

City Manager's Weekly Report

Friday, November 13, 2015

Department:

Administration - City Manager

Notable Notes:

Mayor and Council -

In case anyone missed this item - the University of Delaware Board of Trustees will hold a special meeting at 1 p.m., on Wednesday, November 18, to vote on the University's next President. Scheduled in the Multipurpose Room of the Trabant University Center, the meeting is open to the public.

Attached is the final After Action Report from Operation Night Train a City of Newark MCI Recovery Tabletop Exercise that our Police Department participated in.

Activity or Project:

Honeywell Year One M & V Report

Description:

Please find attached the Draft Measurement and Verification Report we received from Honeywell recently. The report advises of better than 100% accuracy on the water meters. Staff and I will be meeting with Honeywell to fully discuss the outcome in addition to making plans for the second year of M & V.

Status: Near Completion

Expected Completion: 12/4/2015

Execution Status: On Track

Activity or Project:

DEMEC

Description:

Please find attached the Agenda for next week's DEMEC Board meeting as well as the presentation made by Scott Lynch of DEMEC to our CAC Commission in association with the State's Energy Efficiency Advisory Council (EEAC). Scott will also present to Mayor and Council at it's meeting of November 23rd. Here's the link to the EEAC site:

<http://www.dnrec.delaware.gov/energy/information/otherinfo/Pages/EEAC/Council.aspx>

Status: In-Progress

Expected Completion: 11/17/2015

Execution Status: On Track

Activity or Project:**Description:****Status:****Expected Completion:****Execution Status:****Department:**

Administration - Deputy City Manager

Notable Notes:

- Marta and I have worked with our background assessment vendor to facilitate employment credit checks (for specific positions), which required a physical onsite assessment. The assessment included review of building security, security and custody of files/documents, and policies for access. The City passed the assessment, and I write this to note that without the new building security enhancements, it is unlikely we would have passed and would have been denied the ability to facilitate limited credit checks.
- This week the Budget review committee has met with the various departments on elements from the November 2 Budget Hearing, prepping for the November 30 Budget Follow Up hearing.

Activity or Project:

Recruitments: Communications Manager

Description:

The interviews of seven (7) candidates are scheduled for the week of November 16 with a five (5) person interview panel. The applicant pool was very competitive, and we look forward to the interview process.

Status:

In-Progress

Expected Completion: 11/27/2015**Execution Status:**

On Track

Activity or Project:

Recruitment: Fire Protection Specialist, Laborers, Mailroom Aide and Electric Groundhand

Description:

Various other recruitment efforts are in full swing for Code Enforcement, Finance, Electric and PW&WR. Through attrition as well as the vote on the refuse outsourcing, four (4) full-time and one (1) part-time positions are being recruited. The applicant pools continue to be highly

competitive and provide good challenges of selecting (and splitting hairs) between candidates for positions.

Status: Near Completion

Expected Completion: 11/27/2015

Execution Status: On Track

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Department:

Alderman's Court

Notable Notes:

We held 3 court sessions this past week.

Activity or Project:

Court Sessions

Description:

We processed 31 arraignments, 38 trials, 8 capias returns, 5 case reviews and videoed 4 prisoners this past week.

Status: Completed

Expected Completion: 11/12/2015

Execution Status: Completed

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Department:

Community Relations

Notable Notes:

As we work through the budget season, we are making a constant effort to update "Budget Central" as soon as each new piece of information becomes available. We are also working to better inform the public of the section of the website, as well as the information contained on it, using social media.

In an effort to find a cost effective method for creating electronic agendas and packets that are more seamlessly integrated into our website, which would also more seamlessly integrate with our calendar and minutes we have identified that there may be some opportunities to expand the use of an existing "module" on our website that provides this functionality. Of course, the format and appearance of the agendas and their attachments would be different, so we will work with the City Secretary's Office to begin preparing agendas using both systems, to provide for comparison. We are targeting January City Council meetings for the dual agendas for comparison.

We are working with the Conservation Advisory Commission on a "Green Energy Day." We look forward to finding ways to promote our many "Green" efforts throughout Newark.

Activity or Project:

Downtown Holiday Promotions

Description:

Holiday promotions for Downtown are coming into full swing. We were able to take advantage of the University's removal of their Homecoming banners to install our holiday season banners earlier this week at no cost to us. We will again do our "Small Business Saturday" promotion on our Downtown Gift Cards on Saturday, November 28, from 9 a.m.-1 p.m. at the Parking Office, buy a \$50 (or greater) gift card, get a \$25 card free. We have begun advertising for the promotion in the Newark Post print and online editions. Gift cards are in transit and are expected to arrive any day.

Status:

In-Progress

Expected Completion: 11/28/2015

Execution Status: On Track

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Department:

Electric Department

Notable Notes:

The line crews continued installing fault indicators on the aerial circuits. They also continued work on the reconfiguration at the West Main Substation and at the corner of Academy and Park Place.

The electricians have been working on installing a generator at Well 15 on Bellevue Road. They also repaired a pad mount transformer that was damaged when someone tried to nail a sign to it.

Engineering met with the SCADA developer to discuss a proposed automatic switching project. Engineering also spent most of a day with ABB going over the same project.

Activity or Project:

SevOne at STAR Campus

Description:

Install 2 padmount transformers and metering for data center which tie into Bloom Boxes.

Status:

In-Progress

Expected Completion: 12/1/2015

Execution Status: On Track

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Department:

Finance Department

Notable Notes:

A summary of the budget process and timeline follows:

October 12, 2015:

A brief financial workshop was held before the regularly scheduled meeting of Council to advise Council of the budget process and to share preliminary projections as well as tax and rate requirements.

October 20, 2015:

The CIP document and the report were well-received by the Planning Commission. The Chairman and several Commissioners complimented staff for its innovation and efforts before unanimously recommending the 2016-2020 Capital Improvement Program (CIP) for approval.

November 2, 2015:

The first budget hearing was conducted to communicate the 2016 Operating Budget proposal and the 2016-2020 CIP proposal to Council. We are pleased with the clear direction provided at the meeting,

which we are using to develop the final operating and capital budget recommendations, which will be presented to Council at the second budget hearing scheduled for **November 30, 2015 at 6 p.m.** Many of your questions and requests for documentation were fulfilled on the City's "Budget Central" section of the website, linked below. More information and reports are being generated and posted daily, so please check Budget Central frequently for new, date-stamped information.

<http://cityofnewarkde.us/index.aspx?NID=940>

Payments and Utility Billing

The group handled 479 phone calls the week of 11/2/15 with an average call length of 3:57 and an average hold & queue time (average speed of answer) of 3:53, both of which improved over the prior week. The Welcome Center staff greeted 298 visitors, while service calls initiated by Payments and Utility Billing in response to calls and visitors totaled 142 last week. The group also processed 5,393 utility payments and CityView transactions, 710 of which were imported automatically.

Accounting

Accounting staff have been short-handed since Wilma's departure and our focus has been on the production of the 2016-2020 CIP document and the 2016 operating budget proposal. Monthly financial reporting will resume as we approach full staffing levels.

Activity or Project:

Purchasing Card Upgrade

Description:

We are working with Fulton Bank to upgrade the City's existing purchasing cards, or "P-Cards." The upgrade will reduce workload and improve efficiency by automatically posting transactions to the City's financial accounting system and reduce costs through a rebate program. There is no cost to the program upgrade. All replacement cards were properly enrolled and the physical cards have been received. They will be deployed once we integrate the vendor's reporting system (Elan) with the City's financial accounting system (Munis). There is no update to the status of the project this week. The expected completion was pushed back to 12/31/15 to allow me the time I need to train and cross train users on the new system.

Status: Hold

Expected Completion: 12/31/2015

Execution Status: Behind Schedule

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Department:

Parks and Recreation Department

Notable Notes:

We committed considerable time this week working with developers on landscaping installations, inspections and the submittal of surety materials.

Our contractor is continuing to install ADA compliant access ways to certain park facilities. This fall we will have completed the installation of access ways to facilities at Elan, Rahway, Fairfield, Ridgewood Glen and, perhaps, Phillips Parks.

I committed considerable time working on aspects of my succession plan.

We are finalizing plans for next Tuesday evening's public workshop on the Emerald Ash Borer and Bacterial Leaf Scorch. The workshop will take place in the Council Chamber beginning at 6 p.m. Parks and Recreation Department staff will be joined by experts from the University of Delaware, Delaware State Forest Service and others to explain how to identify tree species that may be affected, how to identify a tree currently affected, and measures, both preventative and treatment, if any, that can be taken to minimize damage done to ash and oak trees.

We're happy to report that the White Clay Wild and Scenic River (WCWSR) organization will be donating trees to be planted in Curtis Mill Park to enhance the riparian buffer along the White Clay Creek. The planting will occur on Saturday, November 21 at 9 a.m. Members of the WCWSR and Newark High School students will volunteer their time to plant the trees.

In recent months a few Main Street trees were vandalized to the extent that they had to be removed. We plan to plant replacement trees next week.

The Davey Resource Group recently completed their Tree Inventory work for park and open space areas. We hope to receive their report and data before the end of the year.

The maintenance crew worked on or completed these task:

* Fine mowing operations at various park, landscaped sites and open space areas

* Brush cut mowing at utility rights-of-way

- * Prepared soccer fields for league play
- * Tree and shrub trimming and pruning operations
- * Bamboo eradication efforts at two locations
- * Clearing and removing leaves from trails and playing court facilities
- * Completed several general park maintenance work orders

Teams in our Youth Basketball Leagues will begin practices very soon.

We're very busy planning for this year's 43rd Annual Turkey Trot 5 and 10 K Runs and 5 K Walk. The event is scheduled for Saturday, November 21, at Handloff Park. Registration and Check-in begins at 8 a.m. A portion of the proceed will benefit the James F. Hall Scholarship Fund which provides fee assistance to children wishing to attend a recreation program who's family might not otherwise be able to afford the cost. The event typically attracts 900 to 1,000 participants.

We're also busy planning the Annual Thanksgiving Day Breakfast which will once again be held at the George Wilson Center on Thanksgiving morning.

We're working with members of the Unitarian Universalist Fellowship of Newark and a volunteer youth group to place trail marker information/directional stickers on trail marker posts for Redd Park.

Activity or Project:

Hard Surface Access to Park Facilities

Description:

CIP Project No. K1303. Our contractor has completed installations at two sites (Rahway and Elan Parks) and should finish all others by the end of the month. Attached photo depicts the hard surface access pathway to a play unit at Elan Park.

Status: Started

Expected Completion: 11/27/2015

Execution Status: On Track

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Department:

Planning and Development Department

Notable Notes:Building Maintenance

- In addition to continued custodial services, this week Facilities Maintenance:
 - Painted ceiling grid in the new offices, began installing new ceiling tiles, and insulated walls, where possible;
 - Built sample of raised panels proposed in Council Chamber;
 - Fixed the door locks in the Police Department and Alderman's Court area;
 - Continued to work with engineer on the Municipal Building HVAC system;
 - Managed a bad smoke detector that shut down elevator service in the Municipal Building;
 - Switched out damaged ceiling tiles in the Police Department and changed light bulbs, as needed.

Code Enforcement

- On Tuesday and Wednesday, Code Enforcement Division Manager David Culver and Planning and Development Director Maureen Feeney Roser interviewed candidates for the Fire Protection Specialist position. The Division hopes to hire the successful candidate soon to fill the position, which will be vacated by Chris Murtha on Friday. The Division thanks Chris for his service and wishes him well in his new career with DEMA.
- Code Enforcement reported heavy activity on Main Street for UD Homecoming, but no major violations.
- Code Enforcement worked with the Police Department and Parks and Recreation Department to remove squatters' tents from City park property.
- Final Certificates of Completion were issued for the second floor of the Newark Charter High School.
- Demolition has been completed at 60 North College Avenue.
- A Certificate of Occupancy was issued for 2000 Fountainview Circle, Unit 213.
- Code Enforcement is working on a path forward for the abandoned Rockmoss property.
- Tenant fit-out was completed for Big Z Pizza located in the Newark Shopping Center.
- Met with UD Facilities staff to discuss future upgrades on the air handling systems at

Christiana Towers.

- Work continues on the façade at the Washington House condominiums located at 113 East Main Street.
- We continue to collect bids to replace the sump pump that is failing in the Municipal Building.

Parking

- The Parking Division spent a lot of time this weekend keeping the lots clean during UD Homecoming weekend.
- Time was also spent prepping for the new parking equipment that was delivered on Tuesday and is scheduled to be installed in the coming week. The installation will begin with Lot #1.

Planning

- This week, the Council packet for Floodplain amendments to Code Chapters 27, 32 and 14A was prepared and sent to the City Secretary's Office for ordinance preparation and scheduling for Council consideration.
- This week, the Subdivision agreements for Cleveland Station, Astra Plaza and 70 East Main were reviewed. These development proposals are scheduled for Council review at the November 23rd meeting.
- This week, work was performed in preparation of the December 1, 2015 Planning Commission meeting. Tentatively on the agenda are:
 - Approval of the Planning Commission minutes from the November 3, 2015 meeting;
 - Review and consideration of the major subdivision and special use permit for 3.3 acres located on Possum Park Road just north of the Millcroft Retirement and Nursing Home in order to add a 48 bed memory care unit to the existing Millcroft facility;
 - Review of an amendment to the Zoning Code relating to the definition of Accessory Building or Structure;
 - Commission discussion regarding the 2016 Work Plan; and
 - Review of the changes to Comprehensive Plan V.
- On Thursday afternoon, Maureen met with City Solicitor Bruce Herron and Special Counsel Max Walton to discuss the City Council presentation for the Newark Country Club rezoning.
- On Friday afternoon, Maureen and Development Manager Mike Fortner met with the owner of Ramen Kumamoto to discuss parking requirements and the parking waiver process.
- This week Planning Commissioners Silverman, Cronin and Hurd were registered for the Institute for Public Administration's Freedom of Information Act (FOIA) and Ethics for Local Officials training session at the University of Delaware Paradee Center in Dover scheduled for November 13th.
- This week, a letter was sent to the Alcohol Beverage Commission regarding the license for Qdoba. The letter clearly states that Council approved the special use permit for the sale of alcoholic beverages at 58 East Main Street, and that patio sales are permitted subject to the requirements of Code Section 32-56.4, but external speakers are not permitted, and that a liquor license specifically allowing external speakers should not be issued. The Department also contacted Qdoba, first to remind them of the requirements of their special use permit and that specifically external speakers are not permitted, as well as to let them know the Alcohol Beverage Control Commission had been notified of same.

- This week, Planner Tom Fruehstorfer began preparing a Special Use Permit application for presentation to Council for the installation of a hot tub at a residence located in the SFHA/OFD.
- The following was also completed this week:
 - 4 Deed Transfer Affidavits
 - 37 Building Permit Reviews

Activity or Project:

Special Use Permit - Newark Community Radio

Description:

The application for a Special Use Permit from Newark Community Radio, Inc./Stephen Worden of 117 Bent Lane to operate a Low Power FM (LPFM) station from his owner-occupied residential property was removed from the agenda of the November 9th City Council meeting. The applicant plans to work with the City to see if alternative locations for the antenna at an existing tower or other property is feasible. If a feasible alternative location for the antenna cannot be found, the applicant will re-apply to Council for the Special Use Permit. Without the antenna, the operation of the Newark Community Radio station, as described by the applicant, qualifies as a No-Impact Home Based Business and does not require a Special Use Permit.

Status: In-Progress

Expected Completion: 12/31/2015

Execution Status: On Track

Activity or Project:

Unicity Bus

Description:

On Tuesday, Tom attended the DART Public Hearing Workshop to review the proposed DART service changes and compare them with the Unicity Bus schedule to evaluate how proposed changes would affect connectivity between the bus systems. The proposed changes will not affect connectivity at this time; however, DART indicates changes may be required in the future, which may impact Unicity.

Status: Completed

Expected Completion: 11/10/2015

Execution Status: Completed

Activity or Project:

City Council Meeting

Description:

On Monday evening, Maureen attended the City Council meeting. At this meeting, Council voted not to rezone the Newark Country Club property from RS to RH.

Status: Completed

Expected Completion: 11/9/2015

Execution Status: Completed

Department:

Police Department

Notable Notes:

Homecoming weekend went relatively well. On Saturday, there were a total of 34 criminal charges such as disorderly conduct, open alcohol containers, and underage consumption of alcohol, loud music and littering. One person was arrested for resisting arrest and one person was transported to the hospital for an alcohol overdose. Numerous large and loud parties were dispersed.

Our Citizen Police Academy has come to an end, with the attendees graduating from the program. The participant reviews were very positive with several comments about how surprised they were about all of the various activities and specialized functions performed by the members of the Newark Police Department. Corporal James Spadola did a great job organizing the program this year.

Deputy Chief Feeney has been exploring the possibility of working with the Delaware Department of Health and Social Services in initiating a collaborative effort to address community issues. The program, based on one in Pennsylvania, brings various agencies together to work as a multi-disciplinary team to address emerging issues such as crime prevention and risk conditions. A meeting will be held in December with representatives of various agencies to review goals of the program and to gauge their support and willingness to participate.

This year's Shop with a Cop is scheduled for December 12th at 8:30 a.m. Kmart once again is donating up to \$2,000 for 20 children to pair up with a police officer and shop for presents.

Traffic Officers have been busy conducting enforcement in several residential areas at the request of Council members who have been contacted by the public.

Activity or Project:

N/A

Description:

N/A

Status: Completed

Expected Completion: 11/11/2015

Execution Status: Completed

Activity or Project:

Description:

Status:

Expected Completion:

Execution Status:

Activity or Project:**Description:**

Status:

Expected Completion:

Execution Status:

Department:

Public Works and Water Resources Department

Notable Notes:

Leaf collection has peaked with most leaves now on the ground across the City. Unfortunately, the rain this week has significantly slowed our progress as it is much more difficult to pick up wet leaves versus dry. We are now anticipating to get to every street every other week versus every week as we have generally been able to do up until now.

Activity or Project:

2015 Street Improvement Program

Description:

Grassbusters completed curb replacement work on Green Meadow Court and the paving of Meriden Drive. Milling of Green Meadow Court and the start of curb replacement on Wilson Road was postponed due to rain.

Status:

Expected Completion:

Execution Status:

Activity or Project:

2015 Water Main Replacement

Description:

The contractor is scheduled to begin final paving of Darwin Drive on Friday, November 13th. Once Darwin is paved the project will be complete.

Status:

Expected Completion: 11/16/2015

Execution Status: On Track

Activity or Project:

Green Crosswalk Signalization on Main Street

Description:

City crews relocated the drain on the north side of Main Street that discharges rooftop runoff from Elliot Hall into the curblineline upstream from the crosswalk curb extension. By relocating this drain we will be able to eliminate the grate that crosses the pedestrian walkway and reduce our maintenance burden as this small channel frequently clogs with leaves and debris.

Status: Started

Expected Completion: 6/1/2016

Execution Status: On Track



11/8/2015 to 11/14/2015

The seal of the City of Newark is a circular emblem. It features a blue outer ring with the words "CITY OF NEWARK" in gold at the top and "INCORPORATED 1838" in gold at the bottom. The center of the seal depicts a scene with a large white building, possibly a train or a factory, and several figures in period clothing. Overlaid on this seal is the title of the report in white, bold, sans-serif capital letters.

OPERATION NIGHT TRAIN: CITY OF NEWARK MCI RECOVERY TABLETOP EXERCISE

AFTER ACTION REPORT
OCTOBER 15, 2015



EXERCISE OVERVIEW

Exercise Name	Operation Night Train: Newark Passenger Rail MCI Recovery Tabletop Exercise
Exercise Dates	August 25, 2015
Scope	This exercise was a tabletop exercise, conducted over four hours at the Bob Carpenter Center at the University of Delaware.
Mission Area(s)	Recovery
Core Capabilities	Public Information and Warning Operational Coordination Mass Care Services
Objectives	1. Discuss the operational relationship between law enforcement, fire-rescue and EMS during the response to and recovery from a rail-related MCI incident in Newark. 2. Evaluate current plans and capabilities for victim services and sheltering in the aftermath of an MCI in Newark. 3. Evaluate current plans and capabilities for demobilization of response and cleanup in the aftermath of an MCI in Newark. 4. Evaluate public information activities in the wake of an MCI in Newark. 5. Assess the players' understanding of ICS and UC concepts, roles and terminology, including the transition to and implementation of the recovery phase.
Scenario	Amtrak Derailment
Sponsor	Delaware Emergency Management Agency
Participating Organizations	See Appendix B
Point of Contact	Thomas Nesbella WMD Training and Exercise Planner, DEMA 302-659-2353 (Office) 302-222-6576 (Cell) Thomas.nesbella@state.de.us

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ANALYSIS OF CORE CAPABILITIES

Aligning exercise objectives and core capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned core capabilities, and performance ratings for each core capability as observed during the exercise and determined by the evaluation team.

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Discuss the operational relationship between law enforcement, fire-rescue and EMS during the response to and recovery from a rail-related MCI incident in Newark.	Operational Coordination				
Evaluate current plans and capabilities for victim services and sheltering in the aftermath of an MCI in Newark.	Mass Care Services				
Evaluate current plans and capabilities for demobilization of response and cleanup in the aftermath of an MCI in Newark.	Operational Coordination				
Evaluate public information activities in the wake of an MCI in Newark.	Public Information and Warning				
Assess the players' understanding of ICS and UC concepts, roles and terminology, including the transition to and implementation of the recovery phase.	Operational Coordination				
Ratings Definitions: Performed without Challenges (P): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other					

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. - Performed with Some Challenges (S): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified. - Performed with Major Challenges (M): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws. - Unable to be Performed (U): The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).					

Table 1. Summary of Core Capability Performance

The following sections provide an overview of the performance related to each exercise objective and associated core capability, highlighting strengths and areas for improvement.

Operational Coordination

Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Discuss the operational relationship between law enforcement, fire-rescue and EMS during the response to and recovery from a rail-related MCI incident in Newark.

Strengths

The capability level can be attributed to the following strengths:

Strength 1: Newark Fire established initial command, and players were able to successfully transition to a unified command with Newark Police, University of Delaware Police, Amtrak representatives, and New Castle County EMS.

Strength 2: Fire and EMS access routes and staging areas were quickly established.

Strength 3: Law enforcement coordinated initial response routes, with support from DelDOT as the incident progressed.

Evaluate current plans and capabilities for demobilization of response and cleanup in the aftermath of an MCI in Newark.

Strengths

The capability level can be attributed to the following strengths:

Strength 1: Newark PD, Amtrak, and the Medical Examiner's office will coordinate with federal investigators to maintain investigation efforts while cleaning up and removing the wreckage from the site.

Strength 2: Players had an extensive discussion on the operations to restore the community to normal operations. They discussed the available resources for debris and wreckage removal, resource housing, and using PIOs to control the message about resource removal from the scene.

Strength 3: An on-scene presence would be maintained until victim accountability is confirmed.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Demobilization of emergency responders leaves a major gap in maintaining recovery operations.

Analysis: The players discussed demobilization procedures for emergency personnel, but were not able to say with confidence whether responders would be available for maintaining recovery operations. Many responders are volunteers, and they cannot guarantee their availability in the aftermath of the incident.

Assess the players' understanding of ICS and UC concepts, roles and terminology, including the transition to and implementation of the recovery phase.

Strengths

The capability level can be attributed to the following strengths:

Strength 1: A unified command was established immediately with initial operations falling to the fire department command and recovery operations falling to law enforcement.

Strength 2: Positions within the command structure relevant to the recovery operations were appropriately identified as such: fire department (manpower), law enforcement (crime scene preservation), and EMS/ME's office (documentation/pronouncement).

Strength 3: The agencies in attendance had a firm grasp on incident command and unified command. They were able to successfully establish both during the exercise.

Mass Care Services

Provide life-sustaining services to the affected population with a focus on hydration, feeding, and sheltering to those who have the most need, as well as support for reunifying families.

Evaluate current plans and capabilities for victim services and sheltering in the aftermath of an MCI in Newark.

Strengths

The capability level can be attributed to the following strengths:

Strength 1: Amtrak coordinates local assistance efforts with federal and state assistance, and victim services agencies serve as a liaison between passengers and family members and the assistance agencies. Amtrak has a logistics team to assist with large-scale incidents such as this, including coordination of hotels for displaced passengers and family members.

Strength 2: The National Transportation Safety Board (NTSB) established family assistance centers at local hotels, in coordination with federal regulations.

Strength 3: A plan was put into place for the sheltering of both victims from the train and victims from the surrounding neighborhood.

Strength 4: The University of Delaware has morgue facilities at the College of Health Sciences located on the University STAR Campus.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Access to social services is limited surrounding the derailment site.

Analysis: The shelters identified during exercise discussion were only opened on a temporary basis for the evacuated residents near the derailment site. Identifying appropriate support agencies was also questioned during the exercise. If the New Castle County EOC was activated, there would be additional capabilities and assistance coordinating resources available to on-scene responders.

Area for Improvement 2: Shelters will not be able to handle the amount of people they need to service initially.

Analysis: Shelter needs and resources rely heavily upon the University of Delaware and the Newark Charter School. Players discussed at length the staffing needs for these shelters and the challenges to establishing shelters, including the time it would take to accurately account for all train passengers using the passenger manifest and coordinating with the Transportation Officer for those passengers transported from the scene. Initial shelter staffing will be minimal until County and State resources are activated arrive on scene.

Area for Improvement 3: Transportation for the movement of victims and uninjured bystanders would take time to coordinate.

Analysis: Players mentioned the need for University of Delaware and City of Newark transportation services because of the location of the incident, but there was no definitive answer for the timeframe for transportation operations. In addition, if DelDOT transportation resources were needed, these would take some time to coordinate.

Area for Improvement 4: Patient tracking would be a major challenge during an incident of this kind.

Analysis: With an incident of this size, it is likely that there will not be enough personnel to separate the triage system into train passengers and nearby bystanders. All patients will go through the same system, and transportation officers will be charged with taking notes to track them. With the number of victims and other persons at the scene, it is possible that patients may be difficult to track or get lost during triage, treatment and transport.

Public Information and Warning

Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.

Evaluate public information activities in the wake of an MCI in Newark.

Strengths

The capability level can be attributed to the following strengths:

Strength 1: Public Information is capable of using social media to provide quick information updates during the incident, and the responders have access to a reverse 911 system and the UD Alert system to make notifications about the incident.

Analysis: The PIOs were good at responding and posting to social media; however there was no reference to social media use in their plans. Plans need to be updated to include the parameters of social media use as a method of pushing appropriate information to the public, and to connect with victims' family members.

Strength 2: The PIOs established a Joint Information Center (JIC), and they discussed establishing a staging area specifically for media.

Strength 3: Newark PD, UD, and Amtrak have established protocols in place for the public information function, and Amtrak even discussed establishing their call center to assist with dissemination of information.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: The relevant PIOs within the incident need more collaboration and coordination when responding to the public.

Analysis: There needs to be additional collaboration within the JIC when it comes to uniform messaging to the public. The group discussed the need for creating a script with information available to any call takers responsible for disseminating information.

Area for Improvement 2: Additional work should be done regarding the relationship between public information and Unified Command.

Analysis: Players did not discuss the need for PIOs to maintain communications with incident/unified command throughout the incident in order to provide the most up-to-date and accurate information to the public. Additional planning or exercises should be held to practice coordination among the PIOs themselves and with other responders.

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for the University of Delaware and the City of Newark as a result of Operation Night Train: Newark Passenger Rail MCI Recovery Tabletop Exercise conducted on August 25, 2015.

Core Capability	Issue/Area for Improvement	Corrective Action	Capability Element ¹	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Operational Coordination	Observation 1: Demobilization of emergency responders leaves a major gap in maintaining recovery operations.	Stakeholders should anticipate responder shortages, and take this into consideration when training and planning for recovery operations.	Training, Planning	All Stakeholders		October 14, 2015	Ongoing
Mass Care Services	Observation 1: Access to social services is limited surrounding the derailment site.	Continue planning and coordination efforts with stakeholder social services agencies during a Rail MCI.	Training, Planning	All Stakeholders		October 14, 2015	Ongoing
		Consider planning a workshop to discuss the roles and responsibilities when responding to a rail MCI.	Exercise	NCC OEM	Dave Scott	October 14, 2015	12 Months

¹ Capability Elements are: Planning, Organization, Equipment, Training, or Exercise.

Mass Care Services	Observation 2: Shelters will not be able to handle the amount of people they need to service initially.	Continue planning efforts for handling the influx of people. See previous corrective action.	Planning	City of Newark		October 14, 2015	Ongoing
	Observation 3: Transportation for the movement of victims and uninjured bystanders would take time to coordinate.	Keep this as a planning consideration for future events.	Planning	DeIDOT	Dwayne Day	October 14, 2015	Ongoing
	Observation 4: Patient tracking would be a major challenge during an incident of this kind.	Continue to practice the process through patient tracking exercises and drills specific to MCI tracking.	Training, Exercise	NCC EMS	Dawn Gulezian	October 14, 2015	Ongoing
Public Information and Warning	Observation 1: The relevant PIOs within the incident need more collaboration and coordination when responding to the public.	Continue to practice collaboration and coordination efforts to notify the public of incidents through exercises and drills.	Planning, Exercise	All PIOs		October 14, 2015	Ongoing

Public Information and Warning	Observation 2: Additional work should be done regarding the relationship between public information and Unified Command.	Include JIC formation in training and planning efforts.	Training, Planning	All relevant stakeholders		October 14, 2015	Ongoing
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APPENDIX B: EXERCISE PARTICIPANTS

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Michael Maier	University of Delaware PD	

APPENDIX C: PARTICIPANT FEEDBACK

1. Based on your play in the exercise, list the top three STRENGTHS (things that went well) and top three AREAS FOR IMPROVEMENT (areas that need improvement) for your organization.

Strengths		
• Good scenario • Coordination of agencies • Great discussion • Range of participants from response to recovery • Capable management • Resources avail for this type of incident • Good facilitation • Identifying resources • Collaboration • Interagency interaction • UD/city of Newark alignment • Lots of resources • Communications • Clear JIC/IC structure • Experience • Coordination with other agencies • Command post established quickly • Had great attendance, Amtrak, NTSB • Interplay between the agencies • Interagency communication • Unified command growing appropriately • Knowledge of the area • Good interaction	• Good discussions • Understanding of each role of all agencies • New info learned • ID of key players and clarification of roles • Usage of ICS • Realistic scenario • Understanding all roles • Shared info/resources • Communicated well with unified command • Understanding of UD incident command • Joint operations • Agreement on “one message” • Social media plan UD • Good cooperation between units • Good topic, interesting • Communication between agencies • Unified command/ICS • Most stakeholders identified and present • Resources available • Resources (equipment) • Providing facilities as resources for response efforts • Well developed PIO • Hearing actions and	• Good mixture of participants • Communications ICS usage • Interagency relations/operability • Ample times for table discussion • Good insight by Amtrak chief • Insight into triggers that might effect UD • Resource response • Communication • Unified command worked well • Interplay with UD good for Newark • Good communications • Relationships with all agencies • Trained personnel • Strong support for students • Good relationship with players • Materials • Coordination • Discussion • Good resource management • Our familiarity of unified PIO • Participation and communication • Collaboration • Variety of participants • Strong ICS usage • Participation of agencies • The knowledge of our organizations • Great realistic scenario • Discussion • Detail

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> • between groups of participants • Communication paths • Public safety ability to communicate with the public • Well developed notification system • Networking with other PIOs | <ul style="list-style-type: none"> • capabilities of other agencies • Ability to increase number of units • Excellent moderation • Majority of agencies/departments • Importance of preparedness • Resources | <ul style="list-style-type: none"> • Good mix of agencies • Good communication with Fire/EMS • Coordination of agencies • Our preexisting knowledge of each other • Rapid response to emergency • Consistency • Exercise length |
|---|--|--|

Areas for Improvement

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> • Personnel call back • More time, possibly all day • Needed more time for exercise • Understanding federal legislation in Amtrak accident to this scale • Pre-plans for this specific scenario type “canned” messaging for initial statements (PIO) • Communication between all parties involved • Need microphone for speakers • Communication • Better understanding of roles • Logical step to bring in resource • Student control – curiosity, 7000 students late night activity • Resource pool • Internal message sharing • Need for lead speakers | <ul style="list-style-type: none"> • Updated EOP • Explain more the role of the NTSB • Resources being taxed • Federal level PIO support • Housing • Relief officer to back fill • Triage/MCI • Initial response to media • Need pre-written statements • More detail on best practices, feedback on suggested answers • PIO communication • Present accountability • Establish locations for staging etc. • Exposure from accident to town • Cell service in STAR building • Victim service info • No alternate scheduling plan • Down time (0900-1000) • More interagency collaboration | <ul style="list-style-type: none"> • Clear guidelines for city • Missing red cross and hospital reps • Triage area • Identify responsibility to respond • NFD training/SOP • UC lack some resources due to JMACC size • Resources • Contacts for outside agencies • Recognition on campus for contact • Triage areas • Rail training • Create a participant list with agencies and numbers • Use microphones and audio system “U” shaped table with principals all engaged • More planning things ready to go plan • Expectation of speed of messaging would be higher • Evaluation of plans, procedures • Communication with other agencies • Lack of Amtrak familiarity • Pushing out information through social media by the unified PIO • Better way to find what is |
|--|--|--|

- Need to update emergency plan
- Identification of resources
- Fuel cars are topical and would have been a good addition to exercise
- Having pre-planned locations for staging/housing
- Virtual tracking
- Preplanning of access/incident locations
- Over use of acronyms
- Lack of cell service in STAR campus
- Partnership with surrounding PDs on UD capabilities – PT, morgue, NHMC, etc.
- happening on campus
- Staffing will fatigue rapidly
- A lot of participants
- Group; by responsibility not department
- Missing agencies/departments
- More time to discuss issues
- More inclusion for Amtrak in UC
- Media preparations

2. Identify actions that should be taken to address the issues identified above.

- High
 - Personnel call back
 - Role of each agency and resources available
 - Training on site for all first responders to rail emergency
 - Ability to back fill other agency needs
 - Ability to direct responders into back fill roles
 - Ability to use outside detectives to help with interviews
 - Develop NFD training and SOP for rail emergencies
 - Develop a response team from hospital
 - Share template messaging
 - Establish lead
 - Initial response to media-coordinate
 - Update plan
 - Departmental policies need to be re-evaluated
 - Pre-plan evacuation routes
 - Pre-plan staging/housing locations
 - Develop a sensible protocol to track virtually
 - Maintain key partnerships
 - Media
 - Locations
 - Tower booster for cell service
 - Contact with community via Mark S.
 - Produce a staffing plan/schedule for large long term incidents
 - Schedule training session to focus on major issues
 - Come up with strategies write out plans
 - We can and should share our respective “canned” pieces of messaging
 - We need to identify and preplan potential rail incidents
- Medium
 - Update EOP
 - Clear guidelines for city

- Provide microphones for facilitation and speakers
- UD internal follow up to student control – action plan
- Feedback on suggested path, steps, etc. with best practices
- Including Bakken Crude in some fashion would have been a good addition since the topic is hot now
- Develop some common sense sections to help push messaging out
- Experience to include Amtrak in UC early
- Plans for recall/backfill
- Mutual aid training
- Contacts
- Continued mass casualty training
- Correct cell service issues
- Have all possible agencies and departments represented
- Have a roster passed around
- Meetings with mutual aid and outside agencies and further exercises such as this
- Strengthen our interpersonal contacts with each other
- Low
 - Tour of STAR
 - Limit the number of actual participants and invite observers
 - Shorten time
 - List/sharing of plans
- Unlabeled
 - We'd be happy to offer support/training on Fed plans for legislative accidents
 - Reaching out to red cross at national level if needed for involvement
 - Within our department we need to discuss and create situations like this and plan for various event
 - Where passengers are being transported to injured passengers return to and from hospital
 - Make sure all agencies are aware of services
 - Contingency plans for housing and classes
 - Work with all for single voice communication
 - Financial considerations
 - Continued discussions about action plans
 - Continued communication re roles and responsibilities
 - Condensed victim service info
 - Meet as working groups after initial formation of UC
 - Coordinate Amtrak training

3. Identify equipment, facilities, training or plans/procedures for your organization and/or the county and state as a whole that should be reviewed, revised, or developed. Indicate which organization is responsible for each corrective action.

- Emergency operations plan – City of Newark
- Call back procedures – Newark
- Safety of responding to a rail incident – Amtrak
- Revised/develop more pre-plans for train incidents – FD, PD
- Build relationships with outside agencies – FD, PD

- Continue to outreach and hopefully be invited to more TTXs
- Future tabletop exercise like this very beneficial
- Review NCC CEMP MCI annex to ensure checklists are up to date concerning strategic ops – NCC OEM
- We know limits of city and U of D EOC and can use NCC EOC to fill in
- Potential extended staging available at UD-larger casualty/outstanding resource constant that UD can help all agencies
- More TTXs – All
- Localize training – Amtrak
- Hospital involvement – County/State association
- Emergency communications plan – UD, Newark
- Response plan in city –City of Newark
- Emergency operations plan – City of Newark
- Continued training on MCI by all teams. ICS training needs to be shared by all levels – UD
- Newark needs a backup EOC – Newark
- Newark needs a backup press staging area – Newark
- Amtrak training – Amtrak
- We need to work to improve NPD emergency plans to Dover with train issues – NPD
- Patient accountability – Coordination
- Media preparations – NPD PIO
- Locations for staging/housing – admin unit
- Outside agency contacts – NPD staff
- Contact of pathway for STAR to help community – UD
- Passenger train awareness – will schedule with Amtrak
- Communication plan – NCCFB/NPD
- Victim accounting plan
- Family assistance center plan
- Include medical examiner in the very early moments after the accident/incident
- Social media tracking
- Hot suite enterprise cross training and continued effort – CPA
- Media sonar – UDPD
- Amtrak passenger train emergency preparedness plan – Amtrak
- Need to create rail preplan for FD – Newark FD
- Need to revisit MCI training at a large scale – Fire/EMS/PD
- Review and revise the city of Newark emergency response plan to include agencies in and around Newark to make it more inclusive – City of Newark, with assistance of other agency PIOs

4. What is your assessment of the exercise design and conduct?

Strongly Disagree $\longleftrightarrow$ Strongly Agree

Assessment Factor	1	2	3	4	5
The exercise was well structured and organized.	0%	3%	11%	42%	44%
The exercise has plausible and realistic expectations.	0%	0%	3%	41%	56%
The documentation used during the exercise was a valuable tool throughout the exercise.	0%	0%	19%	54%	27%
Participation in the exercise was appropriate for someone in my position.	0%	0%	12%	29%	59%
The participants included the right people in terms of level and mix of disciplines.	0%	0%	8%	39%	53%
The exercise provided me a better understanding of the issues faced during the recovery phase of a passenger rail MCI.	0%	0%	8%	39%	53%
This exercise was helpful to better understanding command and coordination between agencies during the recovery phase of a passenger rail MCI.	0%	5%	6%	44%	45%

4. What changes would you make to improve this exercise?

- More time is needed for the table top due to the amount of people and organizations involved
- Great scenario; realistic. Future exercises should probably be scheduled for a full day. We didn't have time to fully discuss each module. Other than that the exercise went very well.
- Overall well done. Amount of participants from appropriate agencies
- Adam did a good job facilitating
- Great facility
- Too many acronyms and jargon, not everyone understands those. More plain English
- The only group that seemed involved was the unified command. It would have been nice to have each group talk among themselves including their incident command rep. after the discussion have the UC reoriented and discuss how each module issue would be discussed. The exercise seemed disjointed with many in attendance mere observers rather than participants. The exercise itself creates great conversation and talking points, but it creates too much isolation. The UC also seemed to exclude some important entities i.e. UD (non police) rep, NTSB rep, DelDOT rep. it seemed too police heavy
- Recognize the need for county/state level policy and procedures for passenger rail emergency
- Directives for breakout sessions could be clearer. Many participants seemed unsure of what was expected of them
- Additional follow up together to better consider how scenario could unfold in alternate situations
- Include electric department
- More focus on PIO skills

- Include elected officials
- More people from a broader range of agencies
- Overall the exercise went very well
- Getting all possible responsible agencies together is priceless
- Maybe mix up groups – one PIO per table

APPENDIX D: ACRONYMS

Acronym	Term
AAR	After Action Meeting
CEMP	Comprehensive Emergency Management Plans
DelDOT	Delaware Department of Transportation
DEMA	Delaware Emergency Management Agency
DIAC	Delaware Information and Analysis Center
DSP	Delaware State Police
EMS	Emergency Medical Services
EOC	Emergency Operation Center
EOP	Emergency Operations Plan
FB	Fire Board
FD	Fire Department
HSEEP	Homeland Security Exercise and Evaluation Program
IC	Incident Command
ICS	Incident Command System
IP	Improvement Plan
JIC	Joint Information Center
MCI	Mass Casualty Incident
ME	Medical Examiner
NCC	New Castle County
NHMC	Newark Health and Medical Center
NPD	Newark Police Department
NTSB	National Transportation Safety Board
OEM	Office of Emergency Management
PD	Police Department
PIO	Public Information Officer
SOP	Standard Operating Procedures
STAR	Science, Technology and Advanced Research
TTX	Tabletop Exercise
UC	Unified Command
UD	University of Delaware
VS	Victim Services

City of Newark DE Smart Meters

Year One Performance Report

August 2014 – July 2015



Helping customers manage energy resources to improve financial performance



Report Delivery Receipt

Honeywell has presented the Year 1 Performance Report for City of Newark, DE Smart Meters.

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City of Newark DE Smart Meters



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1.0 Overview

Executive Summary

A Guaranteed Energy Services Agreement between the City of Newark and Honeywell International, Inc, was agreed upon on December 10, 2012.

The energy guarantee began on August 1, 2014. Water meter accuracy performance audit reports will be submitted annually for the period ending July 31 over a 15 year term within 90 days after the end of the period.

Starting from the guarantee commencement date, you received quarterly invoices, based on the year 1 annual billing amount of \$53,780, in advance. The annual amount will be escalated 3% each year for the term of the agreement.

This report contains water meter system accuracy calculations, water meter summaries, water meter test results, and AMR/AMI system reliability determination.

The Year 1 performance results are summarized below:

Table 1 Annual Performance

	Unit of Measure	Guarantee	Actual
Water Meter Accuracy	% Accuracy Minimum	98%	100.04%
Water Meter Readability	Monthly # of Acceptable Non- communicating Meters	115	45*

* Average of monthly non-communicating reports supplied by the City.

Project Overview

Service Contract Number: 40105074

Installation Period: February 2013 to July 2014

Guarantee Start Date: August 2014

Guarantee Term: 15 Years

Honeywell contacts: Mr. Frank Capitummino, Measurement and Verification Specialist
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Operational Cost Avoidance Summary

The annual guarantee of operational cost avoidance strategies are listed below. The operational cost savings are deemed satisfied upon contract execution. The City acknowledges and agrees that, if it did not enter into this agreement, it would have to take future steps to achieve the same ends as does the work included in this project, and that, in doing so, it would incur operational costs of at least the amount per year over the life of the performance period as presented below. The City agrees that, by entering into this agreement, it will avoid future operational costs in at least these amounts. The operational cost avoidance will be escalated 3% per year.

Table 2 Operational Savings ECMs

OSD#	Operational Savings Description	1st Year Avoidance
1	Electric AMI	\$221,482
2	Water AMI	\$51,200
3	WiFi - Public Safety	\$6,958
Total		\$279,640

M&V Methodology

This project uses Option B (Retrofit Isolation) for verifying water meter accuracy.

The definition for Option B, as defined in IPMVP 2012 is shown below.

Option B: Retrofit Isolation: All Parameters Measurement: Determine savings by field measurements of the energy use of the ECM-affected system. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the savings and the length of the reporting period. Savings are calculated using engineering calculation of baseline and reporting period energy from the measurements of proxies of energy use.

Using the principle defined above, the specific measurement plan prescribed in this contract is listed in the table below.

Table 3 M&V Plan

Location	ECM	Variable Measured	Unit of Measure	Measurement Frequency
City Wide	Water Meters with AMI Retrofit	Water Meter Accuracy	Accuracy Percent	Annually

2.0 Summary

Water Meter System Average Accuracy

The system average accuracy is calculated by weighting the average individual meter accuracies by the contract specified system average weighting factors. The table below lists the calculation summary.

Size	System Average Weighting Factors	Average Individual Meter Accuracy
5/8" - 3/4"	53.10%	100.16%
1"	10.12%	100.50%
1.5"	11.70%	98.01%
2"	11.61%	101.04%
3" - 6"	13.47%	100.14%

System Average Accuracy **100.04%**

The individual meter accuracies are calculated in accordance with the American Water Works Association (AWWA) low-medium-high test procedure. The meter accuracies measured at the specified low, medium, and high flow rates are weighted by the specified weighting factors. An average is then calculated by meter size for all the meters tested. The individual meter test results are included in the appendix. The following pages show the average individual meter accuracy calculations by meter size.

5/8" to 3/4" Water Meter Testing Analysis

Weighting Factors:

WtLow	WtMid	WtHi
15%	70%	15%

Serial Number	LOW	MEDIUM	HIGH	Individual Meter Accuracy
75684667	100.30%	100.20%	99.79%	100.15%
75684384	100.40%	100.10%	100.40%	100.19%
75575598	100.00%	100.00%	99.56%	99.93%
76752068	99.90%	100.40%	99.07%	100.13%
75574758	99.00%	100.50%	99.25%	100.09%
75575419	100.40%	100.00%	98.63%	99.85%
75685324	100.20%	100.00%	100.11%	100.05%
75683946	100.30%	100.20%	99.81%	100.16%
74139214	99.50%	100.70%	99.85%	100.39%
75575020	100.90%	101.90%	100.99%	101.61%
75575040	100.30%	101.50%	100.60%	101.19%
75576292	100.00%	99.80%	99.86%	99.84%
75574088	100.40%	99.80%	99.82%	99.89%
75574038	100.00%	99.80%	99.30%	99.76%
75575245	101.60%	101.10%	100.87%	101.14%
75684714	97.50%	101.80%	101.15%	101.06%
75576810	101.90%	99.50%	99.31%	99.83%
76397788	100.10%	99.30%	99.23%	99.41%
76397472	100.20%	98.90%	98.92%	99.10%
75684818	105.40%	100.70%	99.74%	101.26%
75573880	100.20%	99.30%	99.35%	99.44%
75684731	104.10%	99.50%	100.82%	100.39%
76397363	100.00%	99.80%	99.34%	99.76%
79398423	99.90%	100.00%	100.50%	100.06%
79398108	98.60%	99.10%	98.74%	98.97%
75575619	99.14%	100.40%	99.50%	100.08%
75683899	98.80%	100.10%	99.67%	99.84%
75575184	100.90%	100.90%	100.57%	100.85%
Group average				100.16%

1" Water Meter Testing Analysis

Weighting Factors:

WtLow	WtMid	WtHi
15%	70%	15%

Serial Number	LOW	MEDIUM	HIGH	Individual Meter Accuracy
75576999	100.70%	100.80%	101.00%	100.82%
75577054	100.20%	105.00%	99.90%	103.52%
75577025	98.80%	100.00%	100.20%	99.85%
75576987	100.40%	100.20%	100.30%	100.25%
75576901	100.20%	106.90%	101.10%	105.03%
75577018	99.90%	100.10%	100.10%	100.07%
75576937	100.80%	100.30%	100.70%	100.44%
75577048	100.30%	100.30%	100.40%	100.32%
75576981	99.70%	99.60%	101.00%	99.83%
75576915	98.70%	99.50%	98.90%	99.29%
75577047	99.40%	100.10%	99.50%	99.91%
75577050	100.00%	100.20%	99.70%	100.10%
75576897	99.10%	100.00%	99.50%	99.79%
75576913	100.00%	100.70%	100.10%	100.51%
75577044	100.30%	100.40%	99.80%	100.30%
75577056	99.70%	100.20%	99.60%	100.04%
75577028	98.20%	100.60%	100.00%	100.15%
75576943	103.20%	98.90%	104.00%	100.31%
75577073	99.80%	100.00%	100.30%	100.02%
75576927	101.10%	101.10%	101.30%	101.13%
75576918	100.10%	100.00%	101.20%	100.20%
75576931	101.50%	101.00%	101.50%	101.15%
75576928	100.00%	99.90%	100.50%	100.01%
75576996	101.80%	101.80%	102.00%	101.83%
75576936	100.70%	100.20%	100.80%	100.37%
75576903	100.00%	99.50%	100.30%	99.70%
75576951	100.00%	100.00%	101.00%	100.15%
75576992	101.80%	100.40%	101.10%	100.72%
75577079	100.90%	100.00%	100.00%	100.14%
75577065	100.00%	98.90%	99.30%	99.13%
Group average				100.50%

1 ½" Water Meter Testing Analysis

Weighting Factors:

WtLow	WtMid	WtHi
15 %	70 %	15 %

Serial Number	LOW	MEDIUM	HIGH	Individual Meter Accuracy
76394424	100.20%	101.50%	100.30%	101.13%
76394465	99.80%	100.30%	100.10%	100.20%
75572519	98.50%	102.40%	100.90%	101.59%
76394480	101.40%	103.40%	100.40%	102.65%
77116438	53.64%	112.16%	102.17%	101.88%
76394456	101.90%	102.40%	101.30%	102.16%
75572517	96.90%	100.40%	100.30%	99.86%
76394490	99.26%	100.20%	100.20%	100.06%
75572487	65.20%	113.00%	101.40%	104.09%
75572522	48.30%	114.00%	101.10%	102.21%
76394475	99.90%	100.90%	99.80%	100.59%
77430852	99.20%	101.20%	100.60%	100.81%
76394455	100.80%	102.80%	101.40%	102.29%
76394473	100.60%	102.80%	100.90%	102.19%
76394468	80.50%	114.70%	101.10%	107.53%
75572478	99.70%	102.80%	98.40%	101.68%
76394471	0.00%	0.00%	0.00%	0.00%
77116441	100.80%	105.20%	107.20%	104.84%
76394484	99.90%	101.10%	100.10%	100.77%
75572516	100.80%	101.20%	99.90%	100.95%
76394488	99.50%	102.29%	101.30%	101.72%
76394427	101.90%	100.30%	100.50%	100.57%
75572488	103.40%	102.70%	102.60%	102.79%
75572525	101.90%	101.00%	101.40%	101.20%
77035881	102.50%	102.00%	101.20%	101.96%
76824796	97.80%	101.50%	101.80%	100.99%
760916918	97.80%	99.60%	101.30%	99.59%
Group average				98.01%

2" Water Meter Testing Analysis

Weighting Factors:

WtLow	WtMid	WtHi
15%	15%	70%

Serial Number	LOW	MEDIUM	HIGH	Individual Meter Accuracy
76394497	94.50%	102.70%	103.40%	101.96%
75572345	101.20%	102.10%	101.10%	101.27%
75572337	102.10%	102.70%	101.30%	101.63%
75572344	98.70%	103.30%	101.40%	101.28%
75572361	97.90%	103.40%	101.90%	101.53%
75572356	101.30%	100.80%	100.50%	100.67%
75572350	95.40%	100.20%	100.50%	99.69%
76394504	102.20%	101.70%	101.80%	101.85%
75572357	91.30%	101.20%	100.90%	99.51%

Group average 101.04%

3" to 6" Water Meter Testing Analysis

Weighting Factors:

WtLow	WtMid	WtHi
15%	15%	70%

Serial Number	Location	Size	LOW	MEDIUM	HIGH	Individual Meter Accuracy	
75686825	Bank of America	3	98.3%	72.7%	97.9%	94.18%	
75686823	Bank of America	3	99.7%	100.5%	98.9%	99.26%	
75686832	Colonial Garden	3	99.7%	103.4%	101.4%	101.45%	
76749810	Marriott Courtyard	3	98.2%	101.7%	100.8%	100.55%	
75686824	Harmony Inc	3	82.8%	101.7%	100.9%	98.31%	
75686828	Floyd Hudson Cent	3	100.0%	100.8%	100.7%	100.61%	
75686831	Newark Manor Nur	3	98.7%	101.6%	99.6%	99.77%	
75686834	Main Tower	3	97.8%	102.7%	101.0%	100.78%	
78708171	UD Harrington Dor	3	98.8%	101.2%	101.5%	101.05%	
76846096	The Retreat Newark	3	100.0%	100.8%	101.2%	100.96%	
78307008	CSC	3	98.4%	101.2%	99.4%	99.52%	
75686822	CSC	3	102.4%	98.7%	98.9%	99.40%	
						99.65%	Group Avg
75688725	Bloom Energy	4	98.7%	100.8%	99.6%	99.65%	
76512392	Delle Donne STAR	4	98.2%	98.6%	102.2%	101.06%	
75686817	Marjam	4	96.4%	99.8%	101.2%	100.27%	
						100.33%	Group Avg
78060021	UD	6	102.50%	101.00%	101.70%	101.72%	
75686816	Newark Housing A	6	100.00%	99.80%	98.90%	99.20%	
						100.46%	Group Avg

100.14% Average 3"-6" Avg

3.0 Review Detail

Small Water Meter Random Testing Sample

DE City of Newark Year 1 - 5/8" to 3/4" Water Meter Testing Sample

Type	Account1	Name	Address	Cycle	Meter	Transmitter	City Size	Installed Size
WTR	14872	NEW LONDON AVE ASSOC	130 NEW LONDON ROAD	20	75574758	9259111	5/8-inch	5/8x1/2 iPerl
WTR	10701	LAUREL A OLDENBURG	22 MILLWRIGHT DRIVE	2	75685324	8893832	5/8-inch	5/8x1/2 iPerl
WTR	1459	RONALD R WILKINSON	166 W MAIN STREET	15	76752162	9259724		5/8x1/2 iPerl
WTR	2258	WILLIAM J BORNEMANN	276 W CHESTNUT HILL	50	75574038	8915579	5/8-inch	5/8x1/2 iPerl
WTR	26783	STONE TREE LLC	1 CIDER MILL COURT	70	76397472	9291422	5/8-inch	5/8x1/2 iPerl
WTR	5071	CATHERINE M SCOTT	424 NEW LONDON ROAD	45	75575020	9239305	5/8-inch	5/8x1/2 iPerl
WTR	11095	PATRICIA BRACKEN	502 STAFFORD AVENUE	2	76398108	8893570	5/8-inch	5/8x1/2 iPerl
WTR	31697	SHELBY L KAMM	511 DARWIN DRIVE	3	76752068	8876557		5/8x1/2 iPerl
WTR	3426	DONALD E SWEET	942 ALEXANDRIA DRIVE	60	75575040	9240074	5/8-inch	5/8x1/2 iPerl
WTR	5189	LAURA C CLASSEN	16 FREMONT ROAD	45	75684667	8876251		5/8x1/2 iPerl
WTR	15791	LOGAN Z FOUNTAIN	307 MACDUFF ROAD	55	75684550	8875899	5/8-inch	5/8x1/2 iPerl
WTR	1230	EDWARD C HOLDEN	104 SYPHERD DRIVE	20	75575598	8876799	5/8-inch	5/8x1/2 iPerl
WTR	11966	DOMINIC J KAYATTA	192 KENNETH COURT	1	75576292	9259251	5/8-inch	5/8x1/2 iPerl
WTR	7620	FAIRFIELD SHOP CENTER	417 NEW LONDON ROAD	5	74139214	9258994	5/8-inch	5/8x1/2 iPerl
WTR	3646	ROBERT D GIFFORD	924 DEVON DRIVE	60	75575619	9238761		5/8x1/2 iPerl
WTR	11830	DAVID P GARCIA	317 HUDSON DRIVE	3	74139028	8884258	5/8-inch	5/8x1/2 iPerl
WTR	1341	JERONE W JAMISON	107 TANGLEWOOD LANE	15	75684714	8915600	5/8-inch	5/8x1/2 iPerl
WTR	11286	MARY JANE WRENN	3 GEORGIAN CIRCLE	55	75575419	8914506	5/8-inch	5/8x1/2 iPerl
WTR	2306	MATTHEW B VAN RENSLER	415 ARBOUR DRIVE	50	75574237	8915498		5/8x1/2 iPerl
WTR	2064	FP SPE LLC	850 LIBRARY AVENUE	4	76397788	9291387	5/8-inch	5/8x1/2 iPerl
WTR	10835	SIEGFRIED J SCHULZE	106 LONGVIEW DRIVE	2	76398423	8893272		5/8x1/2 iPerl
WTR	4455	MICHAEL H WALTON	917 PICKETT LANE	40	75576464	8915125	5/8-inch	5/8x1/2 iPerl
WTR	4561	MOHAMMAD A AHMAD	10 PANORAMA DRIVE	45	75574088	9239138	5/8-inch	5/8x1/2 iPerl
WTR	9368	RODNEY E PAYNE	13 ADELENE AVENUE	80	75575184	9259915	5/8-inch	5/8x1/2 iPerl
WTR	27549	MATTEI CORPORATION	326 RUTHAR DRIVE	5	75576869	9240342		3/4 iPerl 9
WTR	5695	MICHAEL KALAJIAN	263 S CHAPEL STREET	60	75684731	8914484	5/8-inch	5/8x1/2 iPerl
WTR	1763	CHARLOTTE P WILLIAMS	212 SUNSET ROAD	20	75684818	9240500	5/8-inch	5/8x1/2 iPerl
WTR	16012	HENRY B LEACH III	50 SHENANDOAH DRIVE	35	75684100	9259918	5/8-inch	5/8x1/2 iPerl
WTR	1684	MT ZION UAME CHURCH	100 NEW LONDON ROAD	20	75684384	9259621	5/8-inch	5/8x1/2 iPerl
WTR	6101	RAYMOND KNOX	167 W PARK PLACE	25	75683899	8884857	5/8-inch	5/8x1/2 iPerl
WTR	9767	SCOTT A HURST	312 LYNLEY LANE	35	75575245	9239135		5/8x1/2 iPerl
WTR	15904	ROBERT F DEDINAS	109 SMITH WOODS LANE	2	76398239	8893442	5/8-inch	5/8x1/2 iPerl
WTR	4445	ROBERT KAUCIC	920 PICKETT LANE	40	75573880	8875724	5/8-inch	5/8x1/2 iPerl
WTR	5930	PETER G ROE	19 SUNSET ROAD	25	75686453	8894564	5/8-inch	5/8x1/2 iPerl
WTR	11440	DAN NICULACHE	117 MULBERRY ROAD	3	76398303	8323728	5/8-inch	5/8x1/2 iPerl
WTR	4544	ERIC D ROBBINS	13 TIMBERCREEK LANE	45	75575385	8914610	5/8-inch	5/8x1/2 iPerl
WTR	11319	WILLIAM H WHEATLEY	3 HIGH POND DRIVE	45	75574441	8914545	5/8-inch	5/8x1/2 iPerl
WTR	3393	LEONARD W SCHWARTZ	951 ALEXANDRIA DRIVE	60	76397885	8885145		5/8x1/2 iPerl
WTR	10710	JOHN ELLWOOD	40 MILLWRIGHT DRIVE	2	76397363	9291317	5/8-inch	5/8x1/2 iPerl
WTR	6213	JOHN P REDDINGTON	706 BROOK DRIVE	25	75683946	9259796	5/8-inch	5/8x1/2 iPerl
WTR	4357	DENNIS ANDERSON	904 ROCKMOSS AVENUE	40	75576810	8875776	5/8-inch	5/8x1/2 iPerl
WTR	11636	MORRIS W LARUE	209 S DILLWYN ROAD	3	75575932	9238573	5/8-inch	5/8x1/2 iPerl

DE City of Newark Year 1 - 1" Water Meter Testing Sample

Type	Account1	Name	Address	Cycle	Meter	Transmitter	City Size	Installed Size
WTR	7144	AE-NEWARK ASSOCIATES	14 WHARTON DRIVE	85	75577028	9259800	1-inch	1 iPerl
WTR	8008	MELROSE PLACE APARTMENTS	1100 MELROSE DRIVE	5	75576999	8884445	1-inch	1 iPerl
WTR	8063	COOLIDGE ADMIRALS LLC	43 FAIRWAY ROAD	5	75576915	8885055	1-inch	1 iPerl
WTR	7772	UDEL HOLDINGS LLC	655 LEHIGH ROAD	65	75576931	8894354	1-inch	1 iPerl
WTR	524	HOLY ANGELS SCHOOL	82 POSSUM PARK ROAD -PIT	5	75577054	8904713		1 iPerl
WTR	7124	DELAWARE AUTO PARTS	236 E CLEVELAND AVENUE	4	75577073	9292333		1 iPerl
WTR	27359	GUS TSIONAS	137 E MAIN STREET	4	75576983	9291232		1 iPerl
WTR	7884	WEST CHESTNUT HILL CONDO	179 W CHESTNUT HILL	5	75577065	9239096	1-inch	1 iPerl
WTR	7413	SCHLOSSER & DENNIS LLC	167 E MAIN STREET	4	75576947	9291441	1-inch	1 iPerl
WTR	7316	THOMAS HALL	52 N CHAPEL STREET	4	75576913	8884806	1-inch	1 iPerl
WTR	8053	COOLIDGE ADMIRALS LLC	34 FAIRWAY ROAD	5	75576936	9259155	1-inch	1 iPerl
WTR	5726	THE EASTERN GROUP INC	931 S CHAPEL STREET	60	75577056	9259374		1 iPerl
WTR	8050	COOLIDGE ADMIRALS LLC	31 FAIRWAY ROAD	5	75576937	9291516		1 iPerl
WTR	7749	UDEL HOLDINGS LLC	91 THORN LANE	65	75576928	8893947		1 iPerl
WTR	8175	CNLKOR CHRISTINA MILL LLC	700 CHRISTINA MILL DRIVE	75	75577044	9239231	1-inch	1 iPerl
WTR	8088	UNITED PARCEL SERVICE	325 RUTHAR DRIVE	5	75576943	8884654	1-inch	1 iPerl
WTR	15399	WHITE CLAY ASSOC LLC	700 CREEK VIEW ROAD	4	75577013	8885417	1-inch	1 iPerl
WTR	27459	CITY OF NEWARK	400 PHILLIPS AVENUE	6	75576897	8884728		1 iPerl
WTR	7705	WILLIAMSBURG VLG COUNCIL	169 KING WILLIAM STREET	65	75577068	8875596		1 iPerl
WTR	8031	COOLIDGE ADMIRALS LLC	12 FAIRWAY ROAD	5	75576981	9291295	1 1/4-inch	1 iPerl
WTR	7209	NEWARK PEDIATRICS ENTERPRISES	314 E MAIN STREET	4	75577014	8893548	1-inch	1 iPerl
WTR	8015	MELROSE PLACE APARTMENTS	200 MELROSE DRIVE	5	75576987	8893261		1 iPerl
WTR	8064	COOLIDGE ADMIRALS LLC	44 FAIRWAY ROAD	5	75577050	9291415	1-inch	1 iPerl
WTR	8049	COOLIDGE ADMIRALS LLC	30 FAIRWAY ROAD	5	75576951	9291482	1 1/4-inch	1 iPerl
WTR	7013	FUSCO ENTERPRISES LLC	100 COLLEGE SQUARE	4	75576996	8884295	1-inch	1 iPerl
WTR	27457	CITY OF NEWARK	220 S MAIN STREET	6	75576901	8884612		1 iPerl
WTR	8040	COOLIDGE ADMIRALS LLC	21 FAIRWAY ROAD	5	75577048	9292234	1-inch	1 iPerl
WTR	8077	SCOTTO PASTABILITIES	1130 CAPITOL TRAIL	5	75577025	9238588	1-inch	1 iPerl
WTR	12938	CHF-DEL LLC	0 SCHOLAR WAY	80	75577079	9240835		1 iPerl
WTR	15239	CNLKOR CHRISTINA MILL LLC	500 CHRISTINA MILL DRIVE	75	75577018	9239396	1-inch	1 iPerl
WTR	7188	CK-HP COLONIAL GARDEN LLC	334 E MAIN STREET	70	75576992	8893584	1-inch	1 iPerl
WTR	8071	COOLIDGE ADMIRALS LLC	51 FAIRWAY ROAD	5	75576903	8884564	1-inch	1 iPerl
WTR	7774	UDEL HOLDINGS LLC	650 LEHIGH ROAD	65	75576918	8884777		1 iPerl
WTR	7753	UDEL HOLDINGS LLC	151 THORN LANE	65	75576927	8895604		1 iPerl
WTR	8075	COOLIDGE ADMIRALS LLC	55 FAIRWAY ROAD	5	75577047	9291408	1-inch	1 iPerl
WTR	27127	MILLYARD PROPERTY ASSOC LLC	100 S MAIN STREET	5	75577082	9291320		1 iPerl
WTR	1841	ELKTON ROAD ASSOCIATES LLC	168 S MAIN STREET	80	75784201	8893976	1-inch	1 iPerl

DE City of Newark Year 1 - 1 1/2" Water Meter Testing Sample

Type	Account1	Name	Address	Cycle	Meter	Transmitter	City Size	Installed Size
WTR	8315	UNIV OF DE-PROCUREMENT SERV	240 ACADEMY STREET	80	76394438	8895118	1-1/2 Omni R2	1-1/2 Omni R2
WTR	7484	JRM ENTERPRISES LLC	58 E MAIN STREET	4	75572522	8875861	1 1/2-inch	1-1/2 Omni R2
WTR	7766	VICTORIA MEWS LP	13 O DANIEL AVENUE	75	77035875	8875987	1-1/2 Omni R2	1-1/2 Omni R2
WTR	7647	NOTTINGHAM SWIM CLUB/BLDG	200 RADCLIFFE DRIVE	5	77116438	8876776	1 1/2-inch	1-1/2 Omni R2
WTR	7598	THE VARSITY TOWNHOMES	120 WILBUR STREET	80	76394488	8904089	1 1/2-inch	1-1/2 Omni R2
WTR	7962	HASLETT PARK CONDOMINIUMS	11 CORNWALLIS SQUARE	5	76394484	8893243	1 1/2-inch	1-1/2 Omni R2
WTR	7940	ROHM & HAAS PO #4501780478/8	361 BELLEVUE ROAD	5	76394448	8895036	1 1/2-inch	1-1/2 Omni R2
WTR	7716	CHRISTINA SCHOOL DISTRICT	200 CASHO MILL ROAD	5	76394427	8895097	1 1/2-inch	1-1/2 Omni R2
WTR	7790	UDEL HOLDINGS LLC	600 LEHIGH ROAD	65	75572478	8884264	1 1/2-inch	1-1/2 Omni R2
WTR	8273	UNIV OF DE-PROCUREMENT SERV	273 S COLLEGE AVENUE	80	76394425	8895381	1 1/2-inch	1-1/2 Omni R2
WTR	7143	AE-NEWARK ASSOCIATES	9 WHARTON DRIVE	85	75572482	9240443	1 1/2-inch	1-1/2 Omni R2
WTR	8310	UNIV OF DE-PROCUREMENT SERV	400 ACADEMY STREET	80	76394437	8350153	1-1/2 Omni R2	1-1/2 Omni R2
WTR	8224	UNIV OF DE-PROCUREMENT SERV	12 BROWN DRIVE	80	77035877	8875915	1 1/2-inch	1-1/2 Omni R2
WTR	14931	CHF-DEL LLC	600 SCHOLAR WAY	80	75572488	9238762	1 1/2-inch	1-1/2 Omni R2
WTR	7739	ESSKAY ASSOCIATES INC	260 S MAIN STREET	70	76394473	9240481	1 1/2-inch	1-1/2 Omni R2
WTR	8027	COOLIDGE ADMIRALS LLC	8 FAIRWAY ROAD	5	75572487	9240207	1 1/2-inch	1-1/2 Omni R2
WTR	26609	VILLAGE OF FOUNTAINVIEW	3000 FOUNTAINVIEW CIRCLE	80	76394424	8884304	1 1/2-inch	1-1/2 Omni R2
WTR	7740	ESSKAY ASSOCIATES INC	260 S MAIN STREET	70	76394465	9259736	1 1/2-inch	1-1/2 Omni R2
WTR	7713	WILLIAMSBURG VLG COUNCIL	111 KING WILLIAM STREET	65	75572532	9239198	1 1/2-inch	1-1/2 Omni R2
WTR	26394	CHRISTIANA PARTNERS	3100 MILLSTONE DRIVE	75	76394475	9240417	1 1/2-inch	1-1/2 Omni R2
WTR	8078	150 RED MILL LLC	150 RED MILL ROAD	5	76394480	8893754	1 1/2-inch	1-1/2 Omni R2
WTR	7133	AE-NEWARK ASSOCIATES	2 WHARTON DRIVE	85	75572517	8875747	1 1/2-inch	1-1/2 Omni R2
WTR	26127	UNIV OF DE-PROCUREMENT SERV	110 CENTRAL MALL	80	76394420	8895357	1 1/2-inch	1-1/2 Omni R2
WTR	26392	CHRISTIANA PARTNERS	2100 MILLSTONE DRIVE	75	76394490	8894138	1 1/2-inch	1-1/2 Omni R2
WTR	7738	ESSKAY ASSOCIATES INC	260 S MAIN STREET	70	76394456	9259748	1 1/2-inch	1-1/2 Omni R2
WTR	285	UNIV OF DE-PROCUREMENT SERV	79 E DELAWARE AVENUE	10	77116441	8876768		1-1/2 Omni R2
WTR	7736	ESSKAY ASSOCIATES INC	260 S MAIN STREET	70	76394468	9259847	1 1/2-inch	1-1/2 Omni R2
WTR	9811	WHITE CLAY MILL ASSOC LLC	500 CREEK VIEW ROAD	4	75572525	8876141	2-inch	1-1/2 Omni R2
WTR	7708	WILLIAMSBURG VLG COUNCIL	206 KING WILLIAM STREET	65	75572483	9240304	1 1/2-inch	1-1/2 Omni R2
WTR	7775	UDEL HOLDINGS LLC	644 LEHIGH ROAD	65	76394455	8885274	1 1/2-inch	1-1/2 Omni R2
WTR	8092	CHRISTINA SCHOOL DISTRICT	1500 CAPITOL TRAIL	5	76394471	9259836	1 1/2-inch	1-1/2 Omni R2
WTR	7141	AE-NEWARK ASSOCIATES	11 WHARTON DRIVE	85	75572519	8875620	1 1/2-inch	1-1/2 Omni R2
WTR	11081	200 E VILLAGE ROAD LLC	200 E VILLAGE ROAD	4	75572516	8876195	1 1/2-inch	1-1/2 Omni R2

DE City of Newark Year 1 - 2" Water Meter Testing Sample

Type	Account1	Name	Address	Cycle	Meter	Transmitter	City Size	Installed Size
WTR	7235	PRIYA REALTY CORPORATION	268 E MAIN STREET	4	75572335	8876374	2-inch	2 Omni R2
WTR	27458	CITY OF NEWARK	303 NEW LONDON ROAD	6	76394504	9240290		2 Omni R2
WTR	27445	W L GORE	555 PAPER MILL ROAD -PIT	4	75572363	8904560		2 Omni T2
WTR	8306	UNIV OF DE-PROCUREMENT SERV	418 ACADEMY STREET	80	76749806	8894506	2-inch	2 Omni R2
WTR	8232	UNIV OF DE-PROCUREMENT SERV	26 N COLLEGE AVENUE	80	76394503	9240361	2 Omni R2	2 Omni R2
WTR	7648	OAKLANDS POOL ASSOCIATION	40 HILLSIDE ROAD	5	75572361	9371796	2 Omni T2	2 Omni T2
WTR	321	NEWARK METHODIST CHURCH	69 E MAIN STREET	4	75572355	8875649	2-inch	2 Omni C2
WTR	7277	AG/SPECTRUM NEWARK LLC	501 NEWARK SHOP CENTER	4	75572356	8875572	2-inch	2 Omni C2
WTR	12375	325 EAST MAIN LLC	325 E MAIN STREET	4	75572339	8875847	2-inch	2 Omni R2
WTR	7957	MCDONALD'S OF DELAWARE	815 S COLLEGE AVENUE	5	76394506	8895014		2 Omni R2
WTR	27054	WASHINGTON HOUSE	113 E MAIN STREET	4	75572342	9259856		2 Omni R2
WTR	8254	UNIV OF DE-PROCUREMENT SERV	321 HILLSIDE ROAD	80	76394497	8893501	2-inch	2 Omni R2
WTR	15901	CHRISTINA SCHOOL DISTRICT	0 E DELAWARE AVENUE -PIT	4	75572338	8904749	2-inch	2 Omni R2
WTR	8247	UNIV OF DE-PROCUREMENT SERV	1 PENCADER DRIVE -PIT	5	75572367	8904632	2-inch	2 Omni T2
WTR	25165		165 Academy Street	99	75572366	8894414		2 Omni T2
WTR	7921	HOWARD JOHNSON INN & SUITE	1119 S COLLEGE AVENUE	5	75572350	9240578	2-inch	2 Omni C2
WTR	7952	E I DUPONT DE NEMOURS	350 BELLEVUE ROAD	5	75572349	9239296	2-inch	2 Omni C2
WTR	7913	VILLA BELMONT CONDO ASSO	84 WELSH TRACT ROAD	85	75572344	9259309	2-inch	2 Omni R2
WTR	7912	VILLA BELMONT CONDO ASSO	76 WELSH TRACT ROAD	85	75572345	8350244		2 Omni R2
WTR	8111	RETIREMENT LIVING INC	255 POSSUM PARK ROAD	5	76394512	8894023	2-inch	2 Omni R2
WTR	8255	UNIV OF DE-PROCUREMENT SERV	104 CENTRAL MALL	80	76394494	8894787	2 Omni R2	2 Omni R2
WTR	11301	123 EAST MAIN LLC	123 E MAIN STREET	4	75572334	8876488	2-inch	2 Omni R2
WTR	9787	UNIV OF DE-PROCUREMENT SERV	625 S COLLEGE AVENUE -PIT	5	75572360	8904798	2-inch	2 Omni T2
WTR	7183	VERIZON COMMUNICATIONS	1 WASHINGTON STREET	4	75572336	8876487	2-inch	2 Omni R2
WTR	7924	PATEL INVESTMENTS INC	1017 S COLLEGE AVENUE -PIT	5	75572346	8903498	2-inch	2 Omni R2
WTR	7907	VILLA BELMONT CONDO ASSO	64 WELSH TRACT ROAD	85	75572357	8875851		2 Omni C2
WTR	7920	COMMONWEALTH TRUST COMPANY	1120 S COLLEGE AVENUE -PIT	5	75572358	8903507	2-inch	2 Omni C2
WTR	7009	CHRISTINA SCHOOL DISTRICT	0 WYOMING ROAD	4	75572337	8876500	2-inch	2 Omni R2
WTR	7639	NEWARK COUNTRY CLUB	300 W MAIN STREET -PIT	5	76394508	8894812	2-inch	2 Omni R2
WTR	9448	UNIV OF DE-PROCUREMENT SERV	549 S COLLEGE AVENUE	80	76394501	8894641	2-inch	2 Omni R2

Large Water Meter Testing Summary

The table below is a summary listing of the large water meters that were tested. The meters that were not tested will be tested in year 2. The large water meter test results are included in the appendix.

DE City of Newark Year 1 - Large Water Meter Test Completion

Account	Meter size	Meter type	Meter number	Customer	Address	Date Tested	Reason Not Tested
8246	6"	OMNI 6" T2	75686812	UD	0 Pencader Drive		Scheduling w/customer
7007	6"	OMNI 6" C2	75686816	Newark Housing Authority	302 Delaware Circle	9/28/2015	
7953	4"	OMNI 4" T2	75686817	Marjam	200 Bellevue Road	6/17/2015	
8265	4"	OMNI 4" T2	75686818	Pelican Key LLC	163 South Main Street		Bad Control Valves
9789	4"	OMNI 4" C2	75686819	UD	525 South College Avenue		Scheduling w/customer
8202	4"	OMNI 4" C2	75686820	UD	200 Academy Street		Scheduling w/customer
8290	4"	OMNI 4" C2	75686821	UD	531 South College Avenue		Scheduling w/customer
7072	3"	OMNI 3" T2	75686822	CSC	655 Paper Mill Road	9/28/2015	
15232	3"	OMNI 3" T2	75686823	Bank of America	1500 Thompson Station	6/17/2015	
27057	3"	OMNI 3" T2	75686824	Harmony Inc	300 Ruthar Drive	6/18/2015	
8100	3"	OMNI 3" T2	75686825	Bank of America	1501 Thompson Station	6/17/2015	
15065	3"	OMNI 3" T2	75686827	UD	103 Hillside Road		Scheduling w/customer
7081	3"	OMNI 3" C2	75686828	Floyd Hudson Center	501 Ogletown Road	6/18/2015	
8259	3"	OMNI 3" C2	75686829	UD	15 Orchard Road		Scheduling w/customer
31347	3"	OMNI 3" C2	75686830	UD	37 Lovett Avenue		Scheduling w/customer
7635	3"	OMNI 3" C2	75686831	Newark Manor Nursing Home	254 West Main Street	6/17/2015	
7197	3"	OMNI 3" C2	75686832	Colonial Gardens	334 East Main Street	6/17/2015	
7204	3"	OMNI 3" C2	75686834	Main Towers	330 East Main Street	6/18/2015	
32062	4"	OMNI 4" C2	75688725	Bloom Energy	200 Christina Parkway	6/17/2015	
32616	4"	OMNI 4" C2	76512392	Delle Donne STAR Campus	200 Christina Parkway	6/19/2015	
26170	3"	OMNI 3" T2	76749810	UD (Marriott)	400 David Hollowell Drive	6/18/2015	
8321	3"	OMNI 3" T2	76749812	UD	272 Haines Street		Scheduling w/customer
32555	3"	OMNI 3" C2	76846096	The Retreat Newark	501 Hamlet Way	8/17/2015	
32554	6"	OMNI 8" F2	77853768	The Retreat Newark	501 Hamlet Way	6/16/2015	
8280	6"	OMNI 6" T2	78060021	UD	621 South College	6/18/2015	
15231	3"	OMNI 3" C2	78307008	CSC	655 Paper Mill Road	9/28/2015	
8316	3"	OMNI 3" C2	78708171	UD	152 Courtney Street	8/18/2015	
8286	3"	OMNI 3" C2	78708172	UD	621 South College		Scheduling w/customer

4.0 AMR/AMI System Reliability Determination

AMR/AMI System Reliability Determination

Historical data indicates that 1 to 1.5% of devices may not read at any one point in time, but this failure to read is not automatically a defect in the AMR/AMI system. Since a total of 9,249 water meters were installed, $9,249 \times 1.5\% = 139$ and $9,249 \times 1\% = 92$. Honeywell sets the target at the midpoint of 139 and 92, which is 115 meters. If the system shows more than 114 estimated bills for two consecutive months, that is defined to be a system failure.

The table below lists the number of non-communicating water meters from the reports titled "Water Meter Non-Communication Detail Report" generated by the City. The number of water meters are well below the system failure threshold of 115 units above. A sample of these AMR/AMI System Reliability Reports is included in the appendix.

Report Date	Water Meters
11/11/2014	20
12/7/2014	51
1/5/2015	58
3/2/2015	48
4/6/2015	39
5/4/2015	39
6/1/2015	37
10/5/2015	71
Average	45

5.0 Appendix

Small Water Meter Test Results

DE City of Newark Year 1 - 5/8" to 3/4" Water Meter Test Results

DATE: 8/17/15 METER SIZE & MAKE: 5/8" x 1/2" Sensus iPerl

CUSTOMER NAME: Honeywell

SERIAL #	FLOW RATE ¼ GPM	FLOW RATE 2 GPM	FLOW RATE 15 GPM	DIAL IN	DIAL OUT
75684667	100.30%	100.20%	99.79%	95449.79	95569.79
75684384	100.40%	100.10%	100.40%	54691.38	54811.38
75575598	100.00%	100.00%	99.56%	151825.37	151945.37
76752068	99.90%	100.40%	99.07%	38514.84	38634.84
75574758	99.00%	100.50%	99.25%	80551.68	80671.68
75575419	100.40%	100.00%	98.63%	48465.23	48585.23
75685324	100.20%	100.00%	100.11%	88105.93	88225.93
75683946	100.30%	100.20%	99.81%	18741.11	18861.11
74139214	99.50%	100.70%	99.85%	233214.02	233334.02
75575020	100.90%	101.90%	100.99%	38107.04	38227.04
75575040	100.30%	101.50%	100.60%	48615.13	48735.13

DATE: 8/18/15 METER SIZE & MAKE: 5/8" X 1/2" SENSUS iPerl

CUSTOMER NAME: Honeywell

SERIAL #	FLOW RATE ¼ GPM	FLOW RATE 2 GPM	FLOW RATE 15 GPM	DIAL IN	DIAL OUT
75576292	100.00%	99.80%	99.86%	15064.29	155192.66
75574088	100.40%	99.80%	99.82%	101224.26	101354.31
75574038	100.00%	99.80%	99.30%	121434.01	121560.48
75575245	101.60%	101.10%	100.87	88234.62	88366.52
75684714	97.50%	101.80%	101.15%	184483.58	184612.93
75576810	101.90%	99.50%	99.31%	57141	57276.56
76397788	100.10%	99.30%	99.23%	356226.68	356355.29
76397472	100.20%	98.90%	98.92%	102350.34	102476.2
75684818	105.40%	100.70%	99.74%	120146.96	120279.18
75573880	100.20%	99.30%	99.35%	65397.74	65528.43
75684731	104.10%	99.50%	100.82%	79288.5	79419.21
76397363	100.00%	99.80%	99.34%	97844.57	97975.99
79398423	99.90%	100.00%	100.50%	47420.42	47540.97
79398108	98.60%	99.10%	98.74%	85191.91	85310.39
75575619	99.14%	100.40%	99.50%	63399.03	63518.56
75683899	98.80%	100.10%	99.67%	17336.74	17456.63
75575184	100.90%	100.90%	100.57%	99078.77	99194.53

DE City of Newark Year 1 - 1" Water Meter Test Results
DATE: 8/18/15**METER SIZE & MAKE:1" Sensus iPerl****CUSTOMER NAME: Honeywell**

SERIAL #	FLOW RATE ¾ GPM	FLOW RATE 4 GPM	FLOW RATE 40 GPM	DIAL IN	DIAL OUT
75576999	100.70%	100.80%	101.00%	27221901.13	2722022.93
75577054	100.20%	105.00%	99.90%	1047157.25	1047276.93
75577025	98.80%	100.00%	100.20%	1151987.35	1152108.85
75576987	100.40%	100.20%	100.30%	782245.96	782366.91
75576901	100.20%	106.90%	101.10%	984858.16	984980.55
75577018	99.90%	100.10%	100.10%	545553.24	545673.74
75576937	100.80%	100.30%	100.70%	946504.76	946626.25
75577048	100.30%	100.30%	100.40%	1119063.67	1119185.49
75576981	99.70%	99.60%	101.00%	1177552.06	1177672
75576915	98.70%	99.50%	98.90%	1139916.99	1140035.13
75577047	99.40%	100.10%	99.50%	1048343.43	1048461.95
75577050	100.00%	100.20%	99.70%	977293.62	977413.41
75576897	99.10%	100.00%	99.50%	140516.53	140636.44
75576913	100.00%	100.70%	100.10%	91374.67	91495.23
75577044	100.30%	100.40%	99.80%	867563.75	867684.32
75577056	99.70%	100.20%	99.60%	134401.55	134520.73

DATE: 8/20/15 METER SIZE & MAKE: 1" Sensus iPerl

CUSTOMER NAME: Honeywell

SERIAL #	FLOW RATE ¾ GPM	FLOW RATE 4 GPM	FLOW RATE 40 GPM	DIAL IN	DIAL OUT
75577028	98.20%	100.60%	100.00%	528644.04	528764.03
75576943	103.20%	98.90%	104.00%	535941.22	536067.39
75577073	99.80%	100.00%	100.30%	55518.48	55638.34
75576927	101.10%	101.10%	101.30%	548288.85	548408.34
75576918	100.10%	100.00%	101.20%	1323595.42	1323718.45
75576931	101.50%	101.00%	101.50%	1680703.83	1680822.79
75576928	100.00%	99.90%	100.50%	1046893.08	1047013.05
75576996	101.80%	101.80%	102.00%	1440829.01	1440951.05
75576936	100.70%	100.20%	100.80%	986193.88	986314.18
75576903	100.00%	99.50%	100.30%	1143831.63	1143952.83
75576951	100.00%	100.00%	101.00%	936238.73	936360.98
75576992	101.80%	100.40%	101.10%	1864443.97	1864565.59
75577079	100.90%	100.00%	100.00%	185506.09	185629.81
75577065	100.00%	98.90%	99.30%	351136.83	51257.01

DE City of Newark Year 1 - 1 1/2" Water Meter Test Results

DATE: 8/20/15 METER SIZE & MAKE: 1 1/2" Sensus Omni

CUSTOMER NAME: Honeywell

SERIAL #	FLOW RATE 1.5 GPM	FLOW RATE 8 GPM	FLOW RATE 50 GPM	DIAL IN	DIAL OUT
76394424	100.20%	101.50%	100.30%	1,727,784	1,738,088
76394465	99.80%	100.30%	100.10%	1,459,301	1,459,603
75572519	98.50%	102.40%	100.90%	19,733,854	1,973,688
76394480	101.40%	103.40%	100.40%	1,368,401	1,368,708
77116438	53.64%	112.16%	102.17%	00,383,006	00,383,274
76394456	101.90%	102.40%	101.30%	2,312,518	2,312,823
75572517	96.90%	100.40%	100.30%	2,069,503	2,069,800
76394490	99.26%	100.20%	100.20%	00,356,553	00,356,853
75572487	65.20%	113.00%	101.40%	1,103,198	1,103,476
75572522	48.30%	114.00%	101.10%	00,516,046	00,506,300

DATE: 8/20/15 METER SIZE & MAKE: 1 1/2" Sensus Omni

CUSTOMER NAME: Honeywell

SERIAL #	FLOW RATE 1.5 GPM	FLOW RATE 8 GPM	FLOW RATE 50 GPM	DIAL IN	DIAL OUT
76394475	99.90%	100.90%	99.80%	00,220,934	00,221,237
77430852	99.20%	101.20%	100.60%	00,055,611	00,055,914
76394455	100.80%	102.80%	101.40%	2,105,146	2,105,453
76394473	100.60%	102.80%	100.90%	1,921,637	1,921,943
76394468	80.50%	114.70%	101.10%	2,987,848	2,988,145

DATE: 8/20/15 METER SIZE & MAKE: 1 ½" Sensus Omni

CUSTOMER NAME: Honeywell

SERIAL #	FLOW RATE 1.5 GPM	FLOW RATE 8 GPM	FLOW RATE 50 GPM	DIAL IN	DIAL OUT
75572478	99.70%	102.80%	98.40%	1,241,817	1,242,124
76394471	0.00%	0.00%	0.00%	2,466,628	2,466,633
77116441	100.80%	105.20%	107.20%	3,187,868	3,188,188
76394484	99.90%	101.10%	100.10%	00,115,577	00,115,883
75572516	100.80%	101.20%	99.90%	8,929,576	8,929,882

DATE: 8/18/15 METER SIZE & MAKE: 1 ½" Sensus OMNI

CUSTOMER NAME: Honeywell

SERIAL #	FLOW RATE 1.5 GPM	FLOW RATE 8 GPM	FLOW RATE 50 GPM	DIAL IN	DIAL OUT
76394488	99.50%	102.29%	101.30%	00,843,243	00,843,548
76394427	101.90%	100.30%	100.50%	00,661,450	00,661,755
75572488	103.40%	102.70%	102.60%	2,235,912	2,236,223
75572525	101.90%	101.00%	101.40%	1,966,226	1,966,533
77035881	102.50%	102.00%	101.20%	00,992,132	00,992,440

RWRS-EAST, LLC								
METER PERFORMANCE REPORT								
SERIAL#: 760916918			SIZE: 1 1/2" / 2"		CUSTOMER: City of Newark			
DATE: 6/16/2015		TYPE: Sensus Omni			METER LOCATION: The Retreat Newark			
READING (BEFORE) HIGH: 00000154			READING (BACK IN SERV) HIGH: 00000376					
LOW:			LOW:					
METER REGISTRATION: GALLONS					TESTER RATE UNITS: GPM / CU FT			
					TESTER REGISTRATION: GALLONS			
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	CONVERTED Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH								
LOW	.5	10.0	0	10.0		10.0	97.8%	97.8%
TOTAL								
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	CONVERTED Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	8	101.0	0	101.0		100.0	99.6%	
LOW								
TOTAL						100.0		99.6%
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	CONVERTED Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	50	101.5	0	101.5		100.0	99.9%	
LOW								
TOTAL						100.0		101.3%

TESTING PERFORMED BY: TIM & JON
COMMENTS: Meter Tested within standards

DATE: 6/16/15

RWRS-EAST, LLC								
METER PERFORMANCE REPORT								
SERIAL#: 76824796			SIZE: 1 1/2" / 2"		CUSTOMER: City of Newark			
DATE: 6/16/2015		TYPE: Sensus Omni			METER LOCATION: The Retreat Newark			
READING (BEFORE) HIGH: 02381849			READING (BACK IN SERV) HIGH: 02382060					
LOW:			LOW:					
METER REGISTRATION: GALLONS			TESTER RATE UNITS: GPM / CU FT					
			TESTER REGISTRATION: GALLONS					
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	CONVERTED Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH								
LOW	.5	10.0	0	10.0		10.0	97.8%	97.8%
TOTAL								
RECALIBRATION								
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	CONVERTED Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	8	102.0	0	102.0		100.0	99.6%	
LOW								
TOTAL						100.0		101.5%
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	CONVERTED Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	50	102.0	0	102.0		100.0	99.9%	
LOW								
TOTAL						100.0		101.8%

TESTING PERFORMED BY: TIM & JON
COMMENTS: Meter Tested within standards

DATE: 6/16/15

DE City of Newark Year 1 - 2" Water Meter Test Results

DATE: 8/21/15 METER SIZE & MAKE: 2" Sensus Omni

CUSTOMER NAME: Honeywell

SERIAL #	FLOW RATE 2 GPM	FLOW RATE 15 GPM	FLOW RATE 100 GPM	DIAL IN	DIAL OUT
76394497	94.50%	102.70%	103.40%	8,972,692	8,972,995
75572345	101.20%	102.10%	101.10%	2,198,975	2,199,281
75572337	102.10%	102.70%	101.30%	00,540,502	00,540,810
75572344	98.70%	103.30%	101.40%	1,544,336	1,544,641
75572361	97.90%	103.40%	101.90%	00,690,574	00,690,878
75572356	101.30%	100.80%	100.50%	00,146,649	00,146,953
75572350	95.40%	100.20%	100.50%	9,474,991	9,475,289
76394504	102.20%	101.70%	101.80%	00,127,727	00,128,034
75572357	91.30%	101.20%	100.90%	1,437,515	1,437,810

Large Water Meter Test Results

COMMERCIAL METER PROFILE

Date: 9/28/15
 Utility: Newark Water Dept.
 Location #:
 Meter #: 75686816
 Service Name: Delaware Housing Authority
 Address: 302 Delaware Cir.
 Service Performed: Accuracy testing

Meter Size: 6"
 Type: Omni C2
 Mfg: Sensus
 Reg. USG
 Technicians: Tim
 Line Pressure: 65 lbs.

REGISTER READING - AWWA STANDARDS

	<u>BEFORE</u>	<u>AFTER</u>
Low Side:		
Total/High Side :	00184381	00185123
Fireline:		

TEST BEFORE REPAIR - AWWA STANDARDS

Test Flow :	1.5 gpm	50 gpm	200 gpm
Accuracy:	100.0%	99.8%	98.9%

ACCURACY AVERAGE: 99.5%

TEST AFTER REPAIR

Test Flow:	1.5 gpm	50 gpm	200 gpm
Accuracy:			

ACCURACY AVERAGE: %

Sniffing Required (X) NO () YES

Oxygen 20.9 Comb Gas 0.0 CO 0.0 H2S 0.0 CL2- Turbidity-

(X) Meter Tested within mfg. flow spec accuracies.

() Meter failed mfg. flow spec. accuracies, calibrated within mfg. flow spec. accuracies

() Meter failed mfg. flow spec accuracies, pulled and replaced: After repairs, meter tested within mfg. flow spec accuracies.

() Meter failed to comply with mfg. flow specs at cross-over accuracies. Suggest that a different type of meter be installed which would alleviate these inaccuracies.

OTHER COMMENTS:

METER PERFORMANCE REPORT								
SERIAL#: 75686817			SIZE: 4"		CUSTOMER: City of Newark, Del			
DATE: 6/17/2015		TYPE: Sensus Omni			METER LOCATION: Marjam			
READING (BEFORE) HIGH: 00013890				READING (BACK IN SERV) HIGH: 00013962				
LOW:				LOW:				
METER REGISTRATION: GALLONS					TESTER RATE UNITS: GPM / CU FT			
					TESTER REGISTRATION: GALLONS PSI: 80			
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH								
LOW	.75	9.6	0	9.6		10.0	100.5%	96.4%
TOTAL								
RECALIBRATION								
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	40	99.9	0	100.0		100.0	99.9%	
LOW								
TOTAL						100.0		99.8%
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	250	507	0	507		500.0	99.9%	
LOW								
TOTAL						500.0		101.2%

TESTING PERFORMED BY: TIM & JON
COMMENTS: Meter Tested within standards

DATE: 6/17/15

COMMERCIAL METER PROFILE

Date: 9/28/15
 Utility: Newark Water Dept.
 Location #:
 Meter #: 75686822
 Service Name: CSC
 Address: 655 Paper Mill Rd.
 Service Performed: Accuracy testing

Meter Size: 3"
 Type: Omni T2
 Mfg: Sensus
 Reg. USG
 Technicians: Tim
 Line Pressure: 65 lbs.

REGISTER READING - AWWA STANDARDS

	<u>BEFORE</u>	<u>AFTER</u>
Low Side:		
Total/High Side :	19284560	19285800
Fireline:		

TEST BEFORE REPAIR - AWWA STANDARDS

Test Flow :	1.5 gpm	50 gpm	200 gpm
Accuracy:	102.4%	98.7%	98.9%

ACCURACY AVERAGE: 100.0%

TEST AFTER REPAIR

Test Flow:	1.5 gpm	50 gpm	200 gpm
Accuracy:			

ACCURACY AVERAGE: %

Sniffing Required (X) NO () YES

Oxygen 20.9 Comb Gas 0.0 CO 0.0 H2S 0.0 CL2- Turbidity-

(X) Meter Tested within mfg. flow spec accuracies.

() Meter failed mfg. flow spec. accuracies, calibrated within mfg. flow spec. accuracies

() Meter failed mfg. flow spec accuracies, pulled and replaced: After repairs, meter tested within mfg. flow spec accuracies.

() Meter failed to comply with mfg. flow specs at cross-over accuracies. Suggest that a different type of meter be installed which would alleviate these inaccuracies.

OTHER COMMENTS:

METER PERFORMANCE REPORT								
SERIAL#: 75686823			SIZE: 3"		CUSTOMER: City of Newark, Del			
DATE: 6/17/2015		TYPE: Sensus Omni			METER LOCATION: Bank of America			
READING (BEFORE) HIGH: 01727873					READING (BACK IN SERV) HIGH: 01728573			
LOW:					LOW:			
METER REGISTRATION: GALLONS					TESTER RATE UNITS: GPM / CU FT			
					TESTER REGISTRATION: GALLONS PSI: 60			
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH								
LOW	.5	10.2	0	10.2		10.0	97.8%	99.7%
TOTAL								
RECALIBRATION								
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	20	99.5	0	99.5		100.0	101.1%	
LOW								
TOTAL						100.0		100.5%
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	100	500.3	0	500.3		500.0		
LOW								
TOTAL						500.0		98.9%

TESTING PERFORMED BY: TIM & JON
COMMENTS: Meter Tested within standards

DATE: 6/17/15

METER PERFORMANCE REPORT									
SERIAL#: 75686824			SIZE: 3"		CUSTOMER: City of Newark, Del				
DATE: 6/18/2015		TYPE: Sensus Omni			METER LOCATION: Harmony Inc				
READING (BEFORE) HIGH: 01452460 LOW:				READING (BACK IN SERV) HIGH: 01453160 LOW:					
METER REGISTRATION: GALLONS				TESTER RATE UNITS: GPM / CU FT TESTER REGISTRATION: GALLONS PSI: 70					
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME	TESTER %	METER ACCURACY	
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume to				
	HIGH								
	LOW	.5	8.47	0	8.47		10.0	97.8%	82.8%
	TOTAL								
RECALIBRATION									
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME	TESTER %	METER ACCURACY	
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume				
	HIGH	20	100.6	0	100.6		100.0	101.1%	
	LOW								
	TOTAL						100.0		101.7%
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME	TESTER %	METER ACCURACY	
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume to				
	HIGH	100	510.2	0	510.2		500.0	98.9%	
	LOW								
	TOTAL						500.0		100.9%

TESTING PERFORMED BY: TIM & JON
 COMMENTS: Meter failed accuracy test

DATE: 6/18/15

METER PERFORMANCE REPORT								
SERIAL#: 75686825			SIZE: 3"		CUSTOMER: City of Newark, Del			
DATE: 6/17/2015		TYPE: Sensus Omni			METER LOCATION: Bank of America			
READING (BEFORE) HIGH: 24148304 LOW:				READING (BACK IN SERV) HIGH: 24149004 LOW:				
METER REGISTRATION: GALLONS				TESTER RATE UNITS: GPM / CU FT TESTER REGISTRATION: GALLONS PSI: 60				
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume to			
				GAL / Cu Ft	GAL / Cu Ft			
HIGH								
LOW	.5	10.6	0	10.6		10.0	97.8%	98.3%
TOTAL								
RECALIBRATION								
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume			
				GAL / Cu Ft	GAL / Cu Ft			
HIGH	20	72.0	0	72.0		100.0	101.1%	
LOW								
TOTAL						100.0		72.7%
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume to			
				GAL / Cu Ft	GAL / Cu Ft			
HIGH	100	495	0	495		500.0	98.9%	
LOW								
TOTAL						500.0		97.9%

TESTING PERFORMED BY: TIM & JON

COMMENTS: Meter failed accuracy test, due to possible debris in turbine element

DATE: 6/17/15

METER PERFORMANCE REPORT								
SERIAL#: 75686828			SIZE: 3"		CUSTOMER: City of Newark, Del			
DATE: 6/18/2015		TYPE: Sensus Omni			METER LOCATION: Floyd Hudson Center			
READING (BEFORE) HIGH: LOW:				READING (BACK IN SERV) HIGH: LOW:				
METER REGISTRATION: GALLONS				TESTER RATE UNITS: GPM / CU FT TESTER REGISTRATION: GALLONS PSI: 60				
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume to			
				GAL / Cu Ft	GAL / Cu Ft			
HIGH								
LOW	.5	10.23	0	10.23		10.0	97.8%	100.0%
TOTAL								
RECALIBRATION								
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume			
				GAL / Cu Ft	GAL / Cu Ft			
HIGH	20	99.8%	0	99.8		100.0	101.1%	
LOW								
TOTAL						100.0		100.8%
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume to			
				GAL / Cu Ft	GAL / Cu Ft			
HIGH	150	509.9	0	509.		500.5	98.9%	
LOW								
TOTAL						500.5		100.7%

TESTING PERFORMED BY: TIM & JON
 COMMENTS: Meter Tested within standards

DATE: 6/18/15

METER PERFORMANCE REPORT								
SERIAL#: 75686831			SIZE: 3"		CUSTOMER: City of Newark, Del			
DATE: 6/17/2015		TYPE: Sensus Omni			METER LOCATION: Newark Manor Nursing Home			
READING (BEFORE) HIGH: 03405283				READING (BACK IN SERV) HIGH: 03405939				
LOW:				LOW:				
METER REGISTRATION: GALLONS				TESTER RATE UNITS: GPM / CU FT				
				TESTER REGISTRATION: GALLONS PSI: 35				
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH								
LOW	.5	10.1	0	10.1		10.0	97.8%	98.7%
TOTAL								
RECALIBRATION								
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	20	100.5	0	100.5		100.0	101.1%	
LOW								
TOTAL						100.0		101.6%
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	100	504	0	504		500.0	98.9%	
LOW								
TOTAL						500.0		99.6%

TESTING PERFORMED BY: TIM & JON
COMMENTS: Meter Tested within standards

DATE: 6/17/15

METER PERFORMANCE REPORT								
SERIAL#: 75686832			SIZE: 3"		CUSTOMER: City of Newark, Del			
DATE: 6/17/2015		TYPE: Sensus Omni			METER LOCATION: Colonial Garden			
READING (BEFORE) HIGH: 04554785				READING (BACK IN SERV) HIGH: 04555408				
LOW:				LOW:				
METER REGISTRATION: GALLONS				TESTER RATE UNITS: GPM / CU FT				
				TESTER REGISTRATION: GALLONS PSI: 60				
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH								
LOW	.5	10.2	0	10.2		10.0	97.8%	99.7%
TOTAL								
RECALIBRATION								
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	20	102.3%	0	102.3		100.0	101.1%	
LOW								
TOTAL						100.0		103.4%
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	100	513.0	0	513.0		500.0		
LOW								
TOTAL						500.0		101.4%

TESTING PERFORMED BY: TIM & JON
COMMENTS: Meter Tested within standards

DATE: 6/17/15

METER PERFORMANCE REPORT								
SERIAL#: 75686834			SIZE: 3"		CUSTOMER: City of Newark, Del			
DATE: 6/18/2015		TYPE: Sensus Omni			METER LOCATION: Main Tower			
READING (BEFORE) HIGH: 09269303				READING (BACK IN SERV) HIGH: 0927004				
LOW:				LOW:				
METER REGISTRATION: GALLONS					TESTER RATE UNITS: GPM / CU FT			
					TESTER REGISTRATION: GALLONS			
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH								
LOW	.5	10.01	0	10.01		10.0	97.8%	97.8%
TOTAL								
RECALIBRATION								
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	20	101.6	0	101.6		100.0	101.1%	
LOW								
TOTAL						100.0		102.7%
METER UNDER TEST								
METER SIDE	FLOW RATE (GPM)	Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft	TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
HIGH	100	511	0	511		500.0	98.9%	
LOW								
TOTAL						500.0		101.0%

TESTING PERFORMED BY: TIM & JON
COMMENTS: Meter Tested within standards

DATE: 6/18/15

METER PERFORMANCE REPORT									
SERIAL#: 75688725			SIZE: 4”		CUSTOMER: City of Newark, Del				
DATE: 6/17/2015		TYPE: Sensus Omni			METER LOCATION: Bloom Energy				
READING (BEFORE) HIGH: 00058169 LOW:				READING (BACK IN SERV) HIGH: 00058869 LOW:					
METER REGISTRATION: GALLONS				TESTER RATE UNITS: GPM / CU FT TESTER REGISTRATION: GALLONS PSI: 60					
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME	TESTER %	METER ACCURACY	
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume to				
			GAL / Cu Ft	GAL / Cu Ft	GAL / Cu Ft	from TAG			
	HIGH								
	LOW	.5	10.1	0	10.1	10.0	97.8%		98.7%
TOTAL									
RECALIBRATION									
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME	TESTER %	METER ACCURACY	
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume				
			GAL / Cu Ft	GAL / Cu Ft	GAL / Cu Ft	from TAG			
	HIGH	20	99.8	0	99.8	100.0	101.1%		
	LOW								
TOTAL					100.0		100.8%		
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME	TESTER %	METER ACCURACY	
		Stop Reading	Start Reading	Meter Volume	CONVERTED Volume to				
			GAL / Cu Ft	GAL / Cu Ft	GAL / Cu Ft	from TAG			
	HIGH	100	504.0	0	504.0	500.0	98.9%		
	LOW								
TOTAL					500.0		99.6%		

TESTING PERFORMED BY: TIM & JON
 COMMENTS: Meter Tested within standards

DATE: 6/17/15

METER PERFORMANCE REPORT									
SERIAL#: 76512392			SIZE: 4"		CUSTOMER: City of Newark, Del				
DATE: 6/19/2015		TYPE: Sensus Omni			METER LOCATION: Delle Donne STAR Campus				
READING (BEFORE) HIGH: 00029505			READING (BACK IN SERV) HIGH: 00029577						
LOW:			LOW:						
METER REGISTRATION: GALLONS			TESTER RATE UNITS: GPM / CU FT						
			TESTER REGISTRATION: GALLONS						
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME	TESTER %	METER ACCURACY	
		Stop Reading	Start Reading	Meter Volume	CONVERTED				
				GAL / Cu Ft	Volume to				
					GAL / Cu Ft				GAL / Cu Ft
HIGH									
LOW	.75	10.05	0	5.0	10.05	10.0	97.8%	98.2%	
TOTAL									
RECALIBRATION									
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME	TESTER %	METER ACCURACY	
		Stop Reading	Start Reading	Meter Volume	CONVERTED				
				GAL / Cu Ft	Volume to				
					GAL / Cu Ft				GAL / Cu Ft
HIGH	40	98.7	0	98.7		100.0	99.9%		
LOW									
TOTAL						100.0		98.6%	
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME	TESTER %	METER ACCURACY	
		Stop Reading	Start Reading	Meter Volume	CONVERTED				
				GAL / Cu Ft	Volume to				
					GAL / Cu Ft				GAL / Cu Ft
HIGH	250	512	0	512		500.0	99.9%		
LOW									
TOTAL						500.0		102.2%	

TESTING PERFORMED BY: TIM & JON
 COMMENTS: Meter Tested within standards

DATE: 6/19/15

METER PERFORMANCE REPORT					
SERIAL#: 76749810		SIZE: 3"		CUSTOMER: City of Newark, Del	
DATE: 6/18/2015		TYPE: Sensus Omni		METER LOCATION: Marriott Courtyard	
READING (BEFORE) HIGH: 05438388			READING (BACK IN SERV) HIGH: 05439160		
LOW:			LOW:		
METER REGISTRATION: GALLONS			TESTER RATE UNITS: GPM / CU FT		
			TESTER REGISTRATION: GALLONS PSI: 60		

METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft			
HIGH								
LOW	.5	10.05	0	10.05		10.0	97.8%	98.2%
TOTAL								

RECALIBRATION

METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft			
HIGH	20	100.6	0	100.6		100.0	101.1%	
LOW								101.7%
TOTAL						100.0		

METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft			
HIGH	100	510	0	510		500.0	98.9%	
LOW								
TOTAL						500.0		100.8%

TESTING PERFORMED BY: TIM & JON
 COMMENTS: Meter Tested within standards

DATE: 6/18/15

COMMERCIAL METER PROFILE

Date: 8/17/15
 Utility: Newark Water Dept.
 Location #:
 Meter #: 76846096
 Service Name: The Retreat
 Address: Hamlet Way
 Service Performed: Accuracy testing

Meter Size: 3"
 Type: Omni
 Mfg: Sensus
 Reg. USG
 Technicians: Tim
 Line Pressure: 70 lbs.

REGISTER READING - AWWA STANDARDS

	<u>BEFORE</u>	<u>AFTER</u>
Low Side:		
Total/High Side :	04276003	04277212
Fireline:		

TEST BEFORE REPAIR - AWWA STANDARDS

Test Flow :	.5 gpm	15 gpm	250 gpm
Accuracy:	100.0%	100.8%	101.2%

ACCURACY AVERAGE: 100.6%

TEST AFTER REPAIR

Test Flow:	.5 gpm	15 gpm	250 gpm
Accuracy:			

ACCURACY AVERAGE: %

Sniffing Required (X) NO () YES

Oxygen 20.9 Comb Gas 0.0 CO 0.0 H2S 0.0 CL2- Turbidity-

(X) Meter Tested within mfg. flow spec accuracies.

() Meter failed mfg. flow spec. accuracies, calibrated within mfg. flow spec. accuracies

() Meter failed mfg. flow spec accuracies, pulled and replaced: After repairs, meter tested within mfg. flow spec accuracies.

() Meter failed to comply with mfg. flow specs at cross-over accuracies. Suggest that a different type of meter be installed which would alleviate these inaccuracies.

OTHER COMMENTS:

METER PERFORMANCE REPORT			
SERIAL#: 77853768		SIZE: 8"	CUSTOMER: City of Newark
DATE: 6/16/2015	TYPE: Sensus Omni – F/S		METER LOCATION: The Retreat Newark
READING (BEFORE) HIGH: 99999972		READING (BACK IN SERV) HIGH: 00000034	
LOW:		LOW:	
METER REGISTRATION: GALLONS		TESTER RATE UNITS: GPM / CU FT TESTER REGISTRATION: GALLONS	

METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft			
HIGH								
LOW	2.5	99.0	0	99.0		100.0	100.8%	99.7%
TOTAL								

RECALIBRATION

METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft			
HIGH	80	101.2	0	1201.2		100.0	100.3%	
LOW								
TOTAL						100.0		101.5%

METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY
		Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	<u>CONVERTED</u> Volume to GAL / Cu Ft			
HIGH	200	509	0	509		500.0	99.9%	
LOW								
TOTAL						500.0		101.6%

TESTING PERFORMED BY: TIM & JON
 COMMENTS: Meter Tested within standards

DATE: 6/16/15

METER PERFORMANCE REPORT												
SERIAL#: 78060021			SIZE: 6”		CUSTOMER: City of Newark							
DATE: 6/18/2015		TYPE: Sensus Omni – F/S			METER LOCATION: UD							
READING (BEFORE) HIGH: 003494 00 LOW:				READING (BACK IN SERV) HIGH: 003495 00 LOW:								
METER REGISTRATION: GALLONS				TESTER RATE UNITS: GPM / CU FT TESTER REGISTRATION: GALLONS								
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY				
		Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	CONVERTED Volume to GAL / Cu Ft							
		HIGH										
		LOW	1.5	102.0	0				102.0	100.0	100.5%	102.5%
		TOTAL										
RECALIBRATION												
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY				
		Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	CONVERTED Volume to GAL / Cu Ft							
		HIGH	60	101.0	0				101.0	100.0	100.0%	
		LOW										
		TOTAL								100.0		101.0%
METER SIDE	FLOW RATE (GPM)	METER UNDER TEST				TESTER VOLUME GAL / Cu Ft	TESTER % from TAG	METER ACCURACY				
		Stop Reading	Start Reading	Meter Volume GAL / Cu Ft	CONVERTED Volume to GAL / Cu Ft							
		HIGH	300	1018.9	0				1018.9	1000.0	99.9%	
		LOW										
		TOTAL								1000.0		101.7%

TESTING PERFORMED BY: TIM & JON
 COMMENTS: Meter Tested within standards

DATE: 6/18/15

COMMERCIAL METER PROFILE

Date: 9/28/15
 Utility: Newark Water Dept.
 Location #:
 Meter #: 78307008
 Service Name: CSC
 Address: 655 Paper Mill Rd.
 Service Performed: Accuracy testing

Meter Size: 3"
 Type: Omni C2
 Mfg: Sensus
 Reg. USG
 Technicians: Tim
 Line Pressure: 65 lbs.

REGISTER READING - AWWA STANDARDS

	<u>BEFORE</u>	<u>AFTER</u>
Low Side:		
Total /High Side :	07946663	079469800
Fireline:		

TEST BEFORE REPAIR - AWWA STANDARDS

Test Flow :	1.5 gpm	50 gpm	200 gpm
Accuracy:	98.4%	101.2%	99.4%

ACCURACY AVERAGE: 99.6%

TEST AFTER REPAIR

Test Flow:	1.5 gpm	50 gpm	200 gpm
Accuracy:			

ACCURACY AVERAGE: %

Sniffing Required (X) NO () YES

Oxygen **20.9** Comb Gas **0.0** CO **0.0** H2S **0.0** CL2- Turbidity-

(X) Meter Tested within mfg. flow spec accuracies.

() Meter failed mfg. flow spec. accuracies, calibrated within mfg. flow spec. accuracies

() Meter failed mfg. flow spec accuracies, pulled and replaced: After repairs, meter tested within mfg. flow spec accuracies.

() Meter failed to comply with mfg. flow specs at cross-over accuracies. Suggest that a different type of meter be installed which would alleviate these inaccuracies.

OTHER COMMENTS:

COMMERCIAL METER PROFILE

Date: 8/18/15
 Utility: Newark Water Dept.
 Location #:
 Meter #: 78708171
 Service Name: UD Harrington Dorm
 Address: 152 Courtney
 Service Performed: Accuracy testing

Meter Size: 3"
 Type: Omni
 Mfg: Sensus
 Reg. USG
 Technicians: Tim
 Line Pressure: 70 lbs.

REGISTER READING - AWWA STANDARDS

	<u>BEFORE</u>	<u>AFTER</u>
Low Side:		
Total/High Side :	00000133	00001264
Fireline:		

TEST BEFORE REPAIR - AWWA STANDARDS

Test Flow :	.5 gpm	15 gpm	250 gpm
Accuracy:	98.8%	101.2%	101.5%

ACCURACY AVERAGE: 100.5%

TEST AFTER REPAIR

Test Flow:	.5 gpm	15 gpm	250 gpm
Accuracy:			

ACCURACY AVERAGE: %

Sniffing Required (X) NO () YES

Oxygen 20.9 Comb Gas 0.0 CO 0.0 H2S 0.0 CL2- Turbidity-

(X) Meter Tested within mfg. flow spec accuracies.

() Meter failed mfg. flow spec. accuracies, calibrated within mfg. flow spec. accuracies

() Meter failed mfg. flow spec accuracies, pulled and replaced: After repairs, meter tested within mfg. flow spec accuracies.

() Meter failed to comply with mfg. flow specs at cross-over accuracies. Suggest that a different type of meter be installed which would alleviate these inaccuracies.

OTHER COMMENTS:

AMR/AMI System Reliability Reports

Meter Non-Communication Listing

Generated by MeterSense on 2016/11/05 at 12:09:06 EST

Meter ID	Meter Name	Collector	Meter Type	C/S Status	First Data Timestamp	Last Data Timestamp	Days Since Last Data Received
0017123079	5 FAWN DRIVE S (0017123079 - 2103 - WILBERT JAMES JR.)	OK14	2S RO REX	ON	2014/11/27 00:00:00 EST	2014/12/15 00:00:00 EST	21
0017317195	410 HAMILTON WAY (0017317195 - 32364 - THE RETREAT NEWARK)	OK7	2S RO REX	OFF	2014/08/21 00:00:00 EDT	2014/10/07 00:00:00 EDT	90
0017205490	TRINITY CHAPEL STREET S (0017205490 - 27475 - CITY OF NEWARK)	OK1	12S TL A3	ON	2014/10/20 00:00:00 EST	2014/10/02 00:00:00 EDT	98
0017110585	374 MAIN STREET E (0017110585 - 25143 - MCDONALDS OF DELAWARE)	OK10	6S TL A3	ON	2014/01/17 00:00:00 EST	2014/10/07 00:00:00 EDT	90
0017000970	PARK 42 VETERANS LANE (0017000970 - 7683 - AMERICAN LITTLE LEAGUE)	OK18	3S TL A3	ON	2014/01/16 00:00:00 EST	2014/09/24 00:00:00 EDT	100
0017051824	2 FLR 62 MAIN STREET E (0017051824 - 7459 - WILMINGTON MARINO)	OK12	12S RO REX	ON	2014/01/16 00:00:00 EST	2014/10/20 00:00:00 EDT	8
0017110603	771 MAIN STREET E (0017110603 - 7341 - EL DIABLO BURRITOS)	OK17	12S TL A3	ON	2014/01/11 00:00:00 EST	2014/08/16 00:00:00 EDT	140
0017070730	403 HILSON DRIVE (0017070730 - 11677 - MANK (B))	OK17	PERL 5/8	ON	2014/01/09 00:00:00 EST	2014/08/07 00:00:00 EDT	101
0017070207	1085 CHAPEL STREET S (0017070207 - 3085 - BRIAN SCOTT)	OK8	PERL 3/4	ON	2014/01/09 00:00:00 EST	2014/09/25 00:00:00 EDT	102
0017072338	IRRO DELAWARE AVENUE E (0017072338 - 16501 - CHRISTINA SCHOL DISTRICT)	OK1	QMNI 2 R2	ON	2013/11/23 00:00:00 EST	2014/10/21 00:00:00 EDT	73
0010603832	2 FLR 133 MAIN STREET E (0010603832 - 78 - VACANT)	OK12	12S REX	OFF	2013/10/21 00:00:00 EDT	2014/10/01 00:00:00 EDT	96
0010802170	109 BARNSDALE ROAD (0010802170 - 7725 - ELK RIVER LLC)	OK18	1S TL A3	ON	2013/10/28 00:00:00 EDT	2014/09/17 00:00:00 EDT	110

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Meter ID	Meter Name	Collector	Meter Type	C/S Status	First Data Timestamp	Last Data Timestamp	Days Since Last Data Received
0015270300	507 NEWARK SHOP CENTER (0015270300 - 7270 - NEWARK SHOP CTR OWNER LLC)	OK11	PERL 1	ON	2013/10/16 00:00:00 EDT	2014/10/21 00:00:00 EDT	76
0015307450	223 CLEVELAND AVENUE E (0015307450 - 7120 - NEWARK TOWNS)	OK9	PERL 5/8	ON	2013/10/16 00:00:00 EDT	2014/10/21 00:00:00 EDT	78
0015110598	1108 MAIN STREET E (0015110598 - 15406 - NOVYAN GERSHMAN)	OK11	12S TL A3	ON	2013/10/13 00:00:00 EDT	2014/09/14 00:00:00 EDT	144
0015080351	618 NEWARK SHOP CENTER (0015080351 - 16144 - KASRA CIVILIAN NEWARK LLC)	OK11	PERL 5/8	ON	2013/10/13 00:00:00 EDT	2014/09/08 00:00:00 EDT	121
0015081300	111 MAIN STREET S (0015081300 - 3295 - DENIS ATADAN)	OK13	PERL 5/8	ON	2013/08/25 00:00:00 EDT	2014/08/29 00:00:00 EDT	98
0015110583	315 NEWARK SHOP CENTER (0015110583 - 7288 - NEWARK SHOP CTR OWNER LLC)	OK11	12S TL A3	ON	2013/08/25 00:00:00 EDT	2014/10/14 00:00:00 EST	50
0015176342	601 NEWARK SHOP CENTER (0015176342 - 20023 - BANBRIDGE CC DE APTS LLC)	OK11	9S TL A3	ON	2013/08/24 00:00:00 EDT	2014/10/02 00:00:00 EDT	90
0015175125	309 NEWARK SHOP CENTER (0015175125 - 6806 - NEWARK SHOP CTR OWNER LLC)	OK11	12S TL A3	ON	2013/08/24 00:00:00 EDT	2014/10/14 00:00:00 EST	52
0015087301	523 NEWARK SHOP CENTER (0015087301 - 7200 - NEWARK SHOP CTR OWNER LLC)	OK9	PERL 5/8	ON	2013/08/21 00:00:00 EDT	2014/09/10 00:00:00 EDT	117
0010672830	A-2-605 CHAPEL STREET S (0010672830 - 1501 - EMERSON MARINE PERFORMANCE)	OK1	2S REX	ON	2013/06/25 00:00:00 EDT	2014/10/23 00:00:00 EST	13
0015078882	A-581 PAPER MILL ROAD (0015078882 - 3058 - W L SCOR)	OK3	PERL 3/4	ON	2013/05/15 00:00:00 EDT	2014/07/17 00:00:00 EDT	172
0010614061	255 CLEVELAND AVENUE E (0010614061 - 26015 - ATC TOWER SERVICES)	OK13	2S REX	ON	2013/05/16 00:00:00 EDT	2014/10/08 00:00:00 EST	31

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Meter ID	Meter Name	Collector	Meter Type	C/S Status	First Data Timestamp	Last Data Timestamp	Days Since Last Data Received
0015438127	131 DELAWARE AVENUE E (0015438127 - 11851 - MICHAEL GOODMAN)	OK12	2S REX	ON	2013/05/03 00:00:00 EDT	2014/09/24 00:00:00 EDT	100
0015080504	57 CHAMBERS STREET (0015080504 - 26346 - KEVIN HEITZINGER)	OK1	PERL 5/8	OFF	2013/05/03 00:00:00 EDT	2014/09/23 00:00:00 EDT	98
0010675060	4016 NORTH STREET (0010675060 - 664 - M L BUREAU (BUREAU))	OK11	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/01 00:00:00 EDT	96
0015436963	1422 CHERRY BLA MILL DR VL (0015436963 - 14789 - ROSEMARY SCHULTE)	OK2	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/29 00:00:00 EDT	88
0010613344	17 PINKA ROAD (0010613344 - 3558 - UNIVERSITY OF DELAWARE)	OK1	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/08 00:00:00 EST	61
0010674496	1600 MAINWAY (0010674496 - 17156 - DANIEL DHEINSTEIN)	OK4	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/14 00:00:00 EST	52
0015080320	101 DELREM DRIVE (0015080320 - 4777 - GEORGE E GRAHAM)	OK3	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/23 00:00:00 EST	44
0015430751	1005 WHARTON DRIVE (0015430751 - 3350 - DANIEL FITZMAURICE)	OK11	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/20 00:00:00 EST	35
0015438144	217 HAINES STREET (0015438144 - 12732 - LANCEY ROGUE)	OK1	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/20 00:00:00 EST	35
0010618178	15 LINCOLN DRIVE (0010618178 - 2777 - SCOTT BOWMAN)	OK9	2S RO REX	ON	2013/05/03 00:00:00 EDT	2014/10/21 00:00:00 EST	22
0015430386	3033 SCHOLAR WAY (0015430386 - 12912 - CHEF-DEL LLC)	OK13	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/21 00:00:00 EST	21
0010673025	458-120 WILBUR STREET (0010673025 - 13790 - THE VARSITY TOWN-HOMES)	OK11	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/21 00:00:00 EST	16
0010674988	1415 CHAMBERS AVENUE (0010674988 - 2897 - DONALD J. WILSON & JR.)	OK15	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/23 00:00:00 EST	13
0015431076	35 CHICHESTER STREET (0015431076 - 46 - JESSAMYN NLUOM)	OK11	2S REX	ON	2013/05/03 00:00:00 EDT	2014/10/23 00:00:00 EST	13

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Meter ID	Meter Name	Collector	Meter Type	C/S Status	First Data Timestamp	Last Data Timestamp	Days Since Last Data Received
001567530	94 DALLAS AVENUE (0016673530 - 5002 - GIBBERLY K JUNE)	GH2	2S REX	ON	2013/05/06 00:00:00 EDT	2014/12/23 00:00:00 EST	13
0015430560	314 INDEPENDENCE CIRCLE (0015430560 - 27353 - BOB-BE YOUNG)	GH10	2S REX	ON	2013/05/06 00:00:00 EDT	2014/12/23 00:00:00 EST	13
0015435790	575 QUAL LAKE (0015435790 - 12823 - MARGUARET WONG)	GH4	2S REX	ON	2013/05/06 00:00:00 EDT	2014/12/23 00:00:00 EST	13
0015673591	208 MURRAY ROAD (0015673591 - 8142 - DANIEL MYKLENKO)	GH9	2S REX	ON	2013/05/06 00:00:00 EDT	2014/12/24 00:00:00 EST	12
0015674301	8 KOPPEL WILSON DRIVE (0015674301 - 1081 - UNIV OF DE PRODUCEMENT SERV)	GH17	2S REX	ON	2013/05/06 00:00:00 EDT	2014/12/29 00:00:00 EST	7
0015674301	3718 WILSON DRIVE (0015674301 - 1617 - UNIV OF DE PRODUCEMENT SERV)	GH17	2S REX	ON	2013/05/06 00:00:00 EDT	2014/12/29 00:00:00 EST	7

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Meter ID	Meter Name	Collector	Meter Type	C/S Status	First Data Timestamp	Last Data Timestamp	Days Since Last Data Received
0015676750	3000-30 MAIN STREET E (0015676750 - 313 - ALEXANDER WILLEN)	GH12	12S REX	ON	2013/05/16 00:00:00 EDT	2014/09/08 00:00:00 EDT	121
0015674050	2-4-103 MAIN STREET S (0015674050 - 1830 - MONIQUE ROBINSON)	GH18	2S REX	ON	2013/05/16 00:00:00 EDT	2014/09/01 00:00:00 EDT	96
0015672522	55 MAIN STREET E (0015672522 - 7454 - 681 MAIN LLC)	GH12	OMNI 1 1/2	ON	2013/05/16 00:00:00 EDT	2014/07/27 00:00:00 EDT	182
0015673103	615 BROOK DRIVE (0015673103 - 11163 - EARL H MCQUEEN)	GH5	2S REX	ON	2013/05/16 00:00:00 EDT	2014/08/21 00:00:00 EDT	137
0015677091	7301 GARDEN ROAD (0015677091 - 8036 - HENRI CHOCAS LTD OF NEWSP)	GH9	PERL 1	ON	2013/05/16 00:00:00 EDT	2014/07/11 00:00:00 EST	86
0015674730	271 WALKER WAY (0015674730 - 17381 - CONSTANCE C DAVIES)	GH5	PERL 5/8	ON	2013/05/16 00:00:00 EDT	2014/07/16 00:00:00 EST	86
0015437374	12 FAIRFIELD DRIVE (0015437374 - 4850 - RICHARD PELLETIER)	GH6	2S REX	ON	2013/05/16 00:00:00 EDT	2014/07/17 00:00:00 EDT	172
0015674280	64201 BEVERLY ROAD (0015674280 - 1341 - DANIEL BLUNCE)	GH18	2S REX	ON	2013/05/16 00:00:00 EDT	2014/07/19 00:00:00 EDT	175
0015437406	308 VASSAR DRIVE (0015437406 - 1102 - THOMAS G MAURA)	GH1	2S REX	ON	2013/05/16 00:00:00 EDT	2014/08/14 00:00:00 EDT	144
0015436303	5 BASSETT PLACE (0015436303 - 3772 - MARY G CONNOLLY)	GH10	2S REX	ON	2013/05/16 00:00:00 EDT	2014/09/01 00:00:00 EDT	123
0015437042	3 HEATHER COURT (0015437042 - 14440 - DEBRA A LORENZONI)	GH6	2S REX	ON	2013/05/16 00:00:00 EDT	2014/09/04 00:00:00 EDT	123
0015666661	6 VACUUFF COURT (0015666661 - 15730 - TAYEKA HACKETT)	GH14	PERL 5/8	ON	2013/05/16 00:00:00 EDT	2014/09/18 00:00:00 EDT	111
0015437382	335 DAVEN LAKE (0015437382 - 4885 - ANNE L YOUNG)	GH6	2S REX	ON	2013/05/16 00:00:00 EDT	2014/09/19 00:00:00 EDT	108
0015436776	1014 SCHOENHART WAY (0015436776 - 1290 - CHF-DELL LLC)	GH1	2S REX	ON	2013/05/16 00:00:00 EDT	2014/09/24 00:00:00 EDT	93

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AGENDA
DELAWARE MUNICIPAL ELECTRIC CORPORATION
REGULAR MEETING
Tuesday, November 17, 2015
DEMEC Offices
22 Artisan Drive, Smyrna, DE
9:00 am

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF MINUTES
 - a. Minutes of the Meeting of September 23, 2015
 - b. Minutes of the Executive Session of September 23, 2015
4. TREASURER'S REPORT
 - a. Monthly Financial Reports – September & October 2015
 - b. Moody's Credit Rating Affirmation
5. APPOINTMENTS/ELECTIONS
 - a. None
6. PRESENTATIONS
 - a. C&I Energy Efficiency Program and Retail Lighting Program
7. RESOLUTIONS
 - a. 2015-8 Authorizing Forward Power Purchase
 - b. 2015-9 Authorizing the Refunding of 2008b Bonds
8. COMMITTEE REPORTS
 - a. Executive Committee
 - b. Audit Committee
 - i. Draft Minutes of the Meeting of November 6, 2015
 - ii. Recommendation on Audit Firm Contract Extension
 - iii. Auditors Communication to the Those Charged with Governance
9. PRESIDENT'S REPORTS TO BOARD
 - a. Generation Projects Status Report & Beasley Winterization Update
 - b. Construction Projects Status Report
 - c. Budget 2016
 - i. Beasley Budget
 - ii. Operations Budget
 - iii. Capital Budget
 - d. Update 2008b Bond Refinancing
 - e. Legislative Status Report

- f. Training/Education
 - i. Christmas Lighting Display Tables
 - ii. Rate Making Considerations for Distributed Gen
 - iii. Board Continuing Education Webinars as Requested
- g. DEMEC Green Energy Programs Status Report
 - i. LED Lighting Program
 - ii. Demand Response Update
 - iii. Energy Efficiency Advisory Council Update
 - iv. Energy Efficiency Program Proposal
 - v. Renewable Energy Tracking
 - vi. Smyrna Solar Project Update
 - vii. Customer Sited Generation Policies

10. BUSINESS FROM THE FLOOR

11. EXECUTIVE SESSION

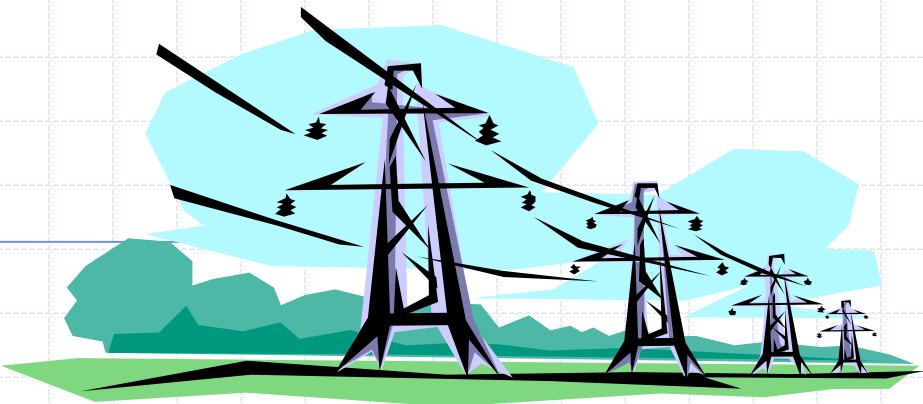
- a. To discuss strategic business and commercial generation operations, dispatch, negotiations and planning
- b. Personnel Matters

12. SET NEXT MEETING DATES

(Third Tuesday of each Month; Subject to Change)

- a. Tuesday, December 8, 2015 (Holiday luncheon)
- b. Tuesday, January 19, 2016
- c. Tuesday, February 16, 2016

13. ADJOURNMENT



DEMEC

Delaware Municipal Electric Corporation

Energy Efficiency Service Offerings

City of Newark Conservation Advisory Commission

November 10, 2015

Agenda

- ◆ Provide energy efficiency program development background information
- ◆ Present energy efficiency program proposal details for preview:
 - Initial Program Offerings
 - Indicative Savings (MWH and MW)
 - Proposed Budgets
 - Online participation portal
- ◆ CAC comments and questions

Efficiency Smart

- ◆ Was established by American Municipal Power, Inc. (AMP) for the benefit of its member communities and is administered under contract with the Vermont Energy Investment Corporation (VEIC).
- ◆ Officially launched in January 2011 to provide robust energy and money-saving services for end-use residential and business customers.
- ◆ Had achieved more than 140 percent of its initial three-year savings goal of approximately 81,000 MWh by the close of 2013.
- ◆ Had supported customers with consultative services and financial incentives for more than 212,400 energy-efficiency measures – over \$5 million in annualized customer savings - by the end of 2012.
- ◆ Had saved approximately the equivalent to the electricity used annually by more than 11,000 homes by the end of its third year of operation.

Efficiency Smart cont.

- ◆ Has all savings data independently evaluated, measured, and verified. A 2012 audit of 2011 data resulted in an energy savings claim realization rate of approximately 97 percent, and the 2013 audit of 2012 data resulted in 101 percent. These are among the highest realization rates for energy efficiency programs across the country.
- ◆ Successfully serves non-contiguous and disparate municipal utilities in multiple states.
- ◆ Offers five programs to meet the unique needs of the business and residential customers: the [Custom program](#), the [Business Energy Rebates program](#), the [Contractor and Vendor Outreach program](#), the [Residential program](#), and the [Community and Small Business Outreach program](#).
- ◆ For more information use this link <http://efficiencysmart.org/>

Proposed Budget and Savings

	Year 1			Year 2			Year 3			Total		
Initiative	Budget	Energy Savings (MWh)	Peak Demand (MW)	Budget	Energy Savings (MWh)	Peak Demand (MW)	Budget	Energy Savings (MWh)	Peak Demand (MW)	Budget	Energy Savings (MWh)	Peak Demand (MW)
Custom C&I Only Program Designed to achieve 80% of DEMEC targets	\$1,049,250	6,034	0.784	\$1,822,381	10,480	1.362	\$2,650,736	15,243	1.982	\$5,522,366	31,756	4.128
Retail Efficient Lighting	\$570,447	1,043	0.115	\$990,777	1,812	0.200	\$1,441,130	2,636	0.292	\$3,002,355	5,491	0.607
Total	\$1,619,697	7,077	0.900	\$2,813,158	12,292	1.563	\$4,091,866	17,879	2.273	\$8,524,721	37,248	4.7356
Cost per MWh of annual retail sales	\$0.86			\$1.49			\$2.16			\$1.50		
DE State Target % Load Reduction		0.4%			0.7%			1.0%			2.1%	
DEMEC % of load reduction		0.4%			0.7%			0.9%			2.0%	

For Discussion Purposes Only: Budgets and Savings are indicative and subject to change

Custom Program

- ◆ Offers businesses personalized consultative services and financial incentives
- ◆ Efficiency Smart will guide customers to determine the most cost-effective upgrades
- ◆ Eligible projects include but are not limited to retrofits and replacements, new equipment, new construction, equipment optimization, and design/plan review.
- ◆ All reporting is independently verified to ensure accuracy—with savings realization rates that are among the highest in the industry.
- ◆ Targeting all business customers with cumulative annual electric usage greater than 500,000 kilowatt-hours per year.

Residential Efficient Lighting

- ◆ Feature deep discounts on CFL and LED products made available to residential customers through an online store
- ◆ To review the current online store offerings, please go to:
<http://www.energyfederation.org/101227/default.php>



Questions

Thank You



NEWARK POLICE DEPARTMENT

WEEK 11/01/15-11/07/15

INVESTIGATIONS

CRIMINAL CHARGES

	2014 TO <u>DATE</u>	2015 TO <u>DATE</u>	THIS WEEK <u>2015</u>	2014 TO <u>DATE</u>	2015 TO <u>DATE</u>	THIS WEEK <u>2015</u>
<u>PART I OFFENSES</u>						
a)Murder/Manslaughter	0	0	0	0	0	0
b)Attempt	1	0	0	1	0	0
Kidnap	1	5	0	1	1	0
Rape	2	5	0	5	1	0
Unlaw. Sexual Contact	7	8	0	2	2	0
Robbery	29	26	0	27	29	0
- Commercial Robberies	5	12	0	2	11	0
- Robberies with Known Suspects	3	2	0	4	1	0
- Attempted Robberies	5	2	0	0	7	0
- Other Robberies	16	10	0	21	10	0
Assault/Aggravated	7	6	1	9	26	0
Burglary	70	53	1	78	19	0
- Commercial Burglaries	10	7	0	5	3	0
- Residential Burglaries	56	43	1	38	15	0
- Other Burglaries	4	3	0	35	1	0
Theft	508	482	15	254	181	3
Theft/Auto	37	32	2	12	7	0
Arson	5	2	0	0	1	0
All Other	75	67	1	172	44	0
TOTAL PART I	742	686	20	561	311	3
<u>PART II OFFENSES</u>						
Other Assaults	234	275	9	179	153	5
Rec. Stolen Property	2	3	0	36	18	1
Criminal Mischief	237	184	6	73	107	1
Weapons	19	10	0	57	57	0
Other Sex Offenses	0	1	0	0	2	0
Alcohol	352	253	16	1050	433	22
Drugs	109	96	2	291	209	4
Noise/Disorderly Premise	634	477	45	300	196	9
Disorderly Conduct	160	156	5	194	91	8
Trespass	154	143	2	94	62	0
All Other	425	417	16	420	262	3
TOTAL PART II	2326	2015	101	2694	1590	53
<u>MISCELLANEOUS:</u>						
Alarm	892	788	9	0	0	0
Animal Control	490	472	9	3	4	0
Recovered Property	234	233	11	0	0	0
Service	21849	27530	618	0	0	0
Suspicious Per/Veh	489	469	12	0	0	0
TOTAL MISC.	23954	29492	659	3	4	0

	THIS WEEK <u>2014</u>	2014 TO <u>DATE</u>	THIS WEEK <u>2015</u>	2015 TO <u>DATE</u>
TOTAL CALLS	715	33,097	898	38,216



Newark Police Department
Weekly Traffic Report
11/01/15-11/07/15



TRAFFIC SUMMONSES	2014 YTD	2015 YTD	THIS WEEK 2014	THIS WEEK 2015
Moving/Non-Moving	8,426	7,856	142	120
DUI	168	179	5	4
TOTAL	8,594	8,035	147	124

TRAFFIC ACCIDENTS				
Fatal	2	2	0	0
Personal Injury	165	190	7	8
Property Damage (Reportable)	323	516	14	30
Property Damage (Non-Reportable)	438	273	31	6
Hit and Run	225	228	17	6
TOTAL	1,153	1,209	69	50