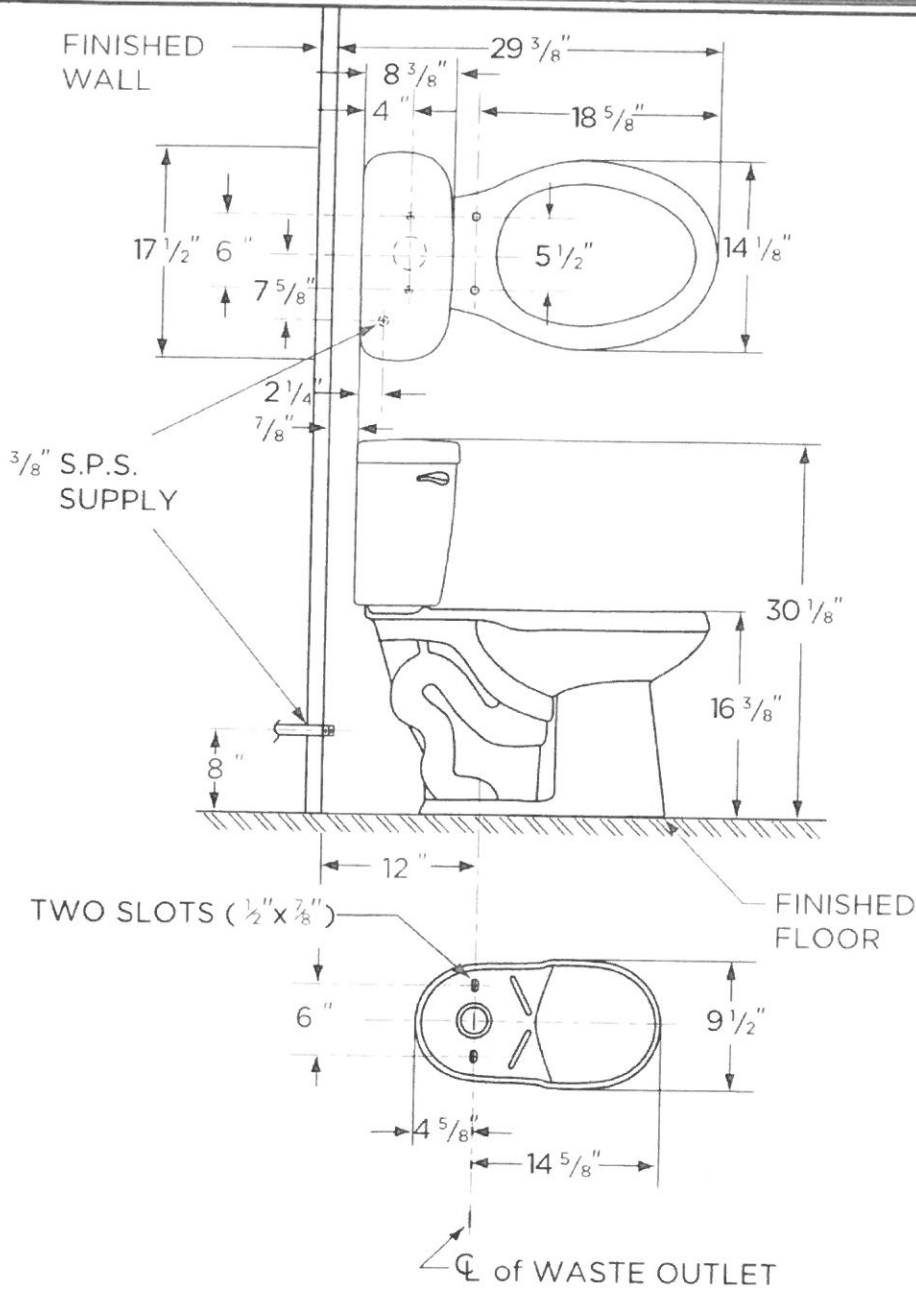
www.gerberonline.com

Job Name	
Date	
Model Specified	
Quantity	
Customer	
Contractor	
Architect/engineer	

TOILETS

GERBER®

1.28 gpf (4.8 Lpf) MAXWELL® 1.28 TOILET
 WS-20-918
 17" High Elongated, 12" Rough-in
 (Bowl MX-21-928 with Tank 28-990)



NOTES:
 All dimensions are in inches.
 Illustrations may not be drawn to scale.

IMPORTANT:
 Dimensions of fixtures are nominal and may vary within the range of tolerances established by ASME Standard A 112.19.2.
 THIS FIXTURE QUALIFIES ACCORDING TO ASME TEST PROCEDURES AS A HIGH EFFICIENCY WATER CLOSET WITH AN AVERAGE CONSUMPTION OF 1.28 gpf (4.8 Lpf) OR LESS.



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

ROY COOPER • Governor

MANDY COHEN, MD, MPH • Secretary

MARK T. BENTON • Assistant Secretary for Public Health

Division of Public Health

August 27, 2020

Andrew Currin, REHS
Harnett County Health Dept
307 Cornelius Harnett Blvd
Lillington, NC 27546

Subject: 186 Rawls Meadow Lane, Mason Pointe Subdivision Lot 57
LHD Request for Review – Session Laws 2013-413 and 2014-120
Project Number: 2020-35

Mr. Currin:

A submittal was received from you on August 20, 2020 requesting review of a proposed flow reduction for 186 Rawls Meadow Lane, Mason Pointe Subdivision Lot 57 in Fuquay-Varina, North Carolina. The Harnett County Department of Public Health Improvement Permit/ Construction Authorization application indicates the design daily flow adjustment requested is for a single-family residence with an initial Construction Authorization permit issue date of June 5, 2019 for a four-bedroom residence with a design daily flow (DDF) of 480 gallons per day (gpd) and a pump to 25% reduction system. The type of review request indicated on the “Local Health Department Request for Project Review” form completed by you is for a proposed flow reduction based on Session Laws 2013-413 and 2014-120. It is our understanding that:

1. Central Carolina Soil Consulting, PLLC employees in conjunction with Bateman Civil Survey Company reviewed fixture receipts for fixtures installed in the single-family residence constructed at the site. The request included information on the flow reducing fixtures installed in the residence.
2. The adjusted design daily flow proposal is for a 5-bedroom residence (DDF=600 gpd) to discharge to a subsurface wastewater system designed for a 4-bedroom residence (DDF=480 gpd).
3. In addition to this proposal, there have been three previous instances (and one pending) of similar flow reductions proposals by the same parties that were submitted months after Harnett County had issued an Operation Permit (December 2, 2019).
 - a. 88 Old Barn Way, Mason Pointe Subdivision Lot 42
 - b. 141 Old Barn Way, Mason Pointe Subdivision Lot 46
 - c. 99 Rawls Meadow Lane, Mason Pointe Subdivision Lot 62
 - d. 171 Piney Field Road, Mason Pointe Subdivision Lot 39 (*review pending*)
4. An undated, digitally signed copy of a “County of Harnett Residential Land Use Application” was submitted indicating a 5-bedroom, 3-bath single family dwelling with a finished bonus room having no closet.

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH

LOCATION: 5605 Six Forks Road, Building 3, Raleigh, NC 27609
MAILING ADDRESS: 1942 Mail Service Center, Raleigh, NC 27699-1942
www.ncdhhs.gov • TEL: 919-707-5854 • FAX: 919-845-3972

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

Only information regarding the requested flow reduction submitted with the request was reviewed. A review was not conducted of the site information, project design/calculations and project specifications. Review has been completed of the submittal and the review comments are as follows:

1. Although the "Local Health Department Request for Project Review" form completed and submitted by Harnett County indicates the proposed flow reduction is based on Session Laws 2013-413 and 2014-120, the parties proposing the flow reduction did not cite the session laws in the proposal cover letter.
 - a. If it appears the PE is proposing the flow reductions under Session Laws 2014-120 and 2013-413, the session laws are to be cited in the proposal cover letter.
 - b. It is suggested that the LHD have the PE provide written verification that the owner is aware of the disclaimer: "Neither the State nor local health department shall be liable for any damages caused by an engineered system approved or permitted pursuant to Session Law 2014-120 Section 53."
2. The septic tank capacity of 1,000 gallons indicated in the submittal does not meet the 1,250-gallon minimum liquid capacity requirement. The design and capacity of any pretreatment system components shall be based on unreduced flows in accordance with Rules .1949(c)(1) and (2) or otherwise designed to account for increased constituent concentrations (wastewater strength) expected due to use of low-flow fixtures.
3. Due to the potential for wastewater effluent strength to increase with the proposed additional bedroom, have the PE conduct an evaluation of the proposed flow reduction/residence expansion to determine whether the reduction/expansion exceeds limits (e.g., wastewater strength, volume, organic loading) necessary to ensure wastewater system integrity and protect public health, safety, and welfare based on site specific conditions and provide a written determination to the Harnett County Health Department.
4. I was unable to determine if the owner has been made aware of Session Law 2014-120 Section 53 which states, "*Neither the State nor any local health department shall be liable for any damages caused by a system approved or permitted pursuant to this section.*" We recommend that you receive verification, preferably in writing, that the owner has been made aware of this disclaimer.
5. Observations: Floor Plan Sheets and Fixtures Table
 - a. The scale of the floor plan sheets 1.2 and 1.3 included in the submittal was so small (1" = 13') that a magnifying glass was required during attempts to ascertain fixtures information on those pages. Floor plans including in future submittals are to be at a scale no smaller than 1" = 5'.
 - b. The fixtures table indicates a tub/shower fixture in the Optional Bath (Bath 5), but I was unable to visually identify a location of this fixture on plan sheet 1.3. Is there such a fixture in Bath 5?
 - c. A laundry sink faucet is listed in the fixtures table, but I was unable to visually identify a location of this fixture on plan sheet 1.2. Is there such a fixture in the dwelling?
 - d. Are there any water-using fixtures in the mud room?
6. Prior to issuing a revised IP/CA, it is strongly recommended that you have all the following information:
 - i. The additional information identified under the conditions above; and
 - ii. Written verification or concurrence from the PE in regard to any modifications to the original system design. For the permitted system and for any system modifications being proposed, (1) written verification is provided that the design is prepared, sealed, and signed by a PE and (2) written concurrence with a design prepared by an authorized designer or LHD is provided by a PE.

7. Prior to issuing a revised OP, it is strongly recommended that you have all the following information:
 - i. Manufacturer's cutsheet for the septic tank with a 1,250-gallon minimum capacity to be installed to meet the requirements of Rule .1952(b).
 - ii. Written confirmation by the PE that they approve the system installation for the adjusted design daily flow; and
 - iii. A statement signed by the PE verifying construction is complete and in accordance with approved plans and specifications.
8. All Permits: All permits issued for adjusted design daily flow rates based on Session Laws 2013-413 and 2014-120 should include a disclaimer in keeping with Session Law 2014-120 Section 53 which states, *"Neither the State nor any local health department shall be liable for any damages caused by a system approved or permitted pursuant to this section."*
9. Operation Permits: Also include as a condition that the specified lower-flow fixtures, low-flow technologies, or replacements with equal or less flow rates are to remain in use for the life of the applicable system.

If you have any questions concerning these comments, you may contact me by phone at (919) 715-3270, by fax at (919) 715-3227, or by e-mail at Lorna.Withrow@dhhs.nc.gov.

Sincerely,

Lorna C. Withrow, PE
On-Site Wastewater Engineering

cc: Scott Greene, LSS – On-Site Water Protection