

**North Carolina Department of Environmental Quality
Division of Water Resources
Public Water Supply Section**

**Application for Approval
of Engineering Plans and Specifications
For Water Supply Systems**

Applicant	Design Engineer
Chatham County <small>(Name of Board, Council or Owner - the Applicant)</small>	Gareth Avant, P.E. <small>(Name of Design Engineer of Record)</small>
Renee Paschal, County Manager <small>(Name and Title of Authorized Official or Representative of the Applicant)</small>	McKim & Creed, Inc. <small>(Name of Engineering Firm)</small>
12 East Street, Courthouse Annex <small>(Mailing Address)</small>	1730 Varsity Drive, Suite 500 <small>(Mailing Address)</small>
Pittsboro, NC 27312 <small>(City, State & ZIP)</small>	Raleigh, NC, 27606 <small>(City, State & ZIP)</small>
(919) 542-8200 <small>(Phone Number)</small>	(919) 233-8091 <small>(Phone Number)</small>
(919) 542-8272 <small>(FAX Number)</small>	(919) 233-8091 <small>(FAX Number)</small>
Renee.Paschal@chathamnc.org <small>(Email address)</small>	gavant@mckimcreed.com <small>(Email address)</small>
 <small>(Signature of Authorized Official or Representative of the Applicant)</small>	

Project Name: Ryan's Crossing Subdivision
(Name of Project to appear on Public Water Supply Section records and tracking system)

Approximately 5,595 lf of 8-inch, 176 lf of 6-inch ductile iron water main, & 281 lf of 2" Schedule 40 PVC water main and all associated appurtenances.
(description of project)

Near the intersection of Tobacco Road and Mann's Chapel Road
(general location of project)

in Chatham County.

Date _____
(for DEQ use only)

Serial No. _____
(for DEQ use only)

Application for Approval of Engineering Plans and Specifications for Water Supply Systems

To: Division of Water Resources,
Department of Environmental Quality

The **Applicant** applies under and in full accord with the provision of NCGS 130A-317, and such other statutes and rules as relate to public water systems. The **Authorized Official or Representative** of the **Applicant** represents that he is authorized to act for the **Applicant**. The **Authorized Official or Representative** of the **Applicant** understands and agrees to the following:

1. The **Applicant** shall not award contracts or begin construction without first receiving "Authorization to Construct" from DEQ.
2. The **Applicant** shall make no change or deviation from the engineering plans and specifications approved by DEQ except as allowed by 15A NCAC 18C .0306 or with the written consent and approval of DEQ.
3. The **Applicant** shall obtain Final Approval in accordance with 15A NCAC 18C .0306 prior to placing the project (or any portion thereof) into service.
4. Digital (PDF) submittals are true image copy of the original sealed/signed documents.

An authorized representative of the **Public Water System** (not always the same as the **Applicant**) is to complete and sign the following WSMP section.

Status of Water System Management Plan (WSMP)

Check one of the following, and if applicable, provide the required information:

- The WSMP for the project, as defined in the attached engineering plans and specifications, has not been submitted.
- Three copies of the WSMP for the project, as defined in the attached engineering plans and specifications, are submitted with this application.
- The WSMP that includes this project, as defined in the attached engineering plans and specifications, was previously submitted.

Provide the following:

Public Water System Name: North Chatham

Owner Name: Chatham County

Water System No.: NC 03-19-126

Serial Number of Deemed Complete WSMP: 12-00936

By my signature below, I certify that the previously submitted WSMP contains the information required by 15A NCAC 18C .0307(c) for the project defined in the attached engineering plans and specifications.

Renee Paschal
(Type or print name of authorized representative of Public Water System)

County Manager, Chatham County
(Title of authorized representative of Public Water System)

Renee Paschal
(Signature of authorized representative of Public Water System)

8/22/18
(Date)

Application for Approval of Engineering Plans and Specifications for Water Supply Systems

In accordance with NCGS 130A-328, the Public Water Supply Section charges a fee for plan review. **Any documents submitted for review must be accompanied by a check payable to DEQ-Public Water Supply Section before the review will begin.**

There is a \$25 fee for returned checks.

The charges for review of plans are shown below. Check one of the following.

Distribution System fees

- | | | |
|-------------------------------------|---|--------------|
| <input type="checkbox"/> | Construction of water lines, less than 5000 linear feet | \$150 |
| <input checked="" type="checkbox"/> | Construction of water lines, 5000 linear feet or more | \$200 |
| <input type="checkbox"/> | Other construction or alteration to a distribution system | \$ 75 |

Ground Water System fees

- | | | |
|--------------------------|--|--------------|
| <input type="checkbox"/> | Construction of a new ground water system or adding a new well | \$200 |
| <input type="checkbox"/> | Alteration to an existing ground water system | \$100 |

Surface water system fees

- | | | |
|--------------------------|---|--------------|
| <input type="checkbox"/> | Construction of a new surface water intake or treatment facility | \$250 |
| <input type="checkbox"/> | Alteration to existing surface water intake or treatment facility | \$150 |

Other fees

- | | | |
|--------------------------|--|--------------|
| <input type="checkbox"/> | Water System Management Plan review | \$ 75 |
| <input type="checkbox"/> | Miscellaneous changes or maintenance not covered above | \$ 50 |

Notes:

1. Projects for Tank Rehabilitation use separate "Application for Water Tank Reconditioning Plan Approval."
2. The fee is not refundable if the plans are not approved.
3. Revisions to plans to address the Public Water Supply Section's or other state agency's comments do not incur an additional fee.
4. If one set of plans has multiple related items (such as a new well with construction of water lines) only one fee must be submitted for highest price item. The amounts are not cumulative, except for fees for Water System Management Plans.
5. **If the appropriate plan review fee is not received within ten days after the receipt of plans, specifications, and reports for approval, then all plan documents will be recycled. A new set of documents must then be submitted with the appropriate fee for approval.**

This approval does not address all applicable laws, rules, standards and criteria, and other approvals and licenses that may be required by the local, state or federal government.

The Public Water Supply Section has stamped and sealed the official copies of plans and specifications accompanying this application with the serial number of this application _____. Any erasures, additions or alterations of the proposed improvements except those permitted in 15A NCAC 18C .0306 make this approval null and void.

This approval does not constitute a warranty of the design, construction or future operation of the water system.

Signed: _____
Robert W. Midgette, P.E., Operations Branch Head
Public Water Supply Section
Division of Water Resources

Application for Approval of Engineering Plans and Specifications for Water Supply Systems

Other Information and Checklist Page

- Attached is a check for the proper plan review fee amount, in accordance with NCGS 130A-328. See note 4 on page 3.

This submittal includes one paper original with two digital (PDF) CDs of the following items, each item in separate folders:

- This completed "Application for Approval of Engineering Plans and Specifications for Water Supply Systems"
- The sealed plan drawings, separate file in PDF format for each drawing. Cover sheet must include drawings index;
- The project-specific Engineering Report (ER) describing the scope and purpose of the project and addressing each of the items listed in 15A NCAC 18C .0307(b), including the design basis of the project. [15A NCAC 18C .0307(b) (12)];
- Specifications for this project; **OR**
- The project will use the following system's previously approved standard specifications for waterline extensions:

Name of System: _____

Serial Number: _____

The Serial Numbers for previously approved standard specifications can be found at the following website:

<http://www.ncwater.org/?page=424>

One of the following:

- Attached is a letter signed by an authorized representative of the Public Water System agreeing to serve the project and stating that the system has adequate supply;

OR

- The **Applicant** is the Public Water System.

If the project has sought funding (for example, DWSRF loan) list the program and (if available) the application or funding number below:

Program Name	Application or Funding Number, if available

Yes No

- Project will be completed with significant expenditure of state moneys, greater than ten million dollars (\$10,000,000) in accordance with G.S. 113A-9 (7a).

- Project will cause substantial, permanent land-disturbing activity of an area greater than 10 acres of public lands in accordance with G.S. 113A-9 (11).

Ben Smith

From: Larry Bridges <larry.bridges@chathamnc.org>
Sent: Thursday, August 23, 2018 7:16 AM
To: Gareth Avant
Cc: Chris Seamster
Subject: RE: Ryan's Crossing
Attachments: Ryans Crossing.pdf

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Good morning Gareth,

I have completed my review of the construction plans for Ryan's Crossing and have the signed permit application. How would you like me to send it to you? Or is someone available to swing by my office and pick up? I have also attached the invoice for my plan review fee. Thanks.

Larry Bridges

From: Gareth Avant [mailto:GAvant@mckimcreed.com]
Sent: Tuesday, August 07, 2018 10:29 AM
To: Jason Savage; Larry Bridges
Cc: Chris Seamster; Ben Smith; Marian Cymbalak; Jacob Bowes
Subject: RE: Ryan's Crossing

Thank you Jason!

From: Jason Savage
Sent: Tuesday, August 07, 2018 10:19 AM
To: Larry Bridges <larry.bridges@chathamnc.org>; Gareth Avant <GAvant@mckimcreed.com>
Cc: Chris Seamster <cseamster@mckimcreed.com>; Ben Smith <BSmith@mckimcreed.com>; Marian Cymbalak <MCymbalak@mckimcreed.com>; Jacob Bowes <JBowes@mckimcreed.com>
Subject: Re: Ryan's Crossing

Good morning, we were able to complete the fire flow test along Manns Chapel Road earlier today. Preliminary results show test hydrant dropped from 91psi to 73psi, with a flow of 1275gpm measured at the flow hydrant. I will insert all this information into a report later today.

Thanks.

Jason

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: Jason Savage <JSavage@mckimcreed.com>

Date: 8/6/18 12:09 PM (GMT-05:00)

To: Larry Bridges <larry.bridges@chathamnc.org>, Gareth Avant <GAvant@mckimcreed.com>

Cc: Chris Seamster <cseamster@mckimcreed.com>, Ben Smith <BSmith@mckimcreed.com>, Marian Cymbalak <MCymbalak@mckimcreed.com>, Jacob Bowes <JBowes@mckimcreed.com>

Subject: RE: Ryan's Crossing

Good afternoon Larry,

We have repaired our fire flow gauge and are checking it out today. Assuming it is operational, we'd like to schedule the test for tomorrow (Tuesday). We can be on site around 9:30am tomorrow, or again at 2pm or later. Let us know if you have a preference on the time.

Thanks.

Jason

From: Jason Savage

Sent: Wednesday, August 01, 2018 12:21 PM

To: 'Larry Bridges' <larry.bridges@chathamnc.org>; Gareth Avant <GAvant@mckimcreed.com>

Cc: Chris Seamster <cseamster@mckimcreed.com>; Ben Smith <BSmith@mckimcreed.com>; Marian Cymbalak <MCymbalak@mckimcreed.com>; Jacob Bowes <JBowes@mckimcreed.com>

Subject: RE: Ryan's Crossing

Good afternoon Larry and Gareth,

Our pitot gauge is not working properly today, so we were not able to complete the test. We'll get a new one ordered and reschedule the test asap.

I'll be in touch.

-Jason

From: Larry Bridges <larry.bridges@chathamnc.org>

Sent: Tuesday, July 31, 2018 12:34 PM

To: Jason Savage <JSavage@mckimcreed.com>; Gareth Avant <GAvant@mckimcreed.com>

Cc: Chris Seamster <cseamster@mckimcreed.com>; Ben Smith <BSmith@mckimcreed.com>; Marian Cymbalak <MCymbalak@mckimcreed.com>; Jacob Bowes <JBowes@mckimcreed.com>

Subject: RE: Ryan's Crossing

Wayme Marsh, our construction inspector plans to be on-site but if he is not there by 10 am you can proceed with test. Make sure hydrants are run until they clear before starting test and provide me with the results when finished. Thank you.

Larry Bridges

From: Jason Savage [<mailto:JSavage@mckimcreed.com>]
Sent: Tuesday, July 31, 2018 11:36 AM
To: Larry Bridges; Gareth Avant
Cc: Chris Seamster; Ben Smith; Marian Cymbalak; Jacob Bowes
Subject: RE: Ryan's Crossing

Good morning Larry,

Marian and Jacob will plan to meet you there tomorrow, Wednesday August 1st at 10am.

Just let us know if your schedule changes and we need to reschedule.
Thanks.

Jason

From: Larry Bridges <larry.bridges@chathamnc.org>
Sent: Tuesday, July 31, 2018 10:19 AM
To: Gareth Avant <GAvant@mckimcreed.com>
Cc: Chris Seamster <cseamster@mckimcreed.com>; Ben Smith <BSmith@mckimcreed.com>; Jason Savage <JSavage@mckimcreed.com>
Subject: RE: Ryan's Crossing

Mid to late morning would work best. Just let me know what time and I will arrange for someone to be there. Can you send me the results as well after the test is completed. Thanks.

Larry

From: Gareth Avant [<mailto:GAvant@mckimcreed.com>]
Sent: Tuesday, July 31, 2018 10:13 AM
To: Larry Bridges
Cc: Chris Seamster; Ben Smith; Jason Savage
Subject: RE: Ryan's Crossing

Larry,

We will be available to do this tomorrow. Will that work for your guys? And do you have a time that will work best?

Thanks!

-Gareth

From: Larry Bridges <larry.bridges@chathamnc.org>
Sent: Tuesday, July 31, 2018 9:51 AM
To: Gareth Avant <GAvant@mckimcreed.com>
Cc: Chris Seamster <cseamster@mckimcreed.com>; Ben Smith <BSmith@mckimcreed.com>
Subject: RE: Ryan's Crossing

Good morning Gareth,

The fees need to be paid prior to planning approval. As for the fire flow test, I just need to be made aware when the test will take place so I can have a representative from my department there. Let me know if you have any further questions. Have a great day.



Larry D. Bridges
Public Utilities Director
Chatham County Utilities & Water Division

964 East St., 2nd floor Suite 205
Phone: (919) 542-8238
Fax: (919) 542-8282
larry.bridges@chathamnc.org

From: Gareth Avant [<mailto:GAvant@mckimcreed.com>]
Sent: Tuesday, July 31, 2018 9:15 AM
To: Larry Bridges
Cc: Chris Seamster; Ben Smith
Subject: Ryan's Crossing

Larry,

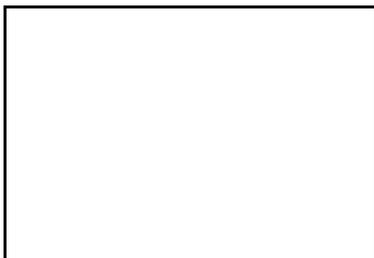
Hope you are doing well! I have a couple of questions related to the Ryan's Crossing subdivision plans we are working on:

1. We are planning on submitting our plans to you for review in the next few days. We know that the County's requirement is that the meter impact fee be paid to you at some point during the process. Is that fee required prior to you issuing approval, or is it just prior to receiving planning approval? We just want to make sure we have the timing right.
2. We need to do a fire flow test off of the existing Mann's Chapel main. Do we need to pay you a fee in order to do that? I think in the past we only needed to notify you. We are trying to schedule that this week if possible.

Thanks!

Gareth Avant, PE, LEED AP | Project Engineer
T 919.233.8091 | C 336.339.3970
1730 Varsity Drive, Suite 500 | Raleigh, NC 27606
GAvant@mckimcreed.com | www.mckimcreed.com

[Voted "Best Firm To Work For" - Zweig Group](#)



To send me a file larger than 20MB [please click here](#)

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ROY COOPER

Governor

MICHAEL S. REGAN

Secretary

LINDA CULPEPPER

Interim Director



NORTH CAROLINA
Environmental Quality

October 22, 2018

Chatham County
ATTN: Renee Paschal, County Manager
12 East Street, Courthouse Annex
Pittsboro, NC 27312

Re: **Authorization to Construct (This is not a Final Approval)**
Issue Date: October 22, 2018
Ryan's Crossing Subdivision
Serial No.: 18-00786 Water System No.: NC0319126
Chatham County

Dear Applicant:

This letter is to confirm that a complete Engineer's Report and a Water System Management Plan have been received, and that engineering plans and specifications have been approved by the Department for **Ryan's Crossing Subdivision, Serial No.: 18-00786**.

The "Authorization to Construct" is valid for 24 months from the issue date. Authorization to construct may be extended if the Rules Governing Public Water Supplies and site conditions have not changed (see Rule .0305). The "Authorization to Construct" and the engineering plans and specifications approval letter shall be posted at the primary entrance of the job site before and during construction.

Upon completion of the construction or modification, **and prior to placing the new construction or modification into service**, the applicant must submit an Engineer's Certification and Applicant's Certification to the Public Water Supply Section.

- **Engineer's Certification:** in accordance with Rule .0303 (a), the applicant shall submit a certification statement signed and scaled by a registered professional engineer stating that construction was completed in accordance with approved engineering plans and specifications, including any provisions stipulated in the Department's engineering plan and specification approval letter.
- **Applicant's Certification:** in accordance with Rule .0303 (c), the applicant shall submit a signed certification statement indicating that the requirements for an Operation and Maintenance Plan and Emergency Management Plan have been satisfied in accordance with Rule .0307 (d) and (e) and that the system has a certified operator in accordance with Rule .1300. The "Applicant's Certification" form is available at <http://www.ncwater.org/> (click on Public Water Supply Section, Plan Review, Plan Review Forms).

Certifications can be sent by mail, fax or attachment to an e-mail message to **PWSSection.PlanReview@ncdenr.gov**.

If this "Authorization to Construct" is for a new public water system, the owner must submit a completed **application for an Operating Permit** and the appropriate fee. For a copy of the application for an Operating Permit please call (919) 707-9085.

Once the certifications and permit application and fee (if applicable) are received and determined adequate, the Department will issue a Final Approval letter to the applicant. In accordance with Rule .0309 (a), **no portion of this project shall be placed into service until the Department has issued Final Approval**.

Please contact us at (919) 707-9100 if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink that reads "R.W. Midgette".

Robert W. Midgette, P.E., Operations Branch Head
Public Water Supply Section
Division of Water Resources

cc: ALLEN HARDY, Regional Engineer
McKim & Creed, Inc.



North Carolina Department of Environmental Quality
Division of Water Resources

Authorization to Construct

Project Applicant:	Chatham County
Public Water System Name and Water System No.:	CHATHAM CO-NORTH NC0319126
Project Name:	Ryan's Crossing Subdivision
Serial No.:	18-00786
Issue Date:	October 22, 2018
Expiration Date:	24 Months after Issue Date

In accordance with NCAC 18C .0305, this Authorization to Construct must be posted
at the primary entrance to the job site during construction.



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

LINDA CULPEPPER
Interim Director

October 22, 2018

Chatham County
Attention: Renee Paschal, County Manager
PO Box 1550
Pittsboro, North Carolina 27312

Re: Engineering Plans and Specifications Approval
Distribution Extension
Ryan's Crossing Subdivision
Chatham County - North
Water System No.: NC0319126, Chatham County
Serial No.: 18-00786

Dear Applicant:

Enclosed please find one copy of the "Application for Approval..." together with one copy of the referenced engineering plans and specifications bearing the Division of Water Resources stamp of approval for the referenced project. These engineering plans and specifications are approved under Division of Water Resources Serial Number 18-00786, dated October 22, 2018. **The following approval has one condition: Proper stream/wetlands permit/approval(s) must be obtained before installing the proposed water main within the depicted wetland areas and stream crossing.**

Engineering plans and specifications prepared by Gareth C. Avant, P.E., call for the installation of approximately 5,595 feet of 8-inch water main, 175 feet of 6-inch water main, 280 feet of 2-inch water main, fire hydrants, valves and associated appurtenances along Amelia Lane, Delia Lane, Evander Way, and Lila Drive to serve 61 single-family residences in Ryan's Crossing subdivision located along Mann's Chapel Road near its intersection with Tobacco Road in Chatham County. The proposed water main will connect to an existing 12-inch water main along Mann's Chapel Road.



Chatham County
Attention: Renee Paschal, County Manager
Page 2 of 2
October 22, 2018

Please note that in accordance with 15A NCAC 18C .0309(a), no construction, alteration, or expansion of a water system shall be placed into service or made available for human consumption until the Public Water Supply Section has issued Final Approval. Final Approval will be issued and mailed to the applicant upon receipt of both an Engineer's Certification and an Applicant's Certification submitted in accordance with 15 A NCAC 18C .0303 (a) and (c).

These plans and specifications in the foregoing application are approved insofar as the protection of public health is concerned as provided in the rules, standards and criteria adopted under the authority of Chapter 130A-317 of the General Statutes. This approval does not constitute a warranty of the design, construction or future operation of the water system.

One copy of the "Application for Approval..." and a copy of the plans and specifications with a seal of approval from the department are enclosed. One copy of the approved documents in a digital format (CD) is being forwarded to our Raleigh Regional Office. The second copy of the CD is being retained in our office.

If the Public Water Supply Section can be of further service, please call (919) 707-9100.

Sincerely,

Handwritten signature of Robert W. Midgette in cursive, followed by the text "/for".

Robert W. Midgette, P.E.
Operations Branch Head
Public Water Supply Section

RWM/LARP

Enclosures: Approval Documents

cc: Allen Hardy, Raleigh Regional Office
Chatham County Health Department
McKim & Creed, Inc.