BOARD OF CONTROL

February 20, 2015

Members Present: Mayor Eileen Patton
Finance Director Rocco
Service & Development Director Berner
Law Director Fagnilli
Councilman Minek

The meeting was called to order at 10:00 a.m. by Public Service and Development Director Berner. The two items on the agenda have to do with the study of the City's sewer system structural investigation at the western end of the City.

The first item is for Field Work including data collection and flow monitoring in connection with the sewer evaluation as authorized by Ordinance 14-67. The work includes measuring the inserts in the manholes to develop a skeletal model of the sewer system. It was recommended by Service and Development Director Rob Berner that this work be assigned to Mackay Engineering, the City Engineer because they have the most knowledge on this project. After a review of the wording of Ordinance 14-67, it was determined that the City needs to seek additional quotes for this project before it can be awarded. It was the unanimous decision of the Board to have this item tabled until such time that other quotes for this work have be received.

The second item on the agenda is the installation and monitoring of Fourteen (14) Flow Meters and Two (2) Rain Gauges, as authorized by Ordinance 14-68. Two (2) proposals have been received and reviewed by Black and Veatch the consulting engineers. It is the recommendation of Black and Veatch to award the contract to Hydromax USA of Florence, Kentucky. Discussion was held as to the work included by each proposal received. ADS would monitor the meters through cell phone monitoring. Hydromax will have a physical presence in the city to check the meters on a scheduled timeline. The price difference between the two contractors was also discussed. The type of work being completed falls under the topic of professional services. Black and Veatch's original estimate for this work is $42,000.00

Mayor Patton made a motion to accept the recommendation of Black and Veatch and award the contract for the installation and monitoring of Fourteen (14) Flow Meters and Two (2) Rain Gauges to Hydromax, USA of Florence Kentucky. The motion was seconded by Mrs. Fagnilli and unanimously approved by the Board.

There being no further business before the Board, Mr. Minek made a motion to adjourn. The motion was seconded by Mr. Berner and unanimously approved by the Board.

Meeting adjourned at 10:20 a.m.

Lisa M. Rocco

Lisa M. Rocco, Secretary

CITY OF FAIRVIEW PARK

20777 Lorain Road
Fairview Park, Ohio 44126-2018
– Established in 1910 –

Eileen Ann Patton, Mayor

January 30, 2015

Rob Berner, Service Director
City of Fairview Park
20777 Lorain Road
Fairview Park, Ohio 44126

Re: Black & Veatch Sewer Study
Field Investigation

Dear Mr. Berner:

As you requested, we have prepared the following scope of work and fee estimate for surveying services on the referenced project. Our services shall consist of the land surveying services necessary to gather field information pertaining to certain storm and sanitary manholes for the referenced project and as specifically set forth below.

The field survey services will involve the survey of approximately every 4th or 5th manhole in the survey area to determine the rim elevations of the manholes, and the diameters and invert elevations of all sewers within the manholes. The survey area is shown on the attached drawing within the area outlined in blue and includes approximately 420 manholes. The survey of additional manholes beyond the estimated 420 manholes may exceed the estimated fee and would, therefore, be provided at our hourly rates and in addition to the estimated fee. The survey of additional manholes beyond the estimated 420 will not be provided without your prior approval. The field survey information will be provided to Black & Veatch in a SHP file format with the following attributes: point number, rim elevation, invert and size of pipe.

Our estimated fee for the services set forth above is $30,000.00. This fee will not be exceeded without your prior approval. All of the work described herein will be performed in accordance with the current terms of our employment with the City and the hourly rates set forth therein will be applied to our actual time to complete the services described above.

It may be necessary for the City of Fairview Park to provide personnel to assist our survey crew in opening certain manholes and other structures (and if necessary, clean the sewers) so that our survey crews can take required measurements. Our survey crews will not make any entries into confined spaces.

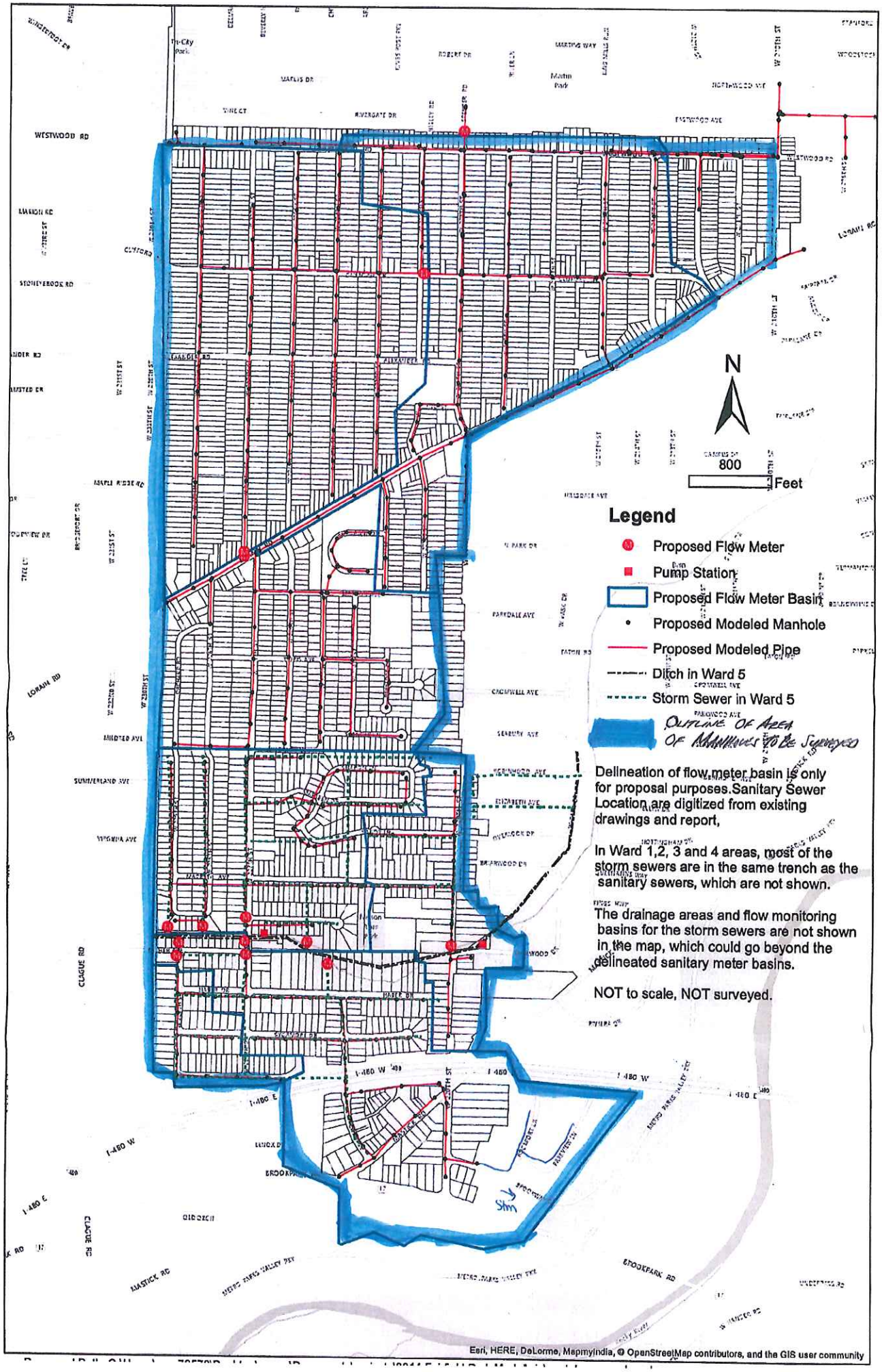
We look forward to working with the City and Black & Veatch on this project and we are available to discuss any questions you have. We are available to begin this work immediately upon your authorization to proceed.

Very truly yours,

Michael Mackay

Michael Mackay

/vgs
cc: Mayor Patton
Dianne M. Sumego


N
800
Feet
Legend
Proposed Flow Meter
Pump Station
Proposed Flow Meter Basin
Proposed Modeled Manhole
Proposed Modeled Pipe
Ditch in Ward 5
Storm Sewer in Ward 5
OUTLINE OF AREA OF MANHOLES TO BE SURVEYED
Delineation of flow meter basin is only for proposal purposes.Sanitary Sewer Location are digitized from existing drawings and report,
In Ward 1,2, 3 and 4 areas, most of the storm sewers are in the same trench as the sanitary sewers, which are not shown.
The drainage areas and flow monitoring basins for the storm sewers are not shown in the map, which could go beyond the delineated sanitary meter basins.
NOT to scale, NOT surveyed.
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Rob Berner

From: Sumego, Dianne <SumegoD@bv.com>
Sent: Monday, February 16, 2015 8:14 PM
To: Rob Berner
Cc: Eileen Patton; 'Michael Mackay (mmackay@mackayeng-surv.com)'; Meng, Yuanhang M.; Cook, Steven J; Sumego, Dianne
Subject: Flow Monitoring Services
Attachments: Proposal - B&V Fairview Park Feb15.pdf; OH Fairview Park fm proposal.pdf

Rob – we received 2 proposals for the above reference work as noted below and proposals attached:

1. ADS - $98,500 base ($8,000/week after first 60 days)
2. Hydromax USA - $ 41,400 ($6030/week after first 60 days)

Both are very qualified and reputable firms experience with this work. Hydromax is a smaller company while ADS comes with higher cost. We are not concerned that the cost are so different because of the quality of their work. ADS is proposing to install cellular telemetry to facilitate remote data collection and early diagnosis and eliminating the need for site visits. As interesting as this sounds, I do not feel this equates to the value provide for the additional cost. I also believe flow meters should be field checked as part of quality assurance measures.

Based on this review we are recommending award to Hydromax for this work. We would recommend including the scope of services we provided to you, and the copy of their proposal to your agreement. We would suggest an installation date of March 9 with the 60 day period ending May 9th.

Please let me know how we can assist with moving forward with the award of this contract. We have not informed either proposer on our recommendation.

Please call with any questions, di

HYDROMAX USA
Advanced Water and Wastewater Pipeline Data Collection

2 February 2015

Ms. Dianne Sumego, Project Manager
Black & Veatch
308 South Main Street, Suite 401
Akron, Ohio 44311

RE: Proposal for Sewer System Flow Monitoring for Fairview Park, Ohio

Dear Ms. Sumego:

At your request, Hydromax USA (HUSA) is submitting this proposal outlining services that we can perform for the referenced project. After reviewing the Request for Proposals (RFP) that we received it is our understanding that you require flow measurements to assist in model development within the project collection system. Based upon the RFP, we are proposing the use of fourteen (14) meters and two (2) rain gauges for a base sixty (60) day period to capture both dry and wet weather events.

HUSA takes the following steps to insure the most accurate data possible:

- Visit the proposed monitoring locations to check for acceptable hydraulic and operational conditions prior to installing the meters and gauges. Identify alternative locations and discuss them with Black & Veatch (Consultant) representatives if potential problems are discovered.
- Calibrate initial level and velocity accuracy of the meters and gauges prior to installation
- Install selected meters and gauges at approved sites and complete an opening site sheet with photographs. The opening site sheet describes the meter and/or gauge set up and provides a detailed location of the meter and /or gauge. At this time, we are projecting programming the meters to five (5) minute sampling with data processing to five (5) minutes. Tipping buckets will be synchronized to the flow meters with data developed on the same five minute basis as the meters.
- Immediately after and again within twenty-four hours of meter installation manual measurements of the flow's depth and velocity are taken to verify the readings from the flow meter.
- Approximately every seven days visit the site to check the operation of the meters and gauges and to download the data. Service includes checking the battery level, checking the desiccant crystals, cleaning the sensor, and comparing real-time level and velocity readings from the flow meter to independent readings physically measured by maintenance personnel.
- The collected data will be reviewed by HUSA staff experienced in evaluating flow monitoring data. The data is reviewed to look for changes in flow patterns and potential equipment problems. Patterns are checked using hydrographs, scatter plots and actual field calibration information. If corrections in the field are required they will be communicated to the HUSA field crews responsible for the meters.
- During the course of the base monitoring period communication with the Consultant will be on a regular basis to identify that the data being collected will be sufficient to allow for analysis. Preliminary data will be delivered to the Consultant after the initial thirty (30) days of data collection. The Consultant will make a decision to leave the equipment installed for weekly extensions no later than five days prior to the removal date. If extensions are not to

be authorized, HUSA personnel will remove all meters and gauges and leave sites in essentially the same condition as evidenced before the equipment was installed.

- The collected data will be reviewed by HUSA personnel experienced in evaluating flow monitoring data, and polished (if necessary). The data is reviewed to look for changes in flow patterns, and potential equipment problems. Patterns are checked using both hydrographs and scatter plots. An analysis will be performed on the final data following the requirements on Page 3 of 4 in the RFP.
- Provide a final report within thirty days of the removal of the meters. The submittal of the data will be in a format agreed to by HUSA and Consultant representatives early in the project. This submittal could be in electronic format with download from the HUSA website or with a hard drive or in hard copy. The submittal will include both raw and polished data and graphical representations of the data. These reports will detail maintenance, flow monitor calibrations, sensor downtime, and any other observations. The report will also detail meter replacements, malfunctions, lost data, etc. At a minimum, the following information will be provided:
    - Tabular summaries of flow depth, velocity and quantity for each flow monitoring location including minimum, average, and maximum values for flow depth and quantity data along with flow quantity totals for the reporting period.
    - Monthly hydrographs with hourly depth, velocity and volumetric flow data.
    - Electronic copy of all data and the overall report in CSV format.
    - Narrative discussing each flow monitoring site, including identified abnormalities and physical pipe and manhole observations.
    - All maintenance provided on the flow monitoring system to include problems encountered, service required, component replacements, monitor and sensor downtime, and other related pertinent information.

HUSA requires the following in order to perform the work in the most efficient and effective manner:

- Full access with Consultant representatives to all sites during initial investigations.
- Identification of a Consultant representative for field crews to contact concerning issues raised during the field work and with the capacity to render assistance and direction. These representatives should also be available for a discussion of the status of the project as it progresses.
- Consultant to provide a working copy of the USEPA SSOAP tool for the submittal of the data at the end of the collection period.
- Consultant to allow thirty (30) days after the end of the data collection period for submittal of the final data with analysis. The RFP required submittal within two (2) weeks but HUSA feels this is inadequate time to perform the required task.

Assuming timely approval, HUSA can initiate the project with installation projected for early March.

HUSA proposes to provide all services using the following the cost schedule:

- The preliminary inspection, furnishing of equipment, installation, maintenance and removal of fourteen (14) flow meters for the sixty (60) day base period. Data review, preliminary data submittal, final data and analysis submittal of the flow meter data for a unit cost of $2,800.00 for a Total Cost of $39,200.00.
- The preliminary inspection, furnishing of equipment, installation, maintenance and removal of two (2) rain gauges for the sixty (60) day base period. Data review, preliminary data

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submittal, final data and analysis submittal of the rain gauge data for a unit cost of $1,100.00 for a Total Cost of $2,200.00

- The operation and maintenance of flow meters for each seven (7) day extension after the base period to include all reporting - a unit cost of $420.00/meter with a minimum requirement of ten (10) meters
- The operation and maintenance of rain gauges for each seven (7) day extension after the base period to include all reporting - a unit cost of $75.00/gauge with a requirement that the installation is simultaneous with the flow meters.

The total cost for the base sixty (60) day period of $41,400.00 includes the provision for one electronic report or one hard copy report. HUSA will submit monthly invoices for this project.

Collecting the best data possible is paramount to this project since the data is the foundation of future work efforts. Using the proper equipment to obtain accurate data from well-planned locations ensures that future expenditures associated with additional investigation activities, rehabilitation, or construction of new sewers is spent wisely. We believe HUSA will provide the highest level of expertise and the best resources to obtain accurate data. These two factors combined with our commitment to communication and timely service throughout the project will produce the best product possible.

If you have any questions regarding our proposal please contact me at your earliest convenience. We look forward to teaming with Black & Veatch and the City of Fairview Park in completing what will be another successful flow monitoring project.

Very truly yours,

Stuart Bowns
Project Manager

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CITY OF FAIRVIEW PARK
ORDINANCE NO. 14-67
REQUESTED BY: SERVICE DIRECTOR ROB BERNER
SPONSORED BY: COUNCILWOMAN CLEARY
CO-SPONSORED BY: COUNCILMAN MINEK

AN ORDINANCE AUTHORIZING THE MAYOR TO ENTER INTO AN AGREEMENT FOR FIELD INVESTIGATION WORK IN CONNECTION WITH COLLECTION OF INFORMATION FOR THE SEWER ISSUES IN THE CITY OF FAIRVIEW PARK, AND DECLARING AN EMERGENCY

WHEREAS, the long term planning process for the development of a plan to address sewer flooding in the City of Fairview Park requires field investigation work, including but not limited to survey work, GIS data collection, sewer evaluations; and

WHEREAS, the City will obtain quotes for the required work and enter into a contract with a qualified firm, at a cost not to exceed thirty thousand dollars ($30,000.00).

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FAIRVIEW PARK, COUNTY OF CUYAHOGA AND STATE OF OHIO:

SECTION 1. That the Mayor is hereby authorized to solicit quotes and to enter into an agreement with a firm qualified to perform the required field investigation work, an amount not to exceed Thirty Thousand Dollars ($30,000.00), to be paid from the Sanitary Sewer Fund (510).

SECTION 2. It is found and determined that all formal actions of this Council concerning and relating to the adoption of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

SECTION 3. That this ordinance is hereby declared to be an emergency measure necessary for the preservation of the public peace, health, safety and welfare and to immediately obtain the required services and provided it receives the affirmative vote of a majority plus one of the members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor, otherwise from and after the earliest period allowed by law.

PASSED: 01.20.15
APPROVED: 01.21.15

William F. Minek, Council President Pro Tem

Eileen Ann Patton, Mayor

Liz L. Westbrooks, Clerk of Council

1st reading: 12.15.14
2nd reading: 01.05.15
3rd reading: 01.20.15

CITY OF FAIRVIEW PARK
ORDINANCE NO. 14-68
REQUESTED BY: SERVICE DIRECTOR ROB BERNER
SPONSORED BY: COUNCILWOMAN CLEARY
CO-SPONSORED BY: COUNCILMAN MINEK

AN ORDINANCE AUTHORIZING THE MAYOR TO ENTER INTO AN AGREEMENT FOR DATA COLLECTION AND FLOW MONITORING IN CONNECTION WITH SEWER EVALUATIONS, AND DECLARING AN EMERGENCY

WHEREAS, the long term planning process to address sewer flooding in the City of Fairview Park includes obtaining services from a qualified firm for data collection and flow monitoring ; and

WHEREAS, the City will obtain quotes for the required work and enter into a contract with a qualified firm, at a cost not to exceed forty-two thousand dollars ($42,000.00).

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FAIRVIEW PARK, COUNTY OF CUYAHOGA AND STATE OF OHIO:

SECTION 1. That the Mayor is hereby authorized to solicit quotes and to enter into a contract with the lowest and best bidder in an amount not to exceed Forty-Two Thousand Dollars ($42,000.00) for the required data collection and flow monitoring work, to be paid from the Sanitary Sewer Fund (510).

SECTION 2. It is found and determined that all formal actions of this Council concerning and relating to the adoption of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

SECTION 3. That this ordinance is hereby declared to be an emergency measure necessary for the preservation of the public peace, health, safety and welfare and to immediately obtain the necessary service and provided it receives the affirmative vote of a majority plus one of the members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor, otherwise from and after the earliest period allowed by law.

PASSED: 01.20.15
APPROVED: 01.21.15

Eileen A. Patton
Eileen Ann Patton, Mayor

William F. Minek
William F. Minek, Council President Pro Tem

Liz L. Westbrooks
Liz L. Westbrooks, Clerk of Council

1st reading: 12.15.14
2nd reading: 01.05.15
3rd reading: 01.20.15