IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 212203

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4639825205820

APPLICANT: BCSC APPLICANT ADDRESS: 2524 Reliance Drive Apex NC 27539

SITE ADDRESS: 144 Campanile Drive Mooresville NC PHONE: ALT. PHONE: 704 658 8616.

SITE DIRECTIONS: 150 to Perth Rd Left on Bells Crossing Left on San Agustin Pass Ph. 3 Left onto Campanile.

SUBDIVISION: Bells Crossing SECTION: 4 LOT # 174+174s LOT AREA: .45 DESIGN FLOW: 480 L.T.A.R.: 3 LTAR

Septic Tank 1000 (gal) STB 294 Date 6/28/17

Pump Tank 1000 (gal) PT 283 Date 7/20/17

Pump Make Zoeller Model N-140-052 1HP Serial # ~~12AMP 60HZ~~

Nitrification Fields 1 # Lines 133 ft Linear Ft: 400

Trench Width 36 ~~Max~~ Trench Bottom Depth 24-30 Gravel Depth -

☒ New System ☐ Repair ☐ Expansion System Type: I II (III) IV V VI

System Description: 25% reduction - Pressure manifold

Repair System Description: 25% reduction - Pressure manifold

Maintenance Agreement Required: ☐ YES ☒ NO

☐ GRAVITY ☒ PRESSURE

☒ Residence ☐ Business ☐ Other ☐ Slab ☐ Crawl Space ☒ Basement w/plumbing ☐ Basement w/o plumbing

No. Bedrooms 4 No. Persons 8 No. Employees

Water Supply: ☐ Private ☐ Public ☐ Community

Comments / Conditions: * Review attachments with Permits

* System is offsite septic. Must follow perimeters outlined in attachments

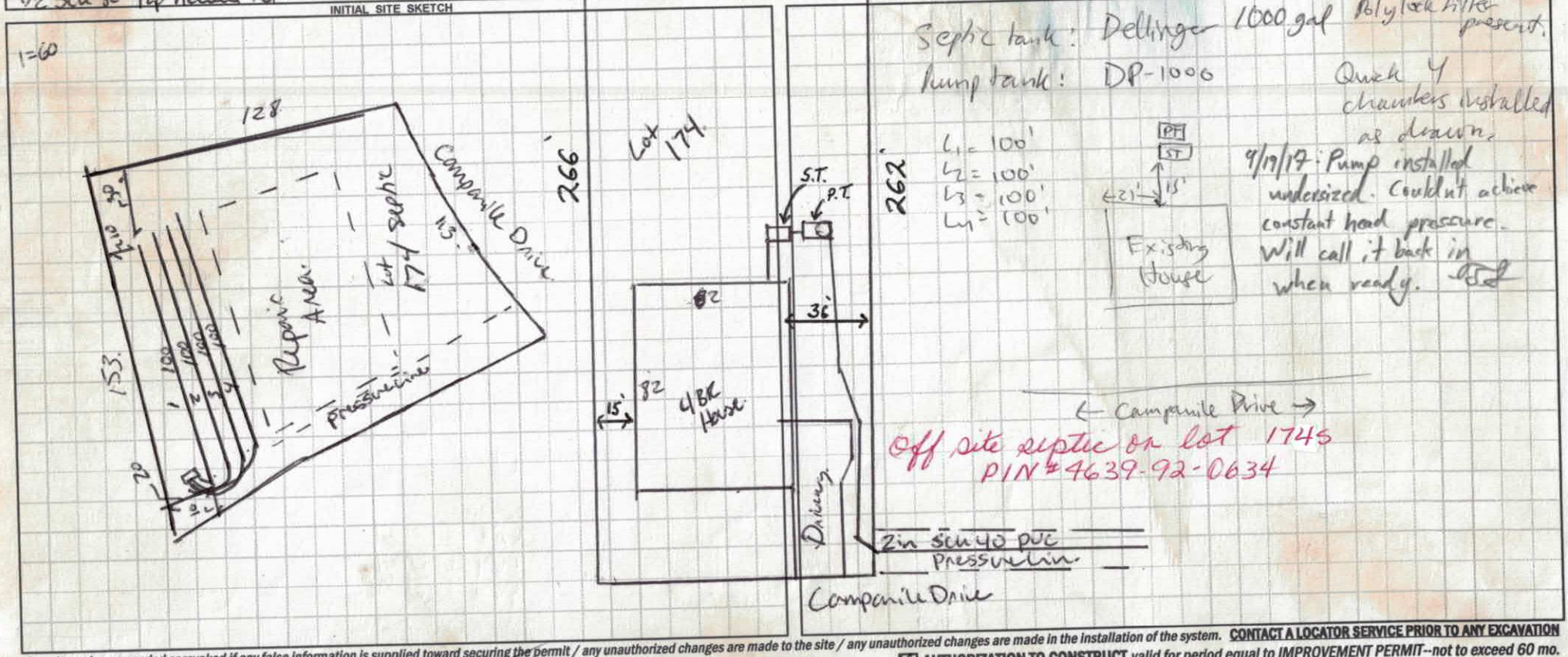
1½ sch 80 Tap needed for all drainlines

* Recommend pumping septic tank every 3-5 years.

* tanks and drainlines checked 8/25/17 M.P.D.

INITIAL SITE SKETCH

1=60



AS BUILT SKETCH

Septic tank: Delinger 1000 gal Polylok filter present.

Pump tank: DP-1000

Quick 4 chambers installed as drawn.

L_1 = 100'
L_2 = 100'
L_3 = 100'
L_4 = 100'

9/19/17: Pump installed undersized. Couldn't achieve constant head pressure. Will call it back in when ready.

← Campanile Drive →

Off site septic on lot 174s
PIN # 4639-92-0634

2in sch 40 PVC Pressureline

Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

☐ **IMPROVEMENT PERMIT** *with plat* valid without expiration. ☒ **IMPROVEMENT PERMIT** *with site plan* valid for 60 mos. ☒ **AUTHORIZATION TO CONSTRUCT** valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.

Owner / Applicant Signature: Date: 4-24-17 Installed by: Andrew Carson (BCSC)

IMPROVEMENT PERMIT by: Benjamin A Bobbitt Date: 4/24/2017 OPERATION PERMIT by: Benjamin M Bobbitt Date: 10/17/17.

AUTHORIZATION TO CONSTRUCT by: Tom Shuck Date: 4/28/17 Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK

	Date	Initials
Drain Lines Checked	8/25/17	M.A.D.
Tanks Checked	8/25/17	M.A.D.
Pressure Manifold or Valve Box Checked		
Pressure Head Set		
Electrical Checked		
Floats Set	10-13-17	KW
Alarm Checked	10-13-17	KW
Maintenance Contract Y/(N)	10-13-17	KW
Comments: 10-13-17 * ~~need pump make/model~~ serial # not required * Still needs putty in electrical openings		

414-544-1000

LEGL

PO = P[illegible]ED PORCH
SP = SC[illegible]ED PORCH
CP = CO[illegible]ED PORCH
WD = WOOD DECK
SW = SIDEWALK
DW = CONC DRIVEWAY

0 30 60

SCALE:
1" = 60 ft.

BELLS CROSSING SUBDIVISION PHASE 4
HOUSES AND SEPTIC LINES ARE STAKED IN THE FIELD
THESE SEPTIC LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING APPROVAL BY THE IREDELL COUNTY ENVIRONMENTAL HEALTH DEPARTMENT.
FOR GENERAL USE NOT A SURVEY PRELIMINARY NOT FOR CONSTRUCTION
SOIL PROFILES AND ANALYSIS PROVIDED BY CENTRAL CAROLINA SOIL CONSULTING PLLC

CAMPANILE DR.
PUBLIC 50' R/W

171
172
173
174

SEPTIC ONLY
SEPTIC ONLY
SEPTIC ONLY
SEPTIC ONLY

S57°36'20"E 135.63
S57°36'20"E 139.00
N39°39'04"E 149.58
S47°00'47"E 219.99
S32°40'28"E 239.35
S08°30'33"W 248.42'

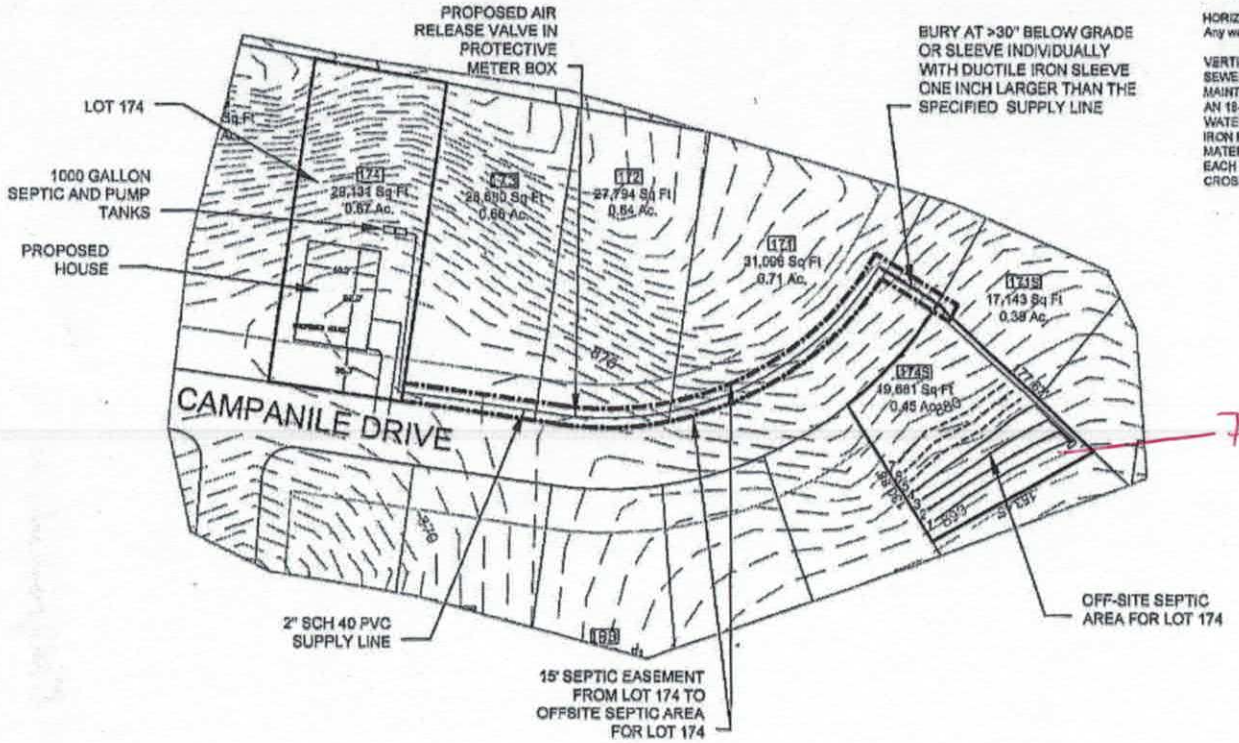
L305
L306
L316
C9

marked
Marked
Missing

Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, NC 27539 Ph: 919.577.1080 Fax: 919.577.1081
www.batemancivilsurvey.com info@batemancivilsurvey.com
NCBELS Firm No. C-2378

SEPTIC SITE PLAN LOT 171-174
BELLS CROSSING SUBDIVISION

IREDELL COUNTY , NORTH CAROLINA
DATE: 04/25/16 DRAWN BY: SPC CHECKED BY: SPC



PIN# 4639-92-0634

WATER LINE SEPARATIONS REQUIREMENTS
CONTRACTOR SHALL MEET ALL SEPERATIONS FROM WATER LINES AS DESCRIBED IN 15A NCAC 18A .1650 (a)(14) AND (f).

HORIZONTAL SEPARATION
Any water line 10'.

VERTICAL SEPARATION
SEWER LINES MAY CROSS A WATER LINE IF 18 INCHES CLEAR SEPARATION DISTANCE IS MAINTAINED, WITH THE SEWER LINE PASSING UNDER THE WATER LINE. WHEN CONDITIONS PREVENT AN 18-INCH CLEAR SEPARATION FROM BEING MAINTAINED OR WHENEVER IT IS NECESSARY FOR THE WATER LINE TO CROSS UNDER THE SEWER, THE SEWER LINE SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR ITS EQUIVALENT AND THE WATER LINE SHALL BE CONSTRUCTED OF FERROUS MATERIALS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF AT LEAST TEN FEET ON EACH SIDE OF THE POINT OF CROSSING, WITH FULL SECTIONS OF PIPE CENTERED AT THE POINT OF CROSSING.

LOT 174 BELLS CROSSING
4 BEDROOM PRESSURE MANIFOLD SYSTEM
LINES 1-4 (400')
LTAR 0.3
EZFLOW OR CHAMBER

LOT 174 BELLS CROSSING
4 BEDROOM LPPPBS (T & J PANEL BLOCK) SYSTEM
LINES 5-7
LTAR 0.3
50% REDUCTION

LINE SCHEDULE SYSTEM

FIELD LAYOUT LINE NUMBER	COLOR	FIELD ELEVATION	LENGTH	DESIGN LENGTH
1	ORANGE	883.5	133	100
2	BLUE	885.1	133	100
3	PINK	886.6	118	100
4	RED	886.5	118	100
5	YELLOW	884.1	114	
6	ORANGE	882.7	113	
7	BLUE	881.2	112	
TARGS		883.0		

NOTES:
1.) CONTRACTOR SHALL CONFIRM ALL ELEVATIONS AND PLACE AIR RELEASE VALVES AT HIGHEST ELEVATION IN EACH PROPOSED LOCATION.
2.) EACH LINE IN THE COMMON TRENCH SHALL HAVE A COLOR PAINTED ON EACH JOINT OF PIPE AND PAINTED IN THE MANIFOLD AND PUMP TANK.
3.) PLACE TRACE WIRE WITH SUPPLY LINE FOR FUTURE LOCATION.

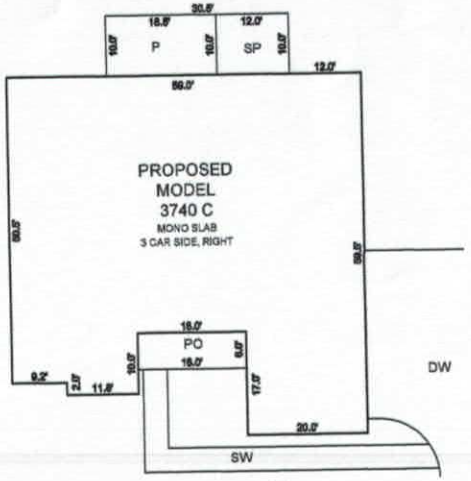
GRAPHIC SCALE
1" = 100'

100' 0 100' 200'

Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)559-6704 Fax (919)569-6703

Septic System Design
Bells Crossing Lot 174
Mooresville, Iredell County, North Carolina

Job# : 174
Drawn By : TMB
Date : 08/19/2016
Revision : 09/06/2016



INSET SCALE: 1"=20'

NOTES:

1. THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
2. THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
3. THIS IS NOT A BOUNDARY SURVEY. PROPERTY LINES SHOWN WERE TAKEN FROM EXISTING FIELD EVIDENCE, EXISTING DEEDS AND PLATS OF PUBLIC RECORD, AND INFORMATION SUPPLIED TO THE SURVEYOR BY THE CLIENT
4. VERTICAL DATUM IS ASSUMED. THE LATITUDE, LONGITUDE AND STATE PLANE COORDINATES, IF SHOWN, ARE GIVEN IN NORTH AMERICAN DATUM OF 1983 (NAD83).
5. FIELD EQUIPMENT USED: NIKON TOTAL STATION, EPOCH 35.
6. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
7. THIS MAP IS NOT A CERTIFIED SURVEY AND HAS NOT BEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
8. THE PROPERTY LIES IN ZONES "X" PER NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NUMBER 3710463900J & 3710464900J, DATED MARCH 18, 2008.
9. ZONING IS RA.
10. ALL LOT LINES HAVE A 10' UTILITY/STORM EASEMENT ALONG LOT LINES.
11. PROPERTY OWNER: MERITAGE HOMES OF THE CAROLINAS INC.
    13925 BALLANTYNE CORPORATE PLACE
    SUITE 300
    CHARLOTTE, NC 28277

NOTE:

ALL DIMENSIONS, LOCATIONS AND FEATURES SHOWN ON THIS PLOT PLAN ARE APPROXIMATE AND ARE ONLY AN ARTISTS RENDITION, EXACT LOCATION OF ALL FEATURES ARE SUBJECT TO CHANGE AND MAY NOT BE INSTALLED EXACTLY AS SHOWN ON PLANS AND/OR IN MODELS. PLACEMENT OF HOME, DRIVEWAY, SIDEWALKS AND EXTERIOR FEATURES ARE SUBJECT TO MODIFICATION AS DEEMED NECESSARY BY FIELD PERSONNEL.

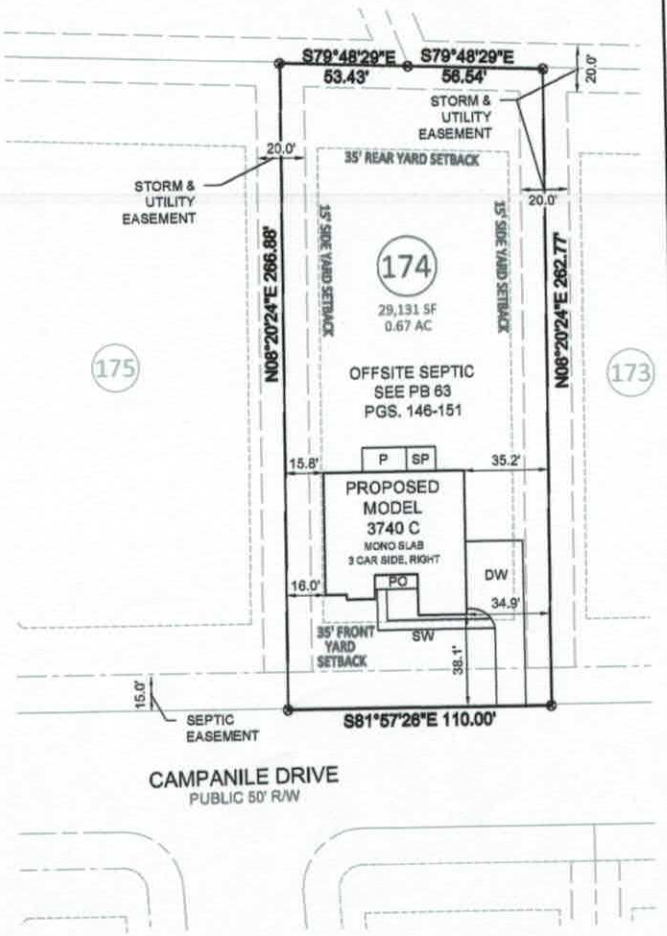
CUSTOMER _____ DATE _____

CUSTOMER _____ DATE _____

MERITAGE REPRESENTATIVE _____ DATE _____

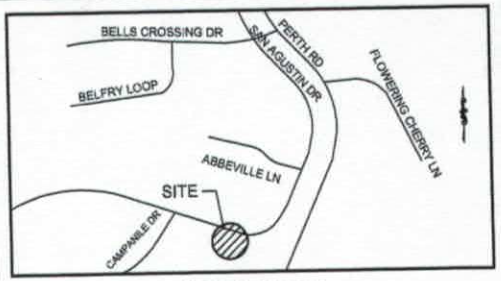
LOT INFORMATION:

PIN: 4639825020
HOUSE = 3,039 SF
PORCH = 108 SF
SIDEWALK = 245 SF
DRIVEWAY = 1,201 SF
SCREENED PORCH = 120 SF
PATIO = 185 SF
TOTAL LOT AREA = 0.67 AC = 29,131 SF
PROPOSED IMPERVIOUS = 4,898 SF
PERCENT IMPERVIOUS = 16.8 %



SCALE:
1" = 50 ft.

Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, NC 27539 Ph: 919.577.1080 Fax: 919.577.1081
www.batemancivilsurvey.com info@batemancivilsurvey.com
NCBELS Firm No. C-2378



VICINITY MAP

(Not to Scale)

LEGEND

PO = PORCH
CP = COVERED PORCH
P = CONCRETE PATIO
WD = WOOD DECK
SW = SIDEWALK
DW = CONC DRIVEWAY
⊗ = COMPUTED POINT
○ = IRON PIPE FOUND
◉ = IRON PIPE SET
● = DRILL HOLE FOUND
WM = WATER METER
CO = CLEAN OUT
AC = AIR CONDITIONER
= SEWER MANHOLE
= ELECTRIC BOX
= CABLE BOX
= TELEPHONE PEDESTAL
CI = CURB INLET
SP = SCREENED PORCH
= LIGHT POLE

BUILDING SETBACKS:
FRONT = 35 ft
SIDE = 15 ft
REAR = 35 ft
SIDE STREET = 25 ft
LAKE BUFFER = 50 ft

I hereby certify that this map is correct and that the building lies wholly on the lot and that there are no visible encroachments on said lot.

PRELIMINARY

Steven P. Carson, PLS 4752
Date

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.

APPROVAL FOR STAKING:

THIS PLOT PLAN AS PREPARED BY BATEMAN CIVIL SURVEY CO., IS CORRECT AND IS HEREBY APPROVED FOR STAKING ON THE DATE AS SHOWN BELOW.

MERITAGE HOMES REPRESENTATIVE _____ DATE _____

PRELIMINARY PLOT PLAN

FOR

MeritageHomes

BELLS CROSSING - PHASE FOUR - LOT 174
144 CAMPANILE DRIVE, MOORESVILLE, NC
DAVIDSON TOWNSHIP, IREDELL COUNTY

DATE: 2/28/17 DRAWN BY: DMH CHECKED BY: SPC

REF: PB 63, PGS. 146-151 BCS# 120314 SCALE: 1" = 50'

I:\BCS-WIP\-PLOT\Bells\Ph4\proto\120314 Bells Phase 4\dwg\120314 Bells Phase 4.dwg, 3/1/2017 11:20:02 AM, dmiller

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet 1 of 1
PROPERTY ID #:
COUNTY: Lenoir

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM
(Complete all fields in full)

L4174.

OWNER:
APPLICATION DATE 4/13
ADDRESS:
DATE EVALUATED: 4
PROPOSED FACILITY: 4bdrm PROPOSED DESIGN FLOW (.1949): 480 PROPERTY SIZE: .45
LOCATION OF SITE: 149 Capstone Dr NE PROPERTY RECORDED: Yes
WATER SUPPLY: ☑ Private ☐ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☐ Auger Boring ☑ Pit ☐ Cut TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	LSS 8%	0-38	C SBK	SS SP FR SPX					Well drained with numerous Roots throughout
		38-46	CL mSBK	I I FM I					
2	LSS 8%	0-8	SCL mSBK	SS SP FR SPX					
		8-33	C SBK	FM					
		33-46	CL mSBK	FR					
3	LSS 8%	0-9	SCL mSBK	SS SP FR SPX					
		9-38	C SBK	FM					
		38-58	CL mSBK	FR	Yellow Brown Mottles				
4	LSS 8%	6-10	SCL SBK	SS SP FR FM					
		10-49	C mSBK	I I FM I					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)	3 25%	3
Site LTAR		

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948):
EVALUATED BY:
OTHER(S) PRESENT:

COMMENTS:

Public Health
HEALTH AND HUMAN SERVICES

RICHARD O. BRAJER
Secretary

DANIEL STALEY
Director, Division of Public Health

September 14, 2016

Mr. Thomas Shuck
Iredell County Health Department
610 East Center St
Mooresville, NC 28115

Subject: Approval of Supply Line Designs for Bells Crossing Lots 171, 172, 173, 174, and 179
Iredell County, NC

Dear Mr. Shuck:

We have reviewed revised plans and specifications for the supply lines serving Bells Crossing Lots 171, 172, 173, 174, and 179 received from Brian Kraynak, PE, Bateman Civil Survey Company, PA.

The revised supply line designs are approved for the above listed lots.

A registered professional engineer must certify that the systems have been installed in accordance with the approved plans and specifications. This certification is based upon periodic observations of construction and a final inspection for design compliance by the certifying engineer or his representative. Record drawings must be provided by the engineer unless the installation is completed without alteration to the approved plans. The installation must be approved by the health department prior to the issuance of an operation permit.

Please contact us if you have any questions pertaining to this letter or if we may be of further assistance with this project. I can be contacted at 919-707-5878 or by email at trish.angoli@dhhs.nc.gov.

Sincerely,

Tricia Angoli, PE
On-Site Wastewater Engineering

cc: Brian Kraynak, PE, Bateman Civil Survey Company, PA

Pressure Manifold
Septic System Design

for

Bells Crossing PH 4 S/D Lot 174
Mooresville, North Carolina

Designed by:

Matt Burdette
Central Carolina Soil Consulting, PLLC
Wake Forest, North Carolina

Engineer:

Brian Kraynak, PE
Bateman Civil Survey Company, PA
Apex, North Carolina
BCSC Project #: 120314.174



08/19/2016

8-19-2016

Bells Crossing PH 4 S/D Lot 174

Table of Contents

Contact Information ---------- 1
Specifications (system) ---------- 2
Tap Chart (system) ---------- 3
Control Panel Specifications ---------- 4
Pump Specifications ---------- 6
Effuent Filter Specifications ---------- 8
Site Plan (System) ---------- 10
Supply Line Hydraulic Profile ---------- 11
Septic and Pumptank Details ---------- 12
Pressure Mainfold and Trench Details ---------- 13

Bells Crossing PH 4 S/D Lot 174

Contact Information

Client:	Meritage Homes
Attn:	Robert Price
Street Address:	11605 North Community House Road Charlotte, NC 28277
Phone:	(704) 944-8939
Fax:	na

Engineer:	Bateman Civil Survey Company, PC
Attn:	Brain Kraynak, PE
Street Address:	2524 Reliance Ave. Apex, North Carolina 27539
Phone:	919-577-1080
Fax:	919-577-1081

Designer:	Central Carolina Soil Consulting, PLLC
Attn:	Matt Burdette
Street Address:	1900 South Main Street Wake Forest, North Carolina 27587
Phone:	919-569-6704
Fax:	919-569-6703

Bells Crossing PH 4 S/D Lot 174

Layout/Design Specifications

Facility Type:	Single Family Home
# of Bedrooms:	4
Daily Flow:	480 gal/day
L.T.A.R.:	0.300 gal/day/sq.ft
Trench Depth:	24-30 in
Trench Width:	36 in
Stone Depth:	accepted in
Manifold Length:	42 in
Manifold Diameter:	4 in sch 80pvc
Supply Line Length:	805 ft
Supply Line Diameter:	2 in sch 40pvc
Supply Line Volume:	140.07 gallons
Friction Loss + Fitting Loss:	10.16 ft(supply line length +25% for fittings)
Design Head:	2 ft
Elevation Head:	30.90 ft
Total Head:	43.06 ft
Dose Volume:	195.24 gals
% of Pipe Vol.	.75
Drawdown:	8.96 in @ 21.8 gal/in
Pump Run Time:	8.91 Minutes
Control Panel:	SJE Rhombus Model112 control panel (or approved equivalent)
Pump:	Zoeller 161 Flow Mate (or approved equivalent)
Septic Tank Effluent Filter:	Zoeller 170-0144 residential effluent filter (or approved equivalent)
Septic Tank:	1000 gallon Shoaf
Pump Tank:	1000 gallon Shoaf

RECEIVED APR 2 5 2017

IREDELL COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
Application for IMPROVEMENT PERMIT , AUTHORIZATION TO CONSTRUCT, or EXISTING SYSTEM INSPECTION

(THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED - APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS)

1. APPLICATION FOR: ☐ Improvement Permit ☑ Authorization To Construct ☐ BOTH ☐ Existing System Inspection

2. Page 2: *Site Plan Worksheet* Form MUST Accompany This Application
The following optional attachments may also be submitted: ☑ Survey Plat, Scaled no more than 1 Inch = 60 Feet
Place check ( ) beside whichever is submitted if applicable ☑ Custom Site Plan, Scaled no more than 1 Inch = 60 Feet

3. Applicant Information:

Applicant Name	Mailing Address	Home Phone #	Alternate Phone #
Meritage Homes of the Carolinas, Inc	13925 Ballantyne Corporate pl. #300	704.944.8918	

Owner Name	Mailing Address	Home Phone #	Alternate Phone #
Meritage Homes of the Carolinas, Inc	same		

4. Property Information:

Street Address	Subdivision Name	Section/Phase and Lot Number
144 Campanile Court	Bells Crossing	Lot 174

Driving Directions: 150 W - Right on Perth Road - Left into Bells Crossing

5. RESIDENTIAL Site Development Information: *(Check or Complete ALL that apply)*

☑ New, Single Family Residence
( ) New, Multi-Family Residence
☐ Expansion of Existing Septic System
( ) Repair To Failing Septic System
( ) Other

Maximum Number of Bedrooms 4
Maximum Number of Occupants 8
If Expansion, Current Number of Bedrooms ___

☐ Crawl Space Foundation?
☑ Concrete Slab Foundation?
☐ Basement w/Plumbing?
☐ Basement w/out Plumbing?

IF Non- Residential Site Development:
Type of Business
Square Footage of Building
Maximum Number of Employees
Maximum Number of Seats

6. Proposed Water Supply:

( ) New Well ( ) Existing Well ☑ Community Well ( ) City Water ( ) Other Public Water

7. Desired Septic System Type: *(You may rank in order of preference, if any)*

☐) Alternative ☑) Conventional ☐) Innovative ( ) Modified Conventional ( ) Other_Excepted__ ( ) No Preference

8. Please Answer The Following To The Best of Your Ability:

( ) Yes ☑ No Does the site contain any jurisdictional wetlands?
( ) Yes ☑ No Is any non-domestic sewage (i.e. industry) to be generated?
( ) Yes ☑ No Is the site subject to approval by any other public agency?

I have read this application and certify that the information provided herein is true, complete, and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed.

9. Signature: _____ Robert Ruthenberg
Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

3/8/17
DATE

RECEIVED FEB 24 2017 # 212203

IREDELL COUNTY HEALTH DEPARTMENT *ENVIRONMENTAL HEALTH DIVISION*

(THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED - APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS)

Paid $500.00

1. APPLICATION FOR: ✓ **Improvement Permit** ___ **Authorization To Construct** ___ **Existing System Inspection**

****

Paid $700.00 4-24-17

2. Page 2: *Site Plan Worksheet* Form MUST Accompany This Application

The following optional attachments may also be submitted: ___ Survey Plat, Scaled no more than 1 Inch = 60 Feet ___ Custom Site Plan, Scaled no more than 1 Inch = 60 Feet

Place check ( ) beside whichever is submitted if applicable

****

3. Applicant Information:

BCSC	2524 Reliance Ave Apex NC 27539		704-658-8616
Applicant Name	Mailing Address	Home Phone #	Alternate Phone #
Meritage Homes	11605 N Community House Rd #250 Charlotte NC 28277		
Owner Name	Mailing Address	Home Phone #	Alternate Phone #

****

4. Property Information:

144 Campanile Drive	Bells Crossing	4 174
Street Address	Subdivision Name	Section/Phase and Lot Number

Driving Directions: 150 W, R on Perth, L into Bells Crossing, L onto San Agustin Pass Ph.3 (Abbeville CT) L onto 4th Lot on Right

****

5. RESIDENTIAL Site Development Information: *(Check or Complete ALL that apply)*

5 4 MB 1410-1c

( ) New, Single Family Residence
( ) New, Multi-Family Residence
( ) Expansion of Existing Septic System
(X) Repair To Failing Septic System due to ___
( ) Other ___

Maximum Number of Bedrooms 5
Maximum Number of Occupants 10 8
If Expansion, Current Number of Bedrooms ___

( ) Crawl Space Foundation?
( ) Concrete Slab Foundation?
(✓) Basement w/Plumbing?
( ) Basement w/out Plumbing?

IF Non- Residential Site Development:
Type of Business ___
Square Footage of Building ___
Maximum Number of Employees ___
Maximum Number of Seats ___

****

6. Proposed Water Supply:

( ) New Well ( ) Existing Well (✓) Community Well ( ) City Water ( ) Other Public Water

****

7. Desired Septic System Type: *(You may rank in order of preference, if any)* ( ) EXISTING SYSTEM installed ____ *Year*

( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional (✓) Other ___

8. Please Answer The Following ( ) Yes (✓) No Does the site contain any jurisdictional wetlands?
To The Best of Your Ability: ( ) Yes (✓) No Is any non-domestic sewage (i.e. industry) to be generated?
( ) Yes ( ) No Is the site subject to approval by any other public agency?

****

I have read this application and certify that the information provided herein is true, complete, and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed.

9. Signature: ___ 4-26-16
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) — DATE

AUTHORIZATION TO ACT AS AGENT FOR OWNER

Any application/document/permit requiring a signature must be signed by the property owner or their authorized agent. This form shall be provided by the owner to allow specified individuals to act as agents for the owner. This form allows the specified individuals to sign or receive any application/document/permit on behalf of the owner. This form allows the authorized agent to make decisions on behalf of the owner pertaining to modifications of permits in the field. It is the responsibility of the owner to assure that any/all permit conditions specified on permits issued by this Division are followed.

I, Robert Price (Meritage Homes), am the legal owner of the property located at Bells Crossing, identified as PIN(Parcel Identification Number) Lot 174, located in Iredell County, North Carolina.

I do hereby authorize (print authorized agent/company name) Bateman Civil Survey Company, Michael Benfield, Matt Burdette, _____, _____, to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

1. Improvement Permit (IP)/ Authorization to Construct (AC).
2. Application for soil-site evaluation (new/repair).
3. Application/permit for water well/well abandonment.
4. Application for existing system.
5. Application for Improvement Permit (IP)/ Authorization to Construct (AC).

I agree to abide by any and all decisions and/or conditions between the agent acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division. This form must be fully executed before the individual's specified above will be recognized as the authorized agent.

Signature of Owner — Date: 3/10/15

Signature of Witness — Date: 3/10/15

IREDELL COUNTY HEATLH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
PAGE 2: *SITE PLAN WORKSHEET*

SEE THE "SAMPLE SITE PLAN" BELOW. *INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!*

Place an (X) beside each item as you complete the site plan:

- x — **Property Line measurements are clearly identified…**
- x — **All proposed structures are indicated…**
  SHOW: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site
- x — **Front and side setbacks from property line…**
- x — **Preferred driveway location and configuration, preferred well location…**
- x — **Area you prefer your septic system to be placed…**
- x — **North arrow, or other sufficient indicator of direction…**

Circle N/A on the following if appropriate:

- x — **Location of septic systems and wells within 100' of your property…** **N/A**
- x — **Location of easements and rights of ways on your property…** **N/A**
- x — **Location of any designated wetlands on the property…** **N/A**

Signature: Rick Kelly — 3/8/17
***REQUIRED* property owner or owner's legal representative signature.** — **DATE**

USE THIS SPACE TO DRAW YOUR SITE PLAN

Please See Attached Plot Plan and IP Documents Attached

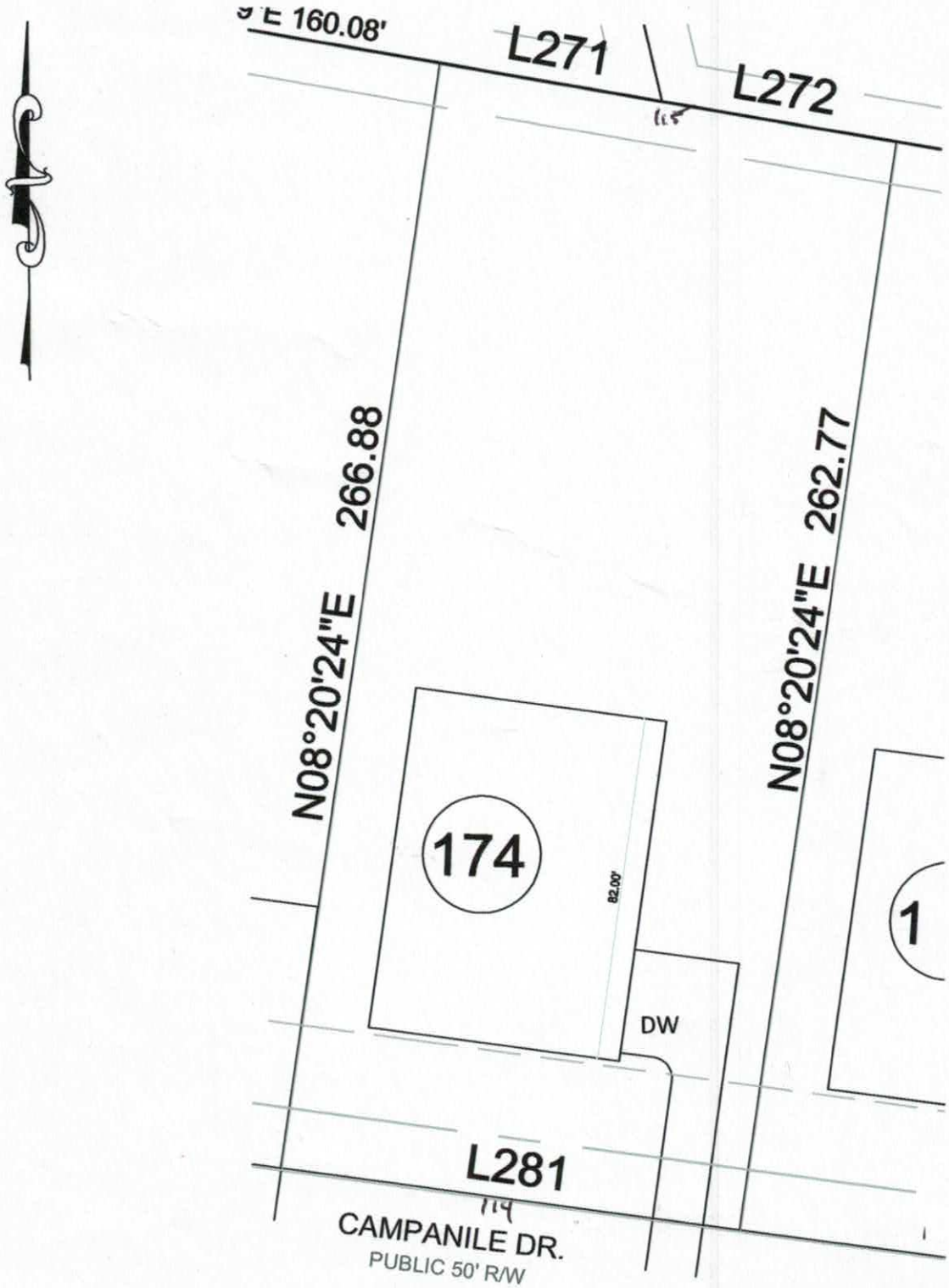
LEGEND

PO = PORCH
SP = SCREENED PORCH
CP = COVERED PORCH
WD = WOOD DECK
SW = SIDEWALK
DW = CONC DRIVEWAY

0 20 40

SCALE:
1" = 40 ft.

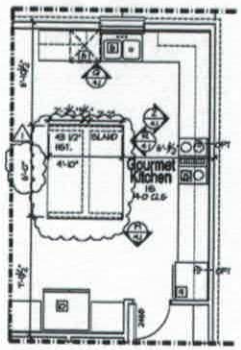
BELLS CROSSING SUBDIVISION PHASE 4
HOUSES AND SEPTIC LINES ARE STAKED IN THE FIELD
THESE SEPTIC LAYOUTS ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING APPROVAL BY THE IREDELL COUNTY ENVIRONMENTAL HEALTH DEPARTMENT.
FOR GENERAL USE NOT A SURVEY PRELIMINARY NOT FOR CONSTRUCTION
SOIL PROFILES AND ANALYSIS PROVIDED BY CENTRAL CAROLINA SOIL CONSULTING PLLC



Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, NC 27539 Ph: 919.577.1080 Fax: 919.577.1081
www.batemancivilsurvey.com info@batemancivilsurvey.com
NCBELS Firm No. C-2378

SEPTIC SITE PLAN LOT 174
BELLS CROSSING SUBDIVISION

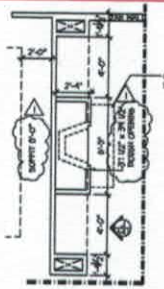
IREDELL COUNTY , NORTH CAROLINA
DATE: 04/25/16 DRAWN BY: SPC CHECKED BY: SPC



Main Floor Plan - Opt Kitchen



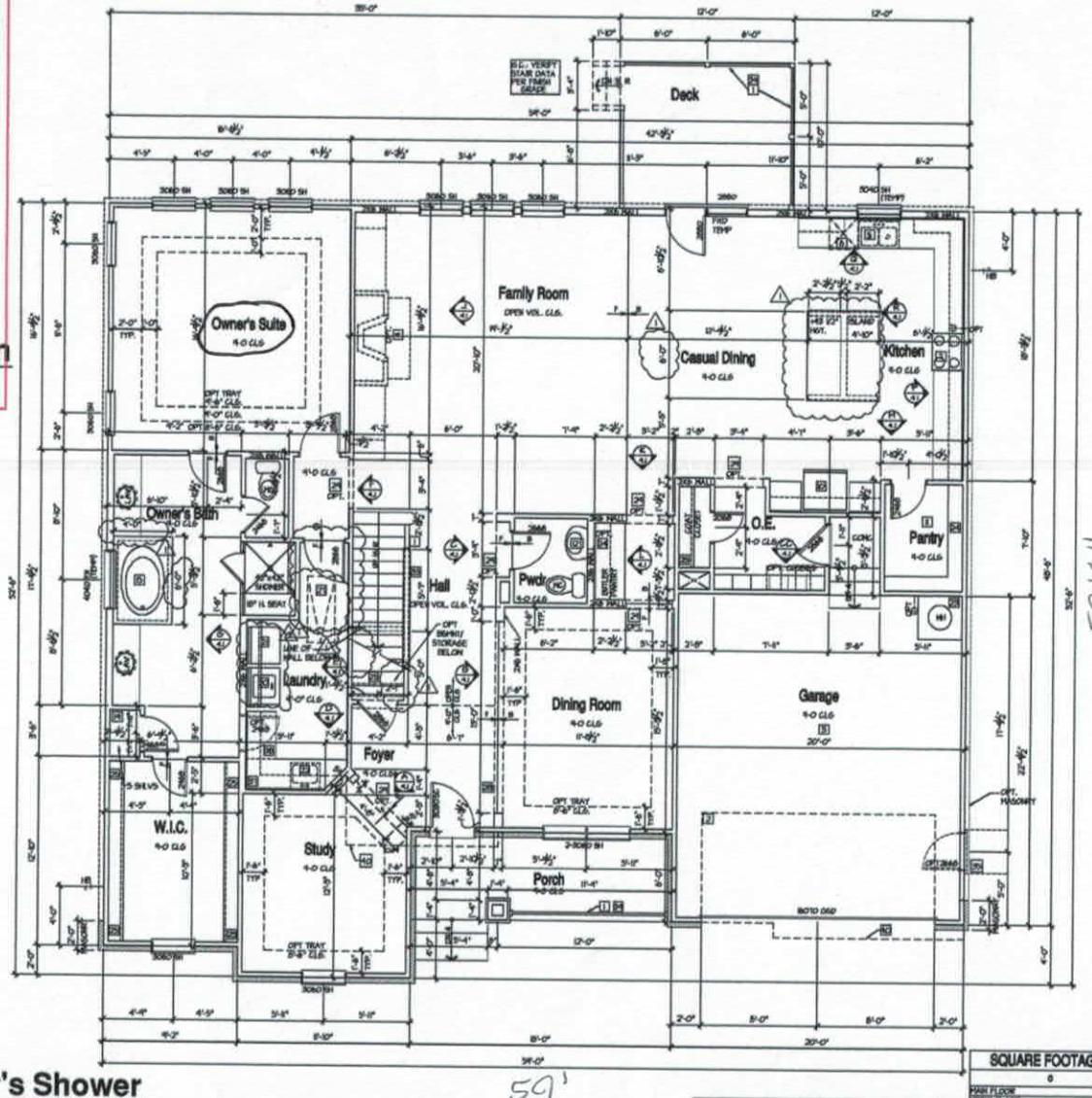
Main Floor Plan - Opt O.E.



Main Floor Plan
Opt Fireplace



Opt. Owner's Shower
Main Floor Plan



Main Floor Plan - C

FLOOR PLAN NOTES:

SEE SHEET

THE FOLLOWING KEYNOTES REFERENCE THE SYMBOLS AS SHOWN ON PLANS.

1. 9" RAILING / GUARDRAIL IS PROVIDED, ALL RAILING / GUARDRAIL BALUSTERS TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALUSTERS. RAILS/HANDRAILS ARE 10" TO BE AT A 34" MINIMUM TO 38" MAXIMUM HEIGHT A.F.F. FOR STAIRS AND 36" MINIMUM ON HORIZONTAL SURFACE GUARDS.
2. LINE OF OVERHEAD GARAGE DOOR IN OPEN POSITION.
3. SLOPE GARAGE FLOOR 1/8" PER FOOT TOWARD OVERHEAD GARAGE DOOR OPENING.
4. FIREPLACE, AS SPECIFIED BY BUILDER. INSTALL PER MANUFACTURERS SPECIFICATIONS. ALL FACTORY BUILT FIREPLACES SHALL COMPLY WITH LOCAL CODES.
5. SINK W/ GARBAGE DISPOSAL
6. DISHWASHER
7. RANGE
8. COOK TOP
9. OVEN
10. REFRIGERATOR SPACE.
11. PANTRY
12. PEDESTAL SINK
13. SHOWER SIZE AS NOTED
14. TUB WITH
15. 42" X 60" SHR 2F TO TOP OF DECKING
16. 60" X 60" SHOWER
17. 30" X 60" SHOWER
18. 32" X 60" SHOWER
19. LINEN SHELVING PER BUILDER SPECS.)
20. WASHER SPACE
21. DRYER, VENT
22. OPTIONAL LAUNDRY SINK.
23. PROVIDE NON-COMBUSTIBLE PLATFORM ELEVATED 8" ABOVE GARAGE FLOOR FOR WATER HEATER.
24. 5 SHELVES PER BUILDER SPECS.
25. 60" LINEN CLOSET W/ 5 SHELVES PER BUILDER SPECS.
26. ATTIC ACCESS (22 1/2"x30" U.N.O.)
27. ATTIC ACCESS W/ STAIRS (25 1/2"x54 1/2") PROVIDE INSULATED ENCLOSURE AT UNDERSIDE OF STAIRS
28. GYPSUM BOARD ARCH @ 11'-2" TO 81-0", FLOOR & 11'-0" AT UPPER FLOOR U.N.O.
29. GYPSUM BOARD ARCH @ 11'-2" TO 81-0".
30. GYPSUM BOARD LOW WALL, 36" A.F.F. (U.N.O.) W/ MTP CAP.
31. SOFFIT, REFER TO EXTERIOR ELEVATIONS FOR HEIGHTS & ARCHITECTURAL DETAILS FOR FINISH.
32. PLANT SHELF, SEE EXTERIOR ELEVATIONS.
33. HALF WALL W/ WOOD CAP OR OPTIONAL LOW WALL WITH RAILING ABOVE.
34. PORCH RAIL, SEE ELEVATION.
35. 36"x36" CONCRETE STOOP.
36. BeB BEAM.
37. OPTIONAL UPPER CABINETS.
38. OPTIONAL CABINETS.
39. OPTIONAL COFFERED CEILING @ 8'-0" PER BUILDER SPEC.
40. LINE OF FRAMING ABOVE.
41. LINE OF FRAMING WALL BELOW.
42. 2HR LOH WALL 42" A.F.F.
43. 2HR LOH WALL 42" A.F.F.
44. ART NICHE
45. HORIZONTAL LAUNDRY CHUTE
46. LOH WALL 42" A.F.F.
47. GYPSUM BOARD ARCH @ 8'-0" TO 8'-6"
48. LOH WALL 30" A.F.F.
49. NO HARD LATCH OR LOCKING KNOB

TYPICAL CONSTRUCTION ASSEMBLIES:

A. TYPICAL ROOF CONSTRUCTION.
ASPHALT ROOF SHINGLES

B. TYPICAL FRAME FLOOR CONSTRUCTION.
FINISH FLOORING ON 3/4" T&GWSE I GROOVE FLOOR SHEATHING ON FLOOR TRUSSES OR FLOOR JOISTS AS NOTED ON STRUCTURAL DRAWINGS.

C. SLAB ON GRADE FLOOR CONSTRUCTION.
4" CONCRETE SLAB, EXCEPT AS SPECIFIED BY SOIL REPORT, AND STRUCTURAL ENGINEER. INCLUDE VAPOR BARRIER PER SECTION M, G, B, ie.

D. WINDOWS.
A. ALL WINDOWS SHALL COMPLY WITH MINIMUM STANDARDS OUTLINED IN APPLICABLE RES. CHECK.
B. WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS TO HAVE A CLEAR EGRESS OPENING OF 5.7 SQ. FT. WITH MIN. DIMENSION OF 24" IN HEIGHT AND 20" IN WIDTH SILL HEIGHT NOT GREATER THAN 44" ABOVE FLOOR.
C. TYPICAL WINDOW HEAD HEIGHT:
7'-0" A.F.F. @ 8'-1 1/8" PLATE HEIGHT (U.N.O.)
8'-0" A.F.F. @ 9'-1 1/8" PLATE HEIGHT (U.N.O.)

E. ELECTRICAL.
ALL ELECTRICAL AND MECHANICAL EQUIPMENT & METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS. CONTRACTOR TO VERIFY.

F. HVAC.
PROVIDE BACK DRAFT DAMPERS @ DRYER VENT, HOOD VENT, & EXHAUST FANS.

G. SIGNAGE.
INSTALL PER LOCAL CODE.

H. DIMENSIONS ARE TO THE FACE OF STUD, U.N.O.

I. ALL EXTERIOR DIMENSIONS ARE TO FACE OF STUDS UNLESS OTHERWISE NOTED.

J. ALL ENABLED PARTITIONS ARE 4S SHEARED UNLESS OTHERWISE NOTED.

K. BRICK SIDING.
INSTALL PER LOCAL CODE.

SQUARE FOOTAGES

MAIN FLOOR	2956
UPPER FLOOR	1431
CRAWLSPACE	2156
FINISHED BASEMENT	1788
UNFINISHED BASEMENT	1070
GARAGE	478
PORCH	106
DECK	120
OPT EXTENDED DECK	321
OPT SCREEN PORCH	321
TOTAL	396

ALL EXTERIOR HOUSE WALLS MAY BE OPTIONAL 2X6 STUD WALLS. SEE STRUCTURAL PLANS FOR DETAILS.

Acknowledgement of Plans Submittal ONLY!

Date 4-25-17

Date 4/28/17

Meritage Homes
5400 Trinity Road
Suite 107
Raleigh,
North Carolina 27607
919-322-2288 Phone

BSB DESIGN
www.bsbdesign.com
4021 Wristen Parkway, Suite 225
West Des Moines, Iowa 50266
515.223.2320

BRIDE DATE: 01/17/2014
REVISIONS

Meritage Homes

JOB NO. 03/13339 PROJ MGR
DRAWN JF-JG CHECKED JF-JG

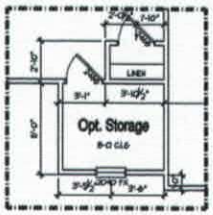
MAIN FLOOR PLAN - C

259 - 3740
A2.1C

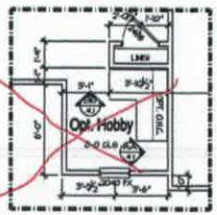
Acknowledgement of
Plans Submittal ONLY!

Date 4-25-17

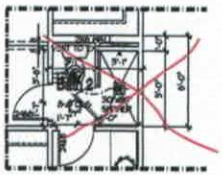
Date 4/28/17



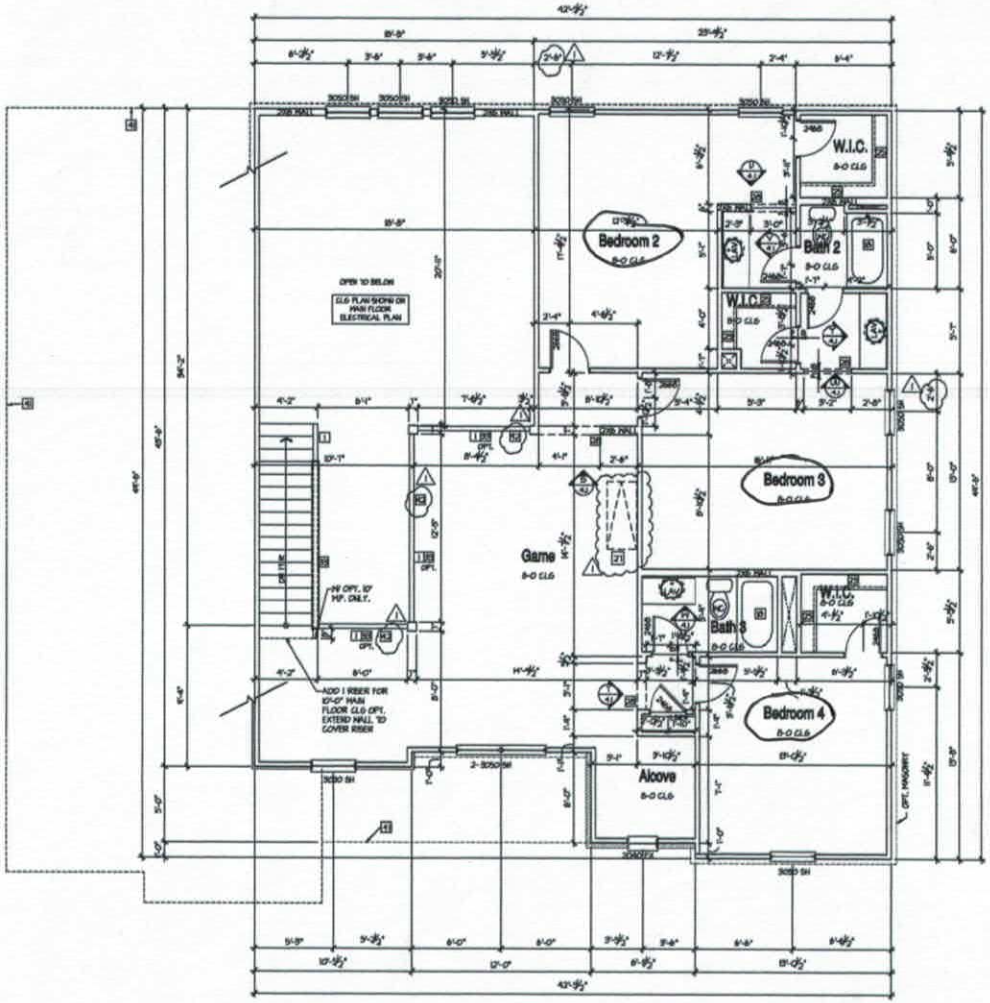
Opt. Storage - C



Opt. Hobby - C



Opt. Shower - Bath 2



Upper Floor Plan - C

ALL EXTERIOR HOUSE WALLS MAY BE OPTIONAL 2X6 STUD WALLS - SEE STRUCTURAL PLANS FOR DETAILS.

SQUARE FOOTAGES	
MAIN FLOOR	2356
UPPER FLOOR	1401
SUBTOTAL	3757
FINISHED BASEMENT	1159
UNFINISHED BASEMENT	1070
GARAGE	418
PORCH	106
DECK	200
OPT EXTENDED DECK	301
OPT SCREEN PORCH	301
TOTAL	7196

FLOOR PLAN NOTES:

(MAIN FLOOR)

1. THE FOLLOWING KEYNOTES REFERENCE THE SYMBOLS AS SHOWN ON PLANS.
2. IF RAILING / GUARDRAIL IS PROVIDED, ALL RAILING / GUARDRAIL BALUSTERS TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALUSTERS. RAILING/HANDRAILS ARE TO BE AT A 34" MINIMUM TO 38" MAXIMUM HEIGHT A.F.F. FOR STAIRS AND 36" MINIMUM ON HORIZONTAL SURFACE GUARDS.
3. LINE OF OVERHEAD GARAGE DOOR IN OPEN POSITION.
5. SLOPE GARAGE FLOOR 1/8" PER FOOT TOWARD OVERHEAD GARAGE DOOR OPENING.
4. FIREPLACE, AS SPECIFIED BY BUILDER. INSTALL PER MANUFACTURERS SPECIFICATIONS. ALL FACTORY BUILT FIREPLACES SHALL COMPLY WITH LOCAL CODES.
5. SINK W/ GARBAGE DISPOSAL
6. DISHWASHER
7. RANGE
8. COOK TOP
9. OVEN
10. REFRIGERATOR SPACE.
11. PANTRY
12. PEDESTAL SINK
13. SHOWER SIZE AS NOTED
14. LAV.
15. 42" X 80" TUB 21" TO TOP OF DECKING
16. 60"X 60" CORNER TUB
17. 30" X 60" SURSHOWER
18. 30" X 60" TURNSHOWER
19. LINEN SHELVING PER BUILDER SPECS.)
20. WASHER SPACE
21. DRYER VENT
22. OPTIONAL LAUNDRY SINK.
23. PROVIDE NON-COMBUSTIBLE PLATFORM ELEVATED 8" ABOVE GARAGE FLOOR FOR WATER HEATER.
24. 5 SHELVES PER BUILDER SPECS.
25. 60"x30" LINEN SHELVING PER BUILDER SPECS.
26. ATTIC ACCESS (22 1/2"x30" U.N.O.)
27. ATTIC ACCESS W/ STAIRS (25 1/2"x54 1/2")
28. SYSTEM BOXOUT DIMENSIONS 3'-0" WIDE FLOOR 4 1'-0" AT UPPER FLOOR U.N.O.
29. GYPSUM BOARD ARCH @ 1'-3" TO 8'-0".
30. GYPSUM BOARD LOW WALL, 36" A.F.F. (U.N.O.) W/ MOP CAP.
31. SOFFIT, REFER TO EXTERIOR ELEVATIONS FOR HEIGHTS & ARCHITECTURAL DETAILS FOR FINISH.
32. PLANT SHELF, SEE EXTERIOR ELEVATIONS.
33. HALF WALL W/ WOOD CAP OR OPTIONAL LOW WALL WITH RAILING ABOVE.
34. PORCH RAIL, SEE ELEVATION.
35. 36"x36" CONCRETE STOOP.
36. 8x8 BEAM.
37. OPTIONAL UPPER CABINETS.
38. OPTIONAL CABINETS.
39. OPTIONAL COFFERED CEILING @ 8'-6" PER BUILDER SPEC.
40. LINE OF FRAMING ABOVE.
41. LINE OF FRAMING WALL BELOW.
42. 2X4 LOW WALL 42" A.F.F.
43. 2X6 LOW WALL 42" A.F.F.
44. ART NICHE
45. HORIZONTAL LAUNDRY CHUTE
46. LOW WALL +34" A.F.F.
47. GYPSUM BOARD ARCH @ 8'-0" TO 8'-4"
48. LOW WALL 30" A.F.F.
49. 90 HARD LATCH OR LOCKSET KNOB

TYPICAL CONSTRUCTION ASSEMBLIES:

A. TYPICAL ROOF CONSTRUCTION.
ASPHALT ROOF SHINGLES

B. TYPICAL FRAME FLOOR CONSTRUCTION.
FINISH FLOORING ON 3/4" TONGUE & GROOVE FLOOR SHEATHING ON FLOOR TRUSSES OR FLOOR JOISTS AS NOTED ON STRUCTURAL DRAWINGS.

C. SLAB ON GRADE FLOOR CONSTRUCTION.
4" CONCRETE SLAB, EXCEPT AS SPECIFIED BY SOIL REPORT, AND STRUCTURAL ENGINEER. INCLUDE VAPOR BARRIER PER SECTION M, C, 3, a.

D. WINDOWS.
A. ALL WINDOWS SHALL COMPLY WITH MINIMUM STANDARDS OUTLINED IN APPLICABLE RES. CHECKS.
B. WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS TO HAVE A CLEAR EGRESS OPENING OF 5.7 SQ. FT. WITH MIN. DIMENSION OF 24" IN HEIGHT AND 20" IN WIDTH. SILL HEIGHT NOT GREATER THAN 44" ABOVE FLOOR.
C. TYPICAL WINDOW HEAD HEIGHT:
7'-0" A.F.F. @ 8'-1 1/8" PLATE HEIGHT (U.N.O.)
8'-0" A.F.F. @ 9'-1 1/8" PLATE HEIGHT (U.N.O.)

E. ELECTRICAL.
ALL ELECTRICAL AND MECHANICAL EQUIPMENT & METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS. CONTRACTOR TO VERIFY.

F. MISC.
PROVIDE EAVE, DRAFT DIVERTERS & DRYER VENT, RANGE VENT, & EXHAUST FANS.

G. SMOKE SENSOR.
INSTALL PER LOCAL CODE.

H. DIMENSIONS ARE TO THE FACE OF STUD, U.N.O.

I. ALL EXTERIOR DIMENSIONS ARE TO FACE OF SIDING UNLESS OTHERWISE NOTED.

H. ALL ANGLED PARTITIONS ARE 45 DEGREES UNLESS OTHERWISE NOTED.

K. BRICK SIDING.
INSTALL PER LOCAL CODE.

ISSUE DATE: 01/17/2014
REVISIONS

5400 Trinity Road
Suite 107
Raleigh,
North Carolina 27607
919-322-2365 Phone

Meritage Homes

Meritage Homes

BSB DESIGN
www.bsbdesign.com
4901 Nicholas Parkway, Suite 205
West Des Moines, Iowa 50266
515.223.3303

JOB NO. 03.73035 PROJECT
DRAWN DESIGNED JFJG

UPPER FLOOR PLAN - C

259 - 3740

A2.2C

IREDELL COUNTY

PO Box 788
349 North Center St.
Statesville, NC 28677

APPLICATION NUMBER
212203
Issue Date: 07/28/2015

ZONING PERMIT

Parcel Number	Street Address	Jurisdiction
4639834045.000	144 CAMPANILE DRIVE, MOORESVILLE, NC 28117	IREDELL COUNTY

Owner Information	Applicant Information
Owner: MERITAGE HOMES OF NC INC	Applicant: MERITAGE HOMES
Address: 17851 N 85TH ST MOORESVILLE, AZ 85255	Address: 7761 BALLANTYNE COMMONS PKWY SUIT CHARLOTTE, NC 28277
Phone:	Phone: 704-944-8903

Use Requested	Zone Code
SFD	RA

Lot Acreage	F Setback	B Setback	L Setback	R Setback	Watershed	Flood Zone
76.003	35.00	35.00	15.00	15.00	CACL	AE

Remarks:

The applicant certifies that there are no deed restrictions, contractual agreements or governmental regulations of any kind that interfere with or prohibit the use of the property or the use for which this permit is requested. The applicant further acknowledges that enforcement of deed restrictions, plat conditions and other contractual agreements will not be undertaken by Iredell County and is the sole responsibility of the affected parties.

Applicant: _____ Date: _____

Permit Number	44911	TOTAL FEES:	$ 77.25