**2015 State Damage Prevention Program Grants Progress Report**

**CFDA Number: 20.720**

**Award Number:** *DTPH5615GPPS17*

**Project Title:** *Dig Safely New York State Damage Prevention Grants*

**Date Submitted:** *01/26/2015*

**Submitted by:** *Kevin Hopper*

**Specific Objective(s) of the Agreement**

Under this grant agreement, the DSNY will:

Develop and implement effective training programs to set new standards for training from the one-call center and further the reach of training offered.

**Workscope**

Under the terms of this grant agreement, the Grantee will address the following elements listed in 49 U.S.C. §60134 (b) through the actions it has specified in its Application.

**Element 4 (Effective Employee Training):** Participation by operators, excavators, and other stakeholders in the development and implementation of effective employee training programs to ensure that operators, the one-call center, the enforcing agency, and the excavators have partnered to design and implement training for the employees of operators, excavators, and locators.

**Accomplishments for this period (Item 1 under Article IX, Section 9.01 Progress Report: “A comparison of actual accomplishments to the objectives established for the period.”)**

**Project Description**Using a 2013 State Damage Prevention Grant, Dig Safely New York developed a certification program for excavators in safe digging best practices. The curriculum incorporates the Nine Elements of an Effective Damage Program, combining various learning styles, including visual, audio, and hands-on. Classes are intimate in size to allow for group discussions and manageable group work. A situational-based workbook was developed to give class participants the opportunity to apply knowledge they learn and discuss into what could be a real-life situation in the field. This is a complex workbook set up like an adventure novel so that groups cannot just guess the next step or correct answer to continue on with their job based on the page numbers. Class participants have to apply the knowledge they have learned in the first section of the course in order to work through the obstacles encountered in their assigned job. The Certified Excavator Program (CEP) in Safe Digging Best Practices was rolled out in May 2015, with 17 classes offered from June through November 2015. A total of 312 individuals voluntarily signed up and took the CEP class. From January through April 2016, another 180 individuals became certified through the program.

Dig Safely New York believes this program is establishing a recognized standard of procedures and processes designed to prevent damage to underground pipelines. Successful participants and companies of the CEP also use the designation for marketing purposes. Member utilities have expressed interest in the program, signing up employees for private classes at their facilities, and noted that future contracts for third-party excavators could include the stipulation that the organization, employees, or specific employees on the job site must be certified through the One-Call Center.

To enhance the Certified Excavator Program in Safe Digging Best Practices efficiency, availability, cost effectiveness, and reach, Dig Safely New York is seeking funding to develop a web and mobile app-based program to heighten the program. Dig Safely New York researched and located a reputable company to build a CMS-based program for web and mobile app platforms. The company, 3 Sided Cube, is based in Bournemouth, England and has developed applications for organizations including, but not limited to, the American Red Cross, Babies R Us, ASPCA, and the Royal National Lifeboat Institution. The custom built program would be offered through a portal on the web through the Dig Safely New York website, and via mobile app for IOS operating system. By developing the digital Certification Program through a CMS, this will allow Dig Safely New York the ability to run, manage, validate comprehension, and edit as warranted without third-party assistance and incurring additional costs. Offering the four-hour Certification Program digitally will save money on printed materials, cost of labor, and allow more excavators to be trained when it is both convenient for them and their organization, as well as make it more appealing for employers to require or recommend the course to their employees. This project will enhance aspects of many of the Nine Elements, including Element 2, 4, 5, 8, and 9. For the purpose of this Grant Application, this project will focus primarily on Element 4.

**Progress Report as of April 30, 2016:**

After submitting the 2015 grant application, Dig Safely New York continued to research cost effective ways to offer the digital Certified Excavator Program after the build was complete. During this research, Dig Safely New York representative came across a learning management software called 4IQ Solutions. 4IQ Solutions is a customizable education management system that allows us to build our own curriculum from the ground up with support and enhanced development; track curriculum from the top down allows us to measure progress, engagement, and effectiveness; and, create a visual platform for individualized learning. Dig Safely New York reached out to 4IQ Solutions for a demonstration, discussions on needs, and a quote for work. With the ability to utilize the 4IQ program for not only the Certified Excavator Program in Safe Digging Best Practices, but other training programs for excavators, locators, first responders, operators, etc., as well as use the program to build internal employee training courses, Dig Safely New York, determined 4IQ Solutions to be the best possible fit for this grant project, needs for the organization, and training needs for stakeholders around the state. Following the grant award, Dig Safely New York signed a contract with 4IQ Solutions and immediately began discovery calls for development purposes. A test environment within the solution was created for Dig Safely New York representative to learn and play around with the capabilities of the tool, as well as determine what capabilities were missing for the purposes of damage prevention training. Following these discovery calls and software enhancements, Dig Safely New York purchased Storyline by Articulate, intuitive software for creating interactive scenarios for the CEP online course. This software fully integrates with 4IQ Solutions, and is allowing Dig Safely New York to turn its group activity workbook into an interactive, visual online workbook. Using Articulate, we can build any interaction, get instant interactivity, and personalize it to each specific user. Currently, Dig Safely New York is in the process of building out its nine job scenarios within the workbook completed in 2015 within Articulate to place into the 4IQ software. Also in progress is the interactive lecture. Dig Safely New York has written out a script and is bringing in talent to record the lecture and put those records over appropriate visual slides, Articulates, and even non-graded pop quizzes. Following the development of these two pieces, Dig Safely New York representatives will work with developer at 4IQ Solutions to randomize Articulate scenarios given to individuals, work out a registration process, randomizing question pools for the final evaluations, and enabling a registration and payment process. Once everything is completed with the course, Dig Safely New York will begin beta testing and working out the bugs with the assistance of 4IQ developers before rolling out the digital offering to the public.

Other representatives of Dig Safely New York are working on building out internal new hire training programs simultaneous within 4IQ Solutions. This solution, once completed, will revolutionize the way training is offered at Dig Safely New York both internally and externally.

The programs within 4IQ are projected to be completed and rolled out no later than October 1, 2016.

**Quantifiable Metrics/Measures of Effectiveness (Item 2 under Article IX, Section 9.01 Progress Report: “Where the output of the project can be quantified, a computation of the cost per unit of output.”)**

For this particular project under this grant, it is difficult to provide quantifiable metrics however, upon completion and utilization of the project; we will be able to report on the following:

* Number of individuals that take the online Certified Excavator Program in Safe Digging Best Practices.
  + Which industries these individuals are from based on assessments and personalization of the program.
  + Analysis of training numbers and whether the online program furthers the reach and availability of training.
* Effectiveness of training being offered.
* Cost effectiveness of offering the Certified Excavator Program in Safe Digging Best Practices classes online versus in person.

**Issues, Problems or Challenges (Item 3 under Article IX, Section 9.01 Progress Report: “The reasons for slippage if established objectives were not met. “)**

Currently, there are no issues, problems or challenge to report.

**Mid-term Financial Status Report**

From a financial perspective, Dig Safely New York has incurred all of the associated project costs. As usual, Dig Safely New York will facilitate funding of this project and seek reimbursement at the completion of the grant period and the completion of the project.

Included in the attachments, you will find the mid-term Financial Status Report, Standard Form 425 (SF-425), to report the status of funds.

**Plans for Next Period (Remainder of Grant)**

As mentioned in the progress report above, Dig Safely New York will continue its build of the Certified Excavator Program curriculum and then work with developers from 4IQ to add customized features to the course, including, but not limited to, randomizing Articulate scenarios given to individuals, working out a registration process, randomizing question pools for the final evaluations, and enabling a registration and payment process. Once all development is complete for the course build, Dig Safely New York and 4IQ representatives will begin beta testing and working out any bugs that may be presented.

**Requests of the AOR and/or PHMSA**

No actions requested at this time.