

## MINUTES FOR BOARD OF ALDERMEN MEETING

NOVEMBER 10, 2015

6:00 PM

The following elected officials were present: Mayor Coleman, Alderman Cearley, Alderman Huggins, Alderwoman Morrow, Alderwoman Malaker-Thomas, and Alderman Withers.

The following staff members were present: Jim Palenick, Interim Town Manager; Maria Stroupe, Administrative Services Director; Town Attorney, Tom Hunn; Doug Huffman, Electric Director; Bill Trudnak, Public Works Director; Steve Lambert, Fire Chief; Anne Martin, Recreation Director; and Jack Kiser, Development Services Director. Gary Buckner, Police Chief, was absent.

Mayor Coleman called the meeting to order at 6:00 pm.

Mayor Coleman opened with the Invocation and the Pledge of Allegiance to the Flag.

Mayor Coleman asked if there were any additions or deletions to the agenda. Mayor Coleman asked that Item 11D be added to address a resolution to Gaston County requesting funds toward a sewer interconnect line with Gastonia. Mr. Withers made a motion to approve the agenda with the addition of Item 11D, seconded by Ms. Malaker-Thomas, and carried unanimously.

Ms. Malaker-Thomas made a motion to approve the minutes from the October 13th Regular Meeting and the October 27<sup>th</sup> Work Session, seconded by Mr. Cearley with the provision that Item 11G be corrected to reflect the accurate contract amount. The motion was approved unanimously to include the correction.

### **Consent Agenda:**

None

### **Recognition of Citizens:**

Mr. John O'Daly, 112 Brahman Ct., spoke concerning three topics: 1) Has anyone decided what will be done with the building at 130 W. Trade St.? 2) Since Courtney's has closed there is not a For Sale sign or anything going on with the space. He would like to see something done, as downtown is going down. 3) There is a dip in the road on Summey Farm Dr. that he brought to the attention of public works almost a year ago. He was told it was in the budget to correct, but nothing has been done. Mayor Coleman asked Mr. Trudnak to address this tomorrow.

Ms. Starletta Hairston, 407 W. Main St. congratulated those elected in the recent election and looks forward to progress in Dallas.

Mr. Tommy Lineman, 405 S. Ridge St. congratulated those elected in the recent election. He feels that Dallas needs to move forward and put personal differences aside for the betterment of the town. Negative comments should be stopped and move toward the positives. He would like to see Dallas thrive for future generations. He would like the Board to consider increasing the TOP TIER program to entice property owners to spruce up their buildings.

Mr. Curtis Wilson, 438 S. Gaston St., congratulated those elected in the recent elections. He prayed over the agenda and the issues facing the Board. He also prayed for the employees, citizens, and leaders in the community.

### **Employee Recognition:**

Item 7A was recognition of three new employees: Eric Abrams, Utility Meter Reader; Daniel Marlow, Police Officer; and Scott Brown, Tree Trimmer/Landscape Technician. Mr. Huffman introduced Mr. Brown. The other two new employees were unable to attend.

## **Special Events & Requests for In-Kind Services:**

None

## **Public Hearings:**

Item 9A was a public hearing concerning an amendment to Title XI, "Business Regulation"; Chapter 110, of the Compiled Code of Town Ordinances, involving the repeal of the "Privilege License Program", and the creation of a new, "Business Registration Program". Ms. Malaker-Thomas made a motion to enter into the public hearing, seconded by Mr. Cearley, and carried unanimously. This item was introduced at the Board Work Session on October 27<sup>th</sup> for discussion. This ordinance will repeal the now-unlawful (as established by action of the North Carolina General Assembly effective June 30, 2015) "Privilege License and Fee Program" and replaces it with an authorized, "Business Registration Program" designed to gather public safety planning and preparedness information on businesses existing or operating within the Town of Dallas. (Exhibit A) Each for-profit business would be required to apply for and receive a yearly 'Business Registration Certificate'; be subject to an initial, and possible future, follow-up inspection; and pay a yearly \$35.00 fee. (Exhibit B) This program, if approved, will begin in January 2016 and then follow the Town's fiscal year. It was discussed at the Work Session, that it was desirable to gather the same data for non-profit entities, but without an annual fee. A detailed "Definition for Non-Profit Organization (NPO)", Section 110.03 has been added that clarifies that such entities are exempt from the provision of the ordinance, but that they are, and will be required to submit building and contact information as part of the Dallas Fire Department's Pre-Incident Planning Program Survey Requirements. By utilizing a business registration program, the Town can assure that this vital information will be obtained and maintained without interruption. Mr. Withers asked if this program would run with the calendar year or the fiscal year. Mr. Palenick stated that the program would begin in January for ½ of the fee, then run by fiscal year beginning July 2016. Gene Armstrong, 402 Lewis St., asked how this would be communicated to the churches. Chief Lambert currently is conducting this program with the churches, so that should not really change anything for them. An audience member asked why the fee was now flat, when the privilege license fees were varied. Mr. Palenick stated that the privilege licenses were by business type and regulated by the State; with the registration program, the procedure will be the same no matter the size or type of business, therefore the fee will be standard. Mr. Cearley made a motion to exit the public hearing, seconded by Mr. Huggins, and carried unanimously. Ms. Malaker-Thomas made a motion to approve the ordinance amendment and business registration program as presented, seconded by Mr. Cearley, and carried unanimously.

## **Old Business:**

Item 10A was a request to authorize and approve a financial advisory agreement with DEC Associates for fire station debt refinancing. This item was first brought to the October 13<sup>th</sup> Board Meeting for action, but was tabled. The Town's Fire Station was financed in 2008 with installment debt issued by Park Sterling Bank for a 25-year loan period at 4.33% interest on a principal balance of \$1,500,000.00. Currently, there is 18 years remaining on the life of the loan, with outstanding principal of \$1,264,132.00. With recent interest rates on longer-term municipal debt at historic lows, it may be prudent to attempt to see if a refinance could result in debt service interest savings to the Town. All North Carolina municipal debt must be approved by the Local Government Commission (LGC) of the State Treasurer's Office, and be structured and issued consistent with strict guidelines put forth by the LGC. Normally, this is accomplished by contracting with Financial Advisor firms, such as the Town utilized with the water system debt; to structure, bid, place the debt, and work with the LGC to assure approval. As DEC Associates, Inc., of Charlotte performed these tasks for Dallas with the water system debt, it seems appropriate to contract with them again for possible refinancing of the Fire Station debt. The fees would be \$10,000 if the Town determines, after bidding that it chooses not to refinance. The fees would rise to \$25,000 if the debt is fully refinanced and approved through the LGC process. Discussion followed around the possibility of restructuring the current debt back with Park Sterling. Mr. Huggins made a motion to table the discussion indefinitely pending further research into options, seconded by Ms. Morrow, and carried unanimously.

Item 10B was a request to authorize and create a Community Garden space at 402 East Johnson St. This item was first brought to the October 13<sup>th</sup> Board Meeting for action, but was tabled pending receipt of the deed for the property. This vacant house and attached property was recently accepted by the Town by donation from the private owner in Ohio. Mr. Hunn was expecting to receive the document authorizing the transfer of the title by this meeting, but still has not received it.

Ms. Malker-Thomas made a motion to table this item until the December meeting, seconded by Mr. Withers, and carried unanimously.

**New Business:**

Item 11A was a presentation by Mr. Scott Thompson from Black & Veatch Engineering, summarizing findings and recommendations on operational practices at the Water Treatment Plant. Mr. Thompson stated that the plant was in quite good condition for its age. The source water comes from the South Fork River, which is a pretty good source. As for chemical usage, he recommended some changes that should reduce the amount of chemicals used in the process. Key recommendations were included in the summary "WTP Evaluation Executive Summary". (Exhibit C) These recommendations cover current recommendations, as well as long-term recommendations.

Item 11B was a request to approve a resolution supporting the US 321B and NC 279-275 Sidewalk and Crosswalk Project Application for congestion Mitigation and Air Quality (CMAQ) Grant Funding. (Exhibit D) Mr. Kiser gave an overview. In 2013, the Town submitted a request to the MPO for 80% funding of a sidewalk project under the CMAQ program. This project would have installed sidewalk along Dallas-High Shoals Hwy from the current ending point (McDonald's) to Park Road and a short distance along Park Road connecting to Park Place Subdivision. After further engineering, it was determined that the cost of the project far exceeded the original 80-20 grant match budget, leaving the Town to have to pay all costs exceeding the original approved grant. Due to the increased costs, the Town decided to cancel the project and return the grant funds. The MPO then offered Dallas the opportunity to use the grant funds on another project that would qualify for the funding. The new proposed project would install sidewalks from McDonald's to the Post Office on Dallas High Shoals Highway and from Walgreen's to across from the entrance to Gaston College on Dallas Cherryville Highway. At the entrance to Gaston College a crosswalk would be installed, including a pedestrian activated crossing. Lighting along the sidewalk would also be installed matching the lighting used at Walgreen's. The MPO approved the revised project and requires a resolution from the Board of Aldermen approving the project in order to grant the funding. The Town's portion of the project is currently budgeted in the 2015/16 fiscal year budget. Ms. Malker-Thomas made a motion to approve the resolution and to reallocate the budgeted funds to the revised project as presented, seconded by Mr. Withers, and carried unanimously.

Item 11C was a discussion to determine the necessity of scheduled work sessions in November and December. As scheduled, the November work session would be held on Tuesday, November 24<sup>th</sup> (the week of Thanksgiving) and the December work session would be held on Tuesday, December 22<sup>nd</sup> (the week of Christmas). In recent years, with no pressing issues, one or both of these sessions have been cancelled. Mr. Withers made a motion to hold the November Work Session as scheduled and to cancel the December Work Session, seconded by Ms. Malker-Thomas, and carried unanimously.

Item 11D was the added item concerning requesting funding from Gaston County for construction of a sewer interconnect line with Gastonia. (Exhibit E) The County has received funding from CaroMont, with \$500,000 earmarked for the Dallas Township. High Shoals is asking for approximately \$200,000 for construction of a new Town Hall. Dallas would request \$300,000 to be used toward a sewer interconnect with Two Rivers Utility. Dallas has designed this project which would cost a total of \$640,000. Gastonia has committed to \$140,000 of the cost, with Dallas responsible for the remaining \$500,000. This would be an opportunity to receive \$300,000 of those funds. Mr. Huggins made a motion to approve the resolution requesting \$300,000 from Gaston County to be used toward a sewer interconnect with Two Rivers Utilities and committing Dallas to the other \$200,000 of the project contingent upon Gastonia committing \$140,000 to the project; seconded by Mr. Cearley, and carried unanimously.

Mr. Withers made a motion to adjourn, seconded by Ms. Malker-Thomas, and carried unanimously. (7:20)

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Rick Coleman, Mayor

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Maria Stroupe, Town Clerk

**An Ordinance to Amend Title XI, "Business Regulations" of the Compiled Code of Ordinances of the Town of Dallas, North Carolina by the Repeal of Chapter 110, Sections 110.01 Through 110.09, "Privilege Licenses"; and the Adoption of a New Chapter 110, Sections 110.01 Through 110.12, Entitled "Business Registration Program".**

**An Ordinance Amending Title XI, "Business Regulations", in order to repeal the "Privilege License" program consistent with North Carolina State Statute; and to instead institute a "Business Registration Program", as allowed for under NC GSA 160A-194.**

**Whereas,** The Town of Dallas, like most North Carolina municipalities, had, for many years, administered a program of business identification, regulation, and fee-based licensing referred to as the "Privilege License"; and,

**Whereas,** the North Carolina General Assembly has subsequently, by adopted Statute, rendered such "Privilege License" programs unlawful effective June 30, 2015 ; and,

**Whereas,** in the absence of such program, Dallas no longer has a means by which it is authorized to, and can administer the "registration" of entities doing business within the community as well as the gathering of accurate information about the operations of such entities; their contact information; their use of certain processes or materials; access, ingress and egress points; and other pertinent public safety and land use data; and,

**Whereas,** the institution of such a program, by adopted local ordinance, along with the authorization to impose fees covering the cost of its administration, is now seen as vital to the long-term interests of the community as well as to the interests of serving the businesses to be "registered"; and,

**Whereas,** following a properly-noticed public hearing held on \_\_\_\_\_, and in consideration of the aforesaid information as well as on research materials received and reviewed,

**NOW, THEREFORE BE IT ORDAINED,** By the Board of Aldermen of the Town of Dallas, North Carolina, that the Compiled Code of Town Ordinances is Hereby Amended as Follows:

**That,** "Chapter 110, Privilege Licenses and General Regulations", be Amended by the Repeal of Sections 110.01 through 110.09; and that Chapter 110, be Renamed, "Business Registration Program and General Regulations", to include the New Sections, Numbered 110.01 through 110.12, To Read as Follows:

**"Section 110.01 Title**

This Ordinance shall be known, referred to, and cited as the Town of Dallas Business Registration Ordinance.

**Section 110.02 Purpose**

The purpose of this Ordinance is to allow the Town of Dallas to better provide for and promote the general health, safety, and welfare of its citizens by identifying and documenting, within a retrievable data base, the locations, functions, operations, and contact information associated with businesses operating within the Town in order to, in turn, enhance the efficient delivery of Town public safety, utility, and land-use planning services; as well as to promote and insure compliance with all planning, zoning, building, fire, and all related and established Town Codes, Ordinances, and Policies.

#### **Section 110.03 Definitions**

For the purposes of this Chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

**BUSINESS:** Any trade, occupation, profession, work, commerce, avocation or other activity, including all devices, machines, vehicles, appurtenances and equipment used therein, owned, operated and conducted for private profit or benefit by any person, directly or indirectly on any premise within the Town of Dallas. To include Peddlers and Solicitors.

**NON-PROFIT ORGANIZATION (NPO):** Any operation, facility, or program of service or outreach, existing within, or providing service to Dallas residents, whether housed in a physical building or structure within the Town of Dallas or not, specifically organized to use any and all surplus revenues to further or enhance its Purpose or Mission. Such NPO's are specifically exempt from the provisions and requirements of this Chapter and are not required to obtain a Business Registration Certificate hereunder. NPO's include, but are not limited to, churches, schools, hospitals, clinics, mental health facilities and counseling centers, food-banks, senior centers, day-care facilities, and offices or distribution, storage, or processing centers or facilities owned and/or operated by or on behalf of charitable organizations, foundations, or government entities. The gathering, maintaining, and up-dating of data and information regarding the buildings and contacts for, or associated with such NPO's, for the purposes of public safety planning and preparedness, is provided for under the Dallas Fire Department' Pre-incident Planning Program Survey requirements.

**PEDDLER:** Any person who travels by foot, motor vehicle or other conveyance, from place to place, selling, or offering for sale goods or services.

**PERSON:** Any individual, partnership, association, or corporation.

**SOLICITOR:** Any person who travels by foot, motor vehicle or other conveyance, from place to place seeking to obtain orders for the purchase of goods or services for future delivery or performance.

#### **Section 110.04 Certificate: Registration Required**

- (A) No person shall engage in or commence a business without having first registered the business with the Town and received a Business Registration Certificate as provided in this ordinance.
- (B) No solicitor or peddler shall engage in such business anywhere within the corporate limits of the Town of Dallas without having first registered with the Town of Dallas and received a Business Registration Certificate as provided in this ordinance. Peddlers and/or solicitors plying their trade must be able to readily produce a valid Business Registration Certificate on demand.

- (C) Any person receiving a valid Business Registration Certificate shall be deemed registered hereunder for the balance of the current registration year and subject to renewal requirements thereafter.
- (D) It shall be the duty of every person holding a registration certificate on behalf of a registered business to report any changes in the information furnished with the certificate application for registration within fifteen (15) business days of such change occurring.

#### **Section 110.05 Procedure for Registration: Application**

Every person required to obtain a Business Registration Certificate from the Town of Dallas to engage in a business shall make application for such certificate with the Office of the Town Clerk, or designee, upon application form(s) provided by the Office of the Clerk, or designee, and shall state under oath or affirmation such facts and information as may be required for, or applicable to, the granting of such certificate.

#### **Section 110.06 Contents of Application**

The Town shall develop a standardized application form for the issuance of Business Registration Certificates, which form shall, at minimum, contain the following:

- (A) Name, address, and dimensional characteristics of building or facility housing business.
- (B) Name, address and complete contact information for business owner(s); business manager; site representative and/or emergency contacts.
- (C) A description of the nature of the business and any goods or services created, processed, or sold.
- (D) Utility information; including providers; capacities; locations of shut-offs; etc.
- (E) Building construction characteristics and access information.
- (F) Information on materials used, stored or processed on site and any hazards associated.
- (G) Information on vehicles, equipment, machinery, or electronics used, housed, or stored.
- (H) For peddlers and/or solicitors the driver's license number, including issuing state for each person acting as a peddler or solicitor within Town limits.

#### **Section 110.07 Business Registration Certificate Fees**

Each person applying for a business registration certificate on behalf of a business which must be registered under the provisions of this ordinance, shall remit to the Office of the Town Clerk a standard fee designed to cover the administrative costs of implementing and administering this program. Said fee is initially established herein as **thirty-five dollars (\$35.00)** per registered business. This fee shall hereafter be listed and reflected in the Town of Dallas Schedule of Fees, to be periodically adjusted or amended as necessary to cover program costs by Resolution of the Town Board of Aldermen.

No Business Registration Certificate shall be issued until or unless the application fee is paid in full.

#### **Section 110.08 Registration Certificate: Conditions of Issuance**

- (A) In addition to fulfilling the requirements of 110.05 – 110.07 herein, and prior to the initial issuance of any Business Registration Certificate hereunder, the applicant shall arrange for and allow the Town of Dallas, as represented by its Fire Inspector or designee and/or its zoning officer or designee, or combination, to conveniently inspect the premises upon or in which the

business shall operate. Businesses subject to yearly certificate renewals may be required to be re-inspected by Town representatives at the Town's sole discretion.

- (B) The issuance of a Business Registration Certificate by the Town of Dallas does not waive, relinquish, or abrogate the Business from any liability for state or County-mandated licensing or inspection requirements (professional, health, fire, building, etc.). Conversely, the granting of a business or professional license or registration by the state of North Carolina, or the County of Gaston shall not exempt such business from the necessity of securing a Business Registration Certificate from the town of Dallas unless such exemption is clearly provided for in State Statute(s).

#### **Section 110.09 Registration Certificate Year**

- (A) Each business subject to and receiving a business registration certificate in the Town of Dallas shall be issued such certificate effective with July 1<sup>st</sup> of the year issued and terminating on midnight of June 30<sup>th</sup>, the following year. As June 30<sup>th</sup> of any given year approaches, the Town will forward applications for renewal certificates to any and all current certificate holders, but no renewal business registration certificates will be issued until all required fees are paid and any requested inspections are completed.
- (B) Registration fees for periods of less than one (1) year shall be the same as a full registration year and the effective date of such registration certificate shall commence with the date of issuance thereof.

#### **Section 110.10 Registration Transferal**

No Business Registration Certificate may be transferred from one business to another. A change in Business ownership or location within the Town of Dallas may allow the Registration Certificate to be transferred only after: the owner has submitted a new application providing all new contact and/or building information; paid a new application fee; and, arranged for and completed any inspection if required.

#### **Section 110.11 Penalties**

The violation of any provision of this chapter shall be a misdemeanor punishable by a fine of \$100.00 plus cost and/or confinement in the County Jail for a term of not to exceed 30 days. In addition, the Town specifically reserves the right to proceed in any court of competent jurisdiction for the purposes of obtaining an injunction, restraining order, or other appropriate remedy to compel compliance with this Ordinance. The existence of this penalty is in addition to any and all provisions for "Business Registration Certificate" revocation as detailed herein.

#### **Section 110.12 Severability**

Should any portion of this ordinance be declared unconstitutional, illegal, or of no force and effect by a court of competent jurisdiction, such portions shall not be deemed to affect the validity of any other part or portion of this ordinance.

This Ordinance shall take effect and be in force from and after the date of its adoption.

Adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2015

ATTEST:

\_\_\_\_\_

Rick Coleman, Mayor

\_\_\_\_\_

Maria Stroupe, Town Clerk



| BUSINESS REGISTRATION PERMIT APPLICATION                      |                   |                                       |
|---|-------------------|---------------------------------------|
| <b>BUSINESS APPLICANT INFORMATION</b>                         |                   |                                       |
| Name of Business:   |                   | Business Phone:                       |
| Physical Address:   |                   |                                       |
| City:   | State:            | ZIP Code:                             |
| Mailing Address:  |                   |                                       |
| City:   | State:            | ZIP Code:                             |
| Website Address:  | Facebook Address: | How long in business at any location? |
| <b>BUSINESS OWNER INFORMATION</b>                             |                   |                                       |
| Owner(s) Name(s):   |                   | Driver's License #:                   |
| Owner(s) Residential Address:                                 |                   | Date of Birth:                        |
| City:   | State:            | ZIP Code:                             |
| Cell Phone:   | Fax:              |                                       |
| Email:  |                   |                                       |
| <b>BUSINESS PREMISES</b>                                      |                   |                                       |
| Property Owner Name:  |                   |                                       |
| Address:  |                   | Property Owner Phone:                 |
| City:   | State:            | ZIP Code:                             |
| Is there living space on the premise? Yes No If so, how many? |                   |                                       |
| How many entrances/exits?                                     |                   | Property PIN#:                        |
| <b>BUILDING INFORMATION</b>                                   |                   |                                       |
| Type of Construction  |                   |                                       |
| Is There a Basement   | Roof              | # of Floors                           |
| Square Footage  | Elevators         | Is Building Sprinklered               |
| Location of Knox Box:   | FDC:              | Sprinkler Control Valve:              |
| <b>WATER SUPPLY INFORMATION</b>                               |                   |                                       |
| Primary Hydrant location:                                     |                   | Hydrant #                             |
| Secondary Hydrant location:                                   |                   | Hydrant #                             |
| <b>DESCRIPTION OF BUSINESS</b>                                |                   |                                       |



**BUSINESS REGISTRATION PERMIT APPLICATION**

Describe your business:

Special Concerns or Hazards:

Have you registered your contact information with Gaston County 911 Emergency dispatch:      Yes:      No:

Is there a secondary key-holder/contact:      Yes:      No:      If so, Contact Info Name:

Phone Number:

Is there an Alarm System Installed;      Yes:      No:

Vehicles, Equipment or Specialized Machinery Used by or Housed in Premises:

Will there be more than one business/activity within said premise?      Yes      No      If yes, explain:

What is the Zoning Classification for the Property Housing the Business:

Has a Zoning Permit been Issued:      Yes:      No:

**SIGNATURE**

By signing below, I confirm that the above information is true and correct to the best of my knowledge and that any alarm system installed is directed to Gaston County 911 Emergency or Town of Dallas Dispatch:

|                         |       |
|-------------------------|-------|
| Signature of applicant: | Date: |
|-------------------------|-------|

- A \$35.00 Fee is required with All Permit Applications

**TOWN USE ONLY**

Fee Paid \_\_\_\_\_ Date: \_\_\_\_\_ By: \_\_\_\_\_

**CERTIFICATE APPROVED:** \_\_\_\_\_



## 1.0 Introduction

The Town of Dallas owns and operates a surface Water Treatment Plant (WTP) in Gaston County, NC with a nominal production capacity of 1.0 million gallons per day (mgd). Black & Veatch was contracted by the Town to evaluate the WTP treatment process for compliance with state and Federal standards as well as evaluation of chemical usage. No design drawings or specifications were produced as a part of this project.

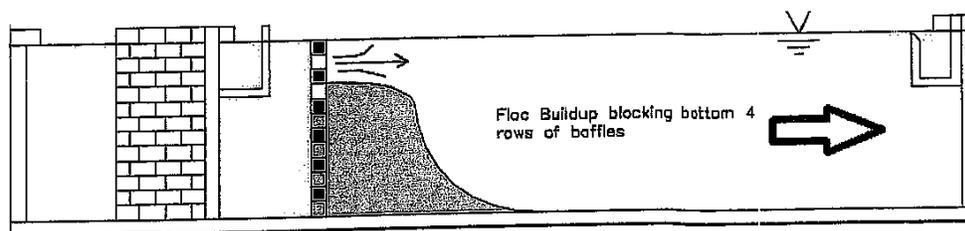
## 2.0 Plant Facilities Evaluation

The 1 mgd Dallas WTP is a surface water treatment facility that is supplied by the South Fork of the Catawba River. The plant facilities include a raw water settling basin followed by a rapid mix (flash mix) basin, a two-stage flocculation basin, a sedimentation basin with continuous sludge collection, and a dual-media filter. The filtered water flows to an onsite clearwell, followed by high service pumps that transfer water to the distribution system. Sedimentation basin residuals, backwash water, and filter-to-waste are transferred to a sludge holding pond onsite. The decant from the sludge holding pond is processed through onsite sand drying beds. Sludge is periodically removed from the pond and processed by a subcontractor through a land application permit.

Black & Veatch analyzed the existing facilities in accordance with the North Carolina Department of Environment and Natural Resources (NCDENR) requirements. All components of the treatment plant meet or exceed NCDENR requirements except for the sedimentation basin weir loading rate, which should be less than 20,000 gpd/ft but is about 37,000 gpd/ft. The higher loading rate means that settled water going onto the filters from the sedimentation basin is prone to carry-over of particulates which would otherwise be settled by gravity. The overflow weir can be improved by adding finger or submerged orifice weirs at a cost of about \$50,000.

Additional physical observations include:

- ❑ The plant is generally in good shape and appears to be sized properly for the plant flow rate of 1 mgd.
- ❑ Solids are building up on the inlet wall of the sedimentation basin, which blocks the inlet diffuser openings. This reduces the locations where water enters the sedimentation basin and significantly increases the probability of short-circuiting and floc carryover into the filters. The Track-Vac system should be run more consistently and staff should observe the basin to ensure settled materials are removed.



- ❑ There is limited redundancy in the treatment process, including rapid mix, flocculation, sedimentation, filtration, backwash pumping, and sludge basin. This makes the interconnection with Gastonia as a back-up source a critical consideration. In the short-term,

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maintaining an adequate supply of critical spare parts for the rapid mix and flocculation equipment and backwash pump is recommended. In the long-term, additional sedimentation basins and a second filter could be added to increase capacity and redundancy, and a second backwash pump should be considered.

### 3.0 Raw Water Evaluation

Black & Veatch evaluated the historical data on the raw water. The South Fork is generally moderate to high in turbidity, low in alkalinity, and low in total organic carbon (TOC). However, it is susceptible to spikes in turbidity and TOC from rain events, which causes the plant to increase chemical usage. As long as the South Fork remains relatively low in TOC and low in alkalinity, then it should continue to provide suitable raw water to the Town.

### 4.0 WTP Chemical Evaluation

Black & Veatch performed bench-scale jar tests to (a) evaluate the chemical dosages being used at the WTP and (b) determine if lower dosages could be used to obtain similar or better treated water quality. The following observations were made:

- ❑ Modify jar test procedures to better replicate the physical characteristics of the treatment plant. This will allow the operators to make better decisions about chemical dosages.
- ❑ There is potential to reduce treatment chemical dosages, and it showed good results in the warm water testing conducted as part of the evaluation. Recommended warm water dosages are below and result in treatment chemical usage of about half of current dosages. Cold water coagulation conditions can be more challenging and will result in smaller savings.
  - 40 mg/L alum (as compared to the plant dosage on the days of testing of 89 mg/L).
  - 10 mg/L caustic (as compared to the plant dosage on the days of testing of 22 mg/L).
  - 0.1 mg/L polymer (as compared to the plant dosage on the days of testing of 0.5 mg/L).
- ❑ In general, if lower coagulant dosages are utilized, a lower dose of polymer appears to be more effective. In addition, lower doses of caustic would be required to maintain an appropriate pH (shown to be approximately 6.2 to 6.6 for this testing period).
- ❑ The lower chemical dosages will produce less solids, which will be a positive for the plant in terms of solids handling and ongoing costs. In addition, the lower chemical dosages may reduce the amount of head loss buildup on the filters, reducing air binding, and potentially reduce filtered water turbidity.
- ❑ The lower chemical dosages appear to have a slightly higher optimum pH than the existing conditions and may lead to a small decrease in organics removal in the coagulation process, which could lead to a slight increase in the levels of disinfection byproducts in the system. This would need to be closely watched as the switch to the lower coagulants dosages is conducted at the plant.

## 5.0 Recommendations

### 5.1 OPERATIONAL RECOMMENDATIONS

- ❑ Recommend the use of lower chemical dosages in the full-scale plant. This will reduce chemical costs and the amount of solids to be processed and may reduce the extent of head

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loss build-up and associated air binding issues due to the current high level of polymer application required at the higher alum dose. Organics removal at the lower chemical dosages will need to be closely monitored to ensure that enhanced coagulation and disinfection byproduct requirements continue to be met.

- ❑ As part of the goal of achieving filtered water turbidity levels  $\leq 0.10$  NTU, the following are recommended:
  - Reduce/prevent buildup of solids in the sedimentation basin adjacent to the inlet baffle wall. Recommend running Track-Vac for full cycle more often to run down and back along sedimentation basin.
  - Eliminate the practice of bumping the filter when air binding occurs; instead, backwash the filter. The lower chemical dosages recommended above will hopefully reduce the amount of air binding that is occurring.
  - Perform filter surveillance activities, including media expansion tests and filter coring, and observing the filter during backwashing for the presence of mudballs.
- ❑ Consider operation of plant on a continuous basis over a 24-hour period to reduce process loading rates and potentially improve performance.
- ❑ For the current chemical dosages, the sludge basin should be cleaned every four to five months.
- ❑ For proposed chemical dosages, the sludge basin should be cleaned every six to eight months.
- ❑ Complete clean out of raw water basin. Monitor the overflow from the residuals holding pond to the raw water basin to prevent solids recirculation to the raw water.
- ❑ Ensure that critical spare parts are available for rapid mixer, flocculators, and backwash pump.
- ❑ Complete clean out of sludge basin when it becomes full.

## 5.2 SHORT-TERM IMPROVEMENTS (0-2 YEARS)

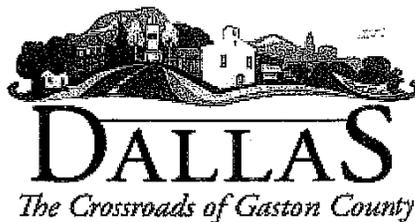
- ❑ Install "finger" or submerged orifice weir troughs in existing sedimentation basin to reduce weir loading rates. The price of the installation and equipment for the finger weirs is estimated at approximately \$50,000.
- ❑ Consider adding a VFD drive to the backwash pump for improved backwash control.

## 5.3 MEDIUM-TERM CAPITAL IMPROVEMENTS (2-10 YEARS)

- ❑ If additional process optimization is needed, consider moving the point of polymer addition to the flocculation basin (between first stage and second stage).
- ❑ If filter surveillance activities indicate that adequate filter media expansion/cleaning is not being obtained, installation of a larger backwash pump may be needed for warm water expansion.

## 5.4 LONG-TERM CAPITAL IMPROVEMENTS (10+ YEARS)

- ❑ The Town should plan to add a second treatment train (a second sedimentation basin and second filter) and should start to set aside money for major capital expenses. At a minimum, a second filter should be considered. In current dollars, the price of an additional treatment train is estimated to be about \$1.0 million.



**RESOLUTION SUPPORTING THE US-321B AND NC-279-275 SIDEWALK AND  
CROSSWALKS PROJECT APPLICATION FOR CONGESTION MITIGATION AND  
AIR QUALITY (CMAQ) FUNDING**

**WHEREAS**, the Federal Highway Administration's CMAQ improvement grant program provides funding to select local governments in air quality non-attainment and maintenance areas in North Carolina to undertake projects that reduce emissions from on-road motorized vehicles; and,

**WHEREAS**, CMAQ funds are distributed by the North Carolina Department of Transportation to the Gaston-Cleveland-Lincoln Metropolitan Planning Organization for use by eligible members; and,

**WHEREAS**, the Town of Dallas currently has a project application for new sidewalk installation on the western side of US-321B from where it currently ends at 3117 Dallas High Shoals Highway (McDonald's) to (and along the front of) 3151 Dallas High Shoals Highway (US Post Office); and, on the northern side NC-279-275 from where it currently ends at 1000 Dallas Cherryville Highway (Walgreens) to the intersection of Gaston College Access Road; and, the installation of crosswalks and pedestrian signals at said intersection; and, the installation of pedestrian scale lighting along said proposed sidewalks; and,

**WHEREAS**, this Project Number C-5508, replaces an earlier Project Number C-5508, which the Town of Dallas determined to be cost prohibitive; and

**WHEREAS**, the cost estimate for the replacement Project C-5508 is \$237,120 with the Town of Dallas committing local funds match of 20% or \$47,424 and with CMAQ funding of 80% or \$189,696; and,

**WHEREAS**, the Town of Dallas acknowledges that any cost in excess of those paid for through CMAQ grants are the responsibility of the municipality and that implementation of the projects if awarded CMAQ grants is the responsibility of the Town; and

**NOW, THEREFORE BE IT RESOLVED** by the Board of Aldermen of the Town of Dallas, North Carolina, that it supports the project application to the Gaston-Cleveland-Lincoln Metropolitan Planning Organization requesting CMAQ grants.

**Adopted this the 10th day of November, 2015.**

ATTESTED BY:

\_\_\_\_\_  
Rick Coleman, Mayor

\_\_\_\_\_  
Maria Stroupe, Town Clerk

**Resolution Requesting That the Gaston County Board of Commissioners Consider The Provision of Financial Support, From Caromont Lease Proceed Revenues, Toward The Construction of A Sanitary Sewer Inter-Connect Line Linking The Town of Dallas to The Two Rivers Utilities Long Creek Wastewater Treatment Plant.**

**Whereas,** The Town of Dallas and the City of Gastonia, through its Two Rivers Utility, have worked jointly and cooperatively over the past several years to plan for, design, and engineer a sanitary sewer inter-connect line linking the Town of Dallas Waste-water collection system to the Long Creek Wastewater treatment plant; and,

**Whereas,** such an inter-connect would provide a critically-important back-up for the Town of Dallas in the event its waste-water treatment plant operations were compromised, disrupted, or ultimately discontinued in the cause of utility consolidation and environmental stewardship; and,

**Whereas,** both the City of Gastonia and Town of Dallas are committed to seeing this multi-jurisdictional infrastructure project completed – having each contributed financially to fully complete the design engineering for the project – however, the estimated \$640,000 construction cost (of which \$500,000 is the Town of Dallas Share; and \$140,000 is the City of Gastonia/Two Rivers) is precluding the project from moving forward; and,

**Whereas,** If the Gaston County Board of Commissioners would consider and approve a contribution of \$300,000 toward the Town of Dallas' \$500,000 inter-connect line cost-share, from the recently-negotiated Caromont Lease Proceeds Revenues, then the Town of Dallas would commit the remaining \$200,000 from its Water/Sewer Fund Balance, which, along with the City of Gastonia' commitment of its \$140,000 cost-share will allow this "shovel-ready" project to move forward quickly; and,

**Whereas,** the long-term cause of utility consolidation and County-wide water and sewer would be furthered by this high-priority project while also supporting economic development within the greater Dallas area by linking the significant excess treatment plant capacity at the long Creek Plant to the Dallas collection system.

**Now Therefore Be It Resolved:** The Town of Dallas, by the affirmative vote of its Board of Aldermen does hereby officially request that the Gaston County Board of Commissioners Approve the Contribution of \$300,000 toward the Dallas cost-share of the Long Creek sanitary sewer inter-connect line linking the Dallas sanitary sewer collection system to the Two Rivers Long Creek Waste-water treatment plant, and in turn, the Town of Dallas does hereby commit to provide the remaining cost-share funds (estimated to be \$200,000) from its Water/Sewer Fund Balance and only further dependent upon the City of Gastonia/Two Rivers Utility providing for its \$140,000 cost-share.

**ADOPTED This 10<sup>th</sup> Day of November, 2015**

**Ayes:**

**Nayes:**

By: \_\_\_\_\_

Rick Coleman, Mayor

Attest: \_\_\_\_\_

Maria Stroupe, Town Clerk