Completion of the DelDOT Construction Intern Project

By

Earl “Rusty” Lee

February, 2019

Delaware Center for Transportation
University of Delaware
355 DuPont Hall
Newark, DE 19716
(302) 831-1446
The Delaware Center for Transportation is a university-wide multi-disciplinary research unit reporting to the Chair of the Department of Civil and Environmental Engineering, and is co-sponsored by the University of Delaware and the Delaware Department of Transportation.

**DCT Staff**

Christopher Meehan  
*Director*

Jerome Lewis  
*Associate Director*

Ellen Pletz  
*Business Admin I*

Earl “Rusty” Lee  
*T² Program Coordinator*

Matheu Carter  
*T² Engineer*

Sandra Wolfe  
*Event Coordinator*

Mingxin Li  
*Sr. Scientist*

The research reported in this document was prepared through participation in an Agreement sponsored by the State of Delaware’s Department of Transportation and the Federal Highway Administration. The views and conclusions contained in this document are those of the author(s) and should not be interpreted as presenting the official policies or position, either expressed or implied, of the State of Delaware’s Department of Transportation or the U.S. Federal Government unless so designated by other authorized documents.
In a February 10, 2016 meeting with Rusty Lee and Matt Carter (Delaware T²/LTAP Center) related to another project, Javier Torrijos lamented that, with the impending start of the US 301 Corridor construction, the Delaware Department of Transportation lacked videos and other training from the SR1 construction, Delaware’s last large scale roadway construction project. After some discussion, the Delaware T²/LTAP Center organized a project to attach engineering interns to the project to film operations and edit a series of videos to support the Construction Manual, which was under redevelopment by an internal committee at DelDOT.

On February 24, Matt met at the 301 GEC Office with Javier, Tom Clements, and Ken Cimino to discuss how interns would gain access to the project. It was agreed that Ken Cimino, in his role as 301 Public Outreach Coordinator, would escort them to the areas of the project as needed. Javier expressed concern that construction activities had already begun and he didn’t want to miss any more activity than necessary. As interns were not yet hired, Matt agreed to work with Ken to be on site as much as possible until interns were on-board. Matt was on-site five days later with Ken to film clearing and grubbing activities and continued as time allowed until the first interns were brought on-board in late May 2016. Following the February meeting, Tom made arrangements for the team to have full access to the eConstruction database, which proved to be an excellent resource.

David Litz and Eric Van Assen were the first interns to work on the filming and editing process, followed by Joe Jefferson and Jacob Ray in the spring of 2017, Matt Pappas in June 2017, and Stefan Floeter in December 2017 (joined for periods by Alexis Withers and Allison Chinnery). Stefan remains with the project at the current time.

During 2016, Dave and Eric collected substantial raw video and still images and began a lengthy experimentation with video formats, styles, content, and length that were presented in waves to the Construction Manual review committee. Iterative direction from the committee eventually resulted in an approach whereby, as Javier put it, “the Standard Specification becomes the script.” The new Part E of the Construction Manual would consist wholly of a table of contents from the Standard Specifications with links from many of the items to brief videos that illustrated the section and used the language of the Standards Specifications as their captions. Billy Sweeney assisted from this time forward to ensure that the team was preparing videos consistent with that intent and that the location of stored videos and linkages were consistent with the overall strategy.

Ken Cimino was instrumental in securing access to any area of the project needed until his departure from the project in June 2018. His role went beyond simply escorting the team to the site. He kept the team well advised through 2-week schedules and other sharing and pointing out key upcoming developments. For example, Ken recognized the importance of the weekend closure of Summit Bridge Road for the culvert installation and secured a briefing on the operation by Tate Cantwell and Tom Nickerson as well as a plan for the team to access the site 24-hours a day through the closure by coordination with Tate or Tom. In another example, Ken ensured access for the overnight filming of the second straddle bent over SR1.
When Matt Pappas took over from the previous interns, the experimental phase was largely complete and he picked up a concept Javier had mentioned a number of times and could now be realized. Pappas began “storyboarding” each Specification section prior to going out into the field as the 2-week look ahead schedules suggested opportunities and the story boards resulted in much higher likelihood that the footage needed to illustrate the Specification language would be obtained.

Funding was expended for this project in August, 2018, but the interns continued work under other DelDOT intern funding.

Project status as of January 2019 is that 30 videos in 10 Specification sections have been uploaded to the DelDOT Construction YouTube Channel and linked to the Construction Manual WikiDot site. These are Sections 201, 202, 209, 401, 605, 607, 610, and 612, as well as Special Provisions under 302 for Permeable Treated Base and Soil Cement Base Course.

Stefan Floeter is the only current intern working on the project and he will be focusing on the following priorities during the winter academic break, where he can commit many more hours than during the semester: Sections 207, 208, 501, 601, 610 (remaining portions), and 611, as well as some Section 700 elements.

This work will likely continue into the spring semester, as some of these are lengthy sections, and the next priorities will be targeted sections that the team may or may not have sufficient footage from the US 301 project. By drafting initial videos in each of these (eleven) sections, the team will be able to determine what footage is missing and work collaboratively with Javier to gain access to other projects where the gaps can be filled.

There are some additional sections that we believe we will not gain sufficient footage of or that are more rarely used and there is no intent at this time to pursue. These are, for example, Sections 504, 505, 616, 619, 621, 625, 626, and 628. In addition, Section 100 (dealing with contractual processes) will not be part of the project and at this time Section 800 (Traffic) does not appear practical for filming as so much of those specifications are voluminous listings of materials and what not to do. Section 900 (Erosion and Stormwater) suffers from lack of footage because of the spring 2016 focus of those activities when interns where not yet on-board, but these sections can be gap-filled with other projects during the summer of 2019 if interest continues in the project. Finally, Section 1000 (Materials) may require alternative approaches because of their structure (again, long lists of materials, etc.).

There remains substantial productive work for one or more interns at least through the summer of 2019.
Delaware Center for Transportation
University of Delaware Newark, Delaware 19716

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

The University of Delaware does not discriminate on the basis of race, color, national origin, sex, disability, religion, age, veteran status, gender identity or expression, or sexual orientation, or any other characteristic protected by applicable law in its employment, educational programs and activities, admissions policies, and scholarship and loan programs as required by Title IX of the Educational Amendments of 1972, the Americans with Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964, and other applicable statutes and University policies. The University of Delaware also prohibits unlawful harassment including sexual harassment and sexual violence. Inquiries or complaints may be addressed to:

Susan L. Groff, Ed. D.
Director, Institutional Equity & Title IX Coordinator
305 Hullihan Hall
Newark, DE 19716
(302) 831-8063
titleixcoordinator@udel.edu

For complaints related to Section 504 of the Rehabilitation Act of 1973 and/or the Americans with Disabilities Act, please contact:

Anne L. Jannarone, M.Ed., Ed.S.
Director, Office of Disability Support Services
Alison Hall, Suite 130,
Newark, DE 19716
(302) 831-4643

Abridged Version – with permission by Title IX coordinator (ex: rack cards, etc.)
The University of Delaware is an equal opportunity/affirmative action employer and Title IX institution. For the University’s complete non-discrimination statement, please visit www.udel.edu/aboutus/legalnotices.html