



2018 FACERS Annual Conference
***Project Management Techniques
and Applications***

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**Where
Inspiration
Sparks
Innovation**

Who am I?

- Graduated in 1997 from UF with a BSCE in Civil Engineering
- Graduated in 1998 from UF with a Master of Engineering in Civil Engineering
- 1998 – 2002 – Worked as a consultant at Zook, Moore and Associates
- 2001 – Received my Professional Engineering (PE) license
- 2002 – 2016 – Worked at Seminole County Government, was the County Engineer from 2012 – 2016
- 2016 – 2018 – Working at the City of Altamonte Springs as the Chief Transportation Engineer
- 2013 – Received my Project Management Professional Certification (PMP)
- I have been involved in the project management of hundreds of local government projects in my career.
- I have been married for 19 years
- I have two teenage daughters who are at Seminole High School



Presentation Goals

- What this presentation is not going to be
 - ✓ A comprehensive view of project management for local government employees.
 - ✓ A comprehensive training session related to the Project Management Professional (PMP) Certification.
 - ✓ A comprehensive overview of the guidelines for project management suggested by the Project Management Institute (PMI)
 - ✓ Advice on how to obtain a PMP certification.
 - What I hope to accomplish
 - ✓ Discuss a few of the guidelines from PMI and the PMP certification that I have benefited from in my project management career.
 - ✓ Use one recent project as an example of how these guidelines can be applied to a local government project.
 - ✓ Provide simple ideas to help with your project management.
 - ✓ Make it interactive enough to prevent everyone from falling asleep!
- 
- A vertical logo on the right side of the slide. It features the word "PRO" in large green letters at the top. Below it, the words "Project Management" are written in a smaller font. At the bottom, the word "PLANNING" is written vertically in green. There are also some small icons and text related to project management, such as "COSTS", "DEVELOPMENT", and "RISK", interspersed with the main text.



What is the PMP?

- The Project Management Institute (PMI) was founded in 1969
- There are about 750,000 Project Management Professional (PMP) certified professionals with more than half living outside of the USA.
- The PMP Certification process began in 1984.
- Must have 3 years of project management experience with a four-year degree to take the test and must show at least 4,500 hours of direct project management experience.
- Must take 35 hours of PMP training classes.
- Must pass the four-hour PMP certification exam.
- The Project Management Body of Knowledge (PMBOK) is the PMI project management standard reference.



Orange Ave Improvements

SR 434

SR 436

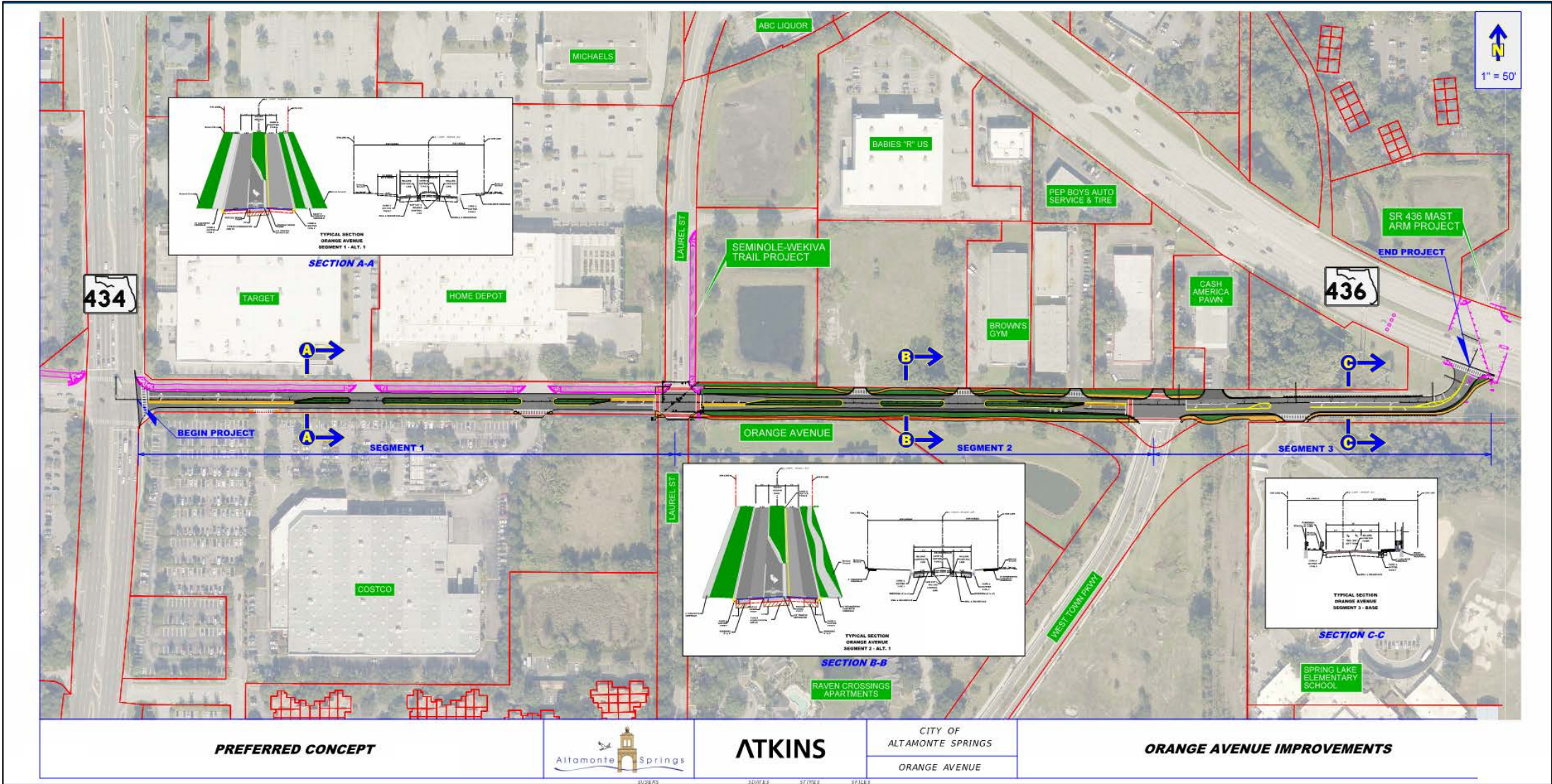
Orange Ave

Costco

Spring Lake Elementary



Orange Ave Improvements



Orange Ave Improvements

Existing Conditions



Project Risk Management

- The PMBOK has the following guidance:
 - ✓ 11.1 – Plan Risk Management
 - ✓ 11.2 – Identify Risks
 - ✓ 11.3 – Perform Qualitative Risk Analysis
 - ✓ 11.4 – Perform Quantitative Risk Analysis
 - ✓ 11.5 – Plan Risk Responses
- Use a Project Risk Register tool or something similar.
- Hold a meeting to fill out the Risk Register and involve as many key members of the project team as possible.
- Do this as early in the project process as possible.
- Make it simple!
- Incorporate the results of this analysis into the project scope.



Project Risk Management

Project Risk Register

Orange Ave Roadway Improvements - SR 434 to SR 436

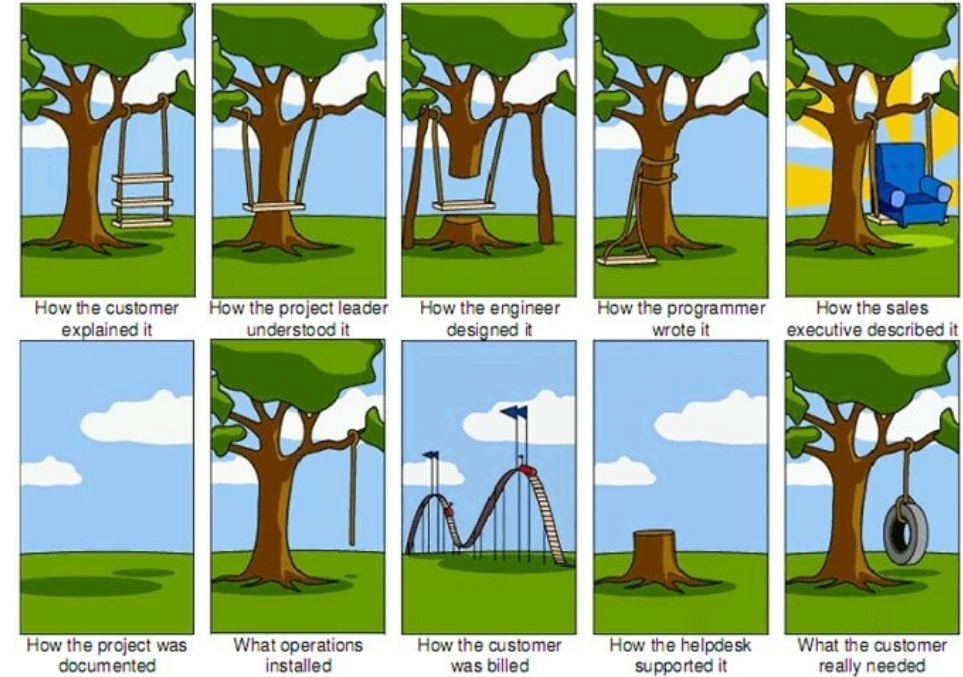
Project Manager: Brett Blackadar

Identified Risks

Risk Title	Overall Risk Ranking	Risk Status	Date Response Required	Risk Response Strategy
Property Acquisition - easements, TCE's	1			Start meeting with property owners ASAP. Offer to purchase easements. Eliminate unnecessary TCE's.
Utility Relocations - gas line, power	3			Hold early utility coordination meeting. Avoid impacts to gas lane as much as possible during design process.
Coordination with Spring Lake Elementary	4			Meet with school resource officer and school staff as early as possible in the design process.
Access Management Impacts	2			Meet with Costco to discuss potential changes ASAP in the design process.
FDOT Permitting	9			Send a preliminary concept plan to FDOT for changes at SR 436 as early in the process as possible.
SJRWMD Permitting	10			
Impacts to the Little Wekiva River	6	Resolved		Leave existing bridge in place and work within the existing footprint.
Schedule Restrictions - school hours, holiday shopping hours	7			Incorporate restrictions into bid documents.
Budget Restrictions	8			Obtain accurate cost estimates at 30% plans and remove items from scope to meeting budget restrictions if needed.
Use of private pond for stormwater treatment	5	Resolved		Determined to not be feasible.
Coordination with Seminole Wekiva Trail Extension project	11			Coordinate with the County to incorporate some of our intersection design changes into their project.

Project Scope Management

- The PMBOK has the following guidance:
 - ✓ 5.1 – Plan Scope Management
 - ✓ 5.2 – Collect Requirements
 - ✓ 5.3 – Define Scope
 - ✓ 5.4 – Create WBS
- The project manager should do an initial draft of project requirements.
- Hold a meeting to discuss the project requirements with key staff, including long term maintenance staff, planning staff, etc.
- Do this as early in the project process as possible.
- Share your results with the consultant (if applicable) before they create their project proposal. If a new RFP, incorporate into the scope of the RFP document.



Project Scope Management

PROJECT REQUIREMENTS - Orange Ave Corridor Improvements

DRAFT – BWB, 8/17/16

General Items

- Perform a traffic analysis of the corridor, including turning movement counts at the intersections of SR 434, Laurel St, West Town Pkwy and the school entrance. Perform traffic counts for the driveways between SR 434 and West Town Pkwy and review crash history for the corridor. Review other recent Traffic Impact Analysis studies recently performed (including Wal-Mart and the Tax Collector's Office) in the area and include projected trips from those developments in the analysis. Analyze the queuing needs of all turn lanes at the study intersections.
- Perform a field review at Spring Lake Elementary during both the AM school drop off period and the PM school pickup period. Include administrative staff from the school board and elementary school in the review and provide any recommendations based on the field reviews.
- Prepare a 30% concept plan of the corridor and meet with City representative to discuss the feasibility of all project elements moving forward.

Orange Ave - SR 434 to Laurel St

- Analyze potential access management modifications to this section based on the results of the traffic analysis discussed above.
- Analyze converting a portion of the two-way left turn lane in this section to a raised median with landscaping.

Orange Ave and Laurel St Intersection

- Add north-south decorative brick paver crosswalks to this intersection.
- Make any turn lane modifications recommended by the traffic analysis discussed above.
- Convert the existing strain-pole signal to decorative mast arm structures.

Orange Ave - Laurel St to West Town Pkwy

- Convert this segment of roadway to an urban roadway cross section.
- Provide a continuous eight foot wide sidewalk on the north side, if feasible.
- Provide a stormwater management system to resolve the existing flooding issue at the low point in this section.

Orange Ave and West Town Pkwy Intersection

- Add north-south decorative brick paver crosswalks to this intersection.
- Make any turn lane modifications recommended by the traffic analysis discussed above.

Orange Ave - West Town Pkwy to SR 436

- Provide a continuous sidewalk on the north side. A sidewalk width of 8 feet would be preferred, if feasible.
- Widen the sidewalk on the south side to 8 feet to provide better access to the school, if feasible.

- Analyze the existing culvert at the Little Wekiva River and determine whether or not it needs to be modified to meet the requirements of this project.

Orange Ave and SR 436 Intersection

- Convert the exiting strain-pole signal to decorative mast arm structures.

Other Misc. Items

- Perform survey of the corridor, including a ROW control survey to determine the existing ROW line. Prepare title and sketch and descriptions, if needed, for required easements or other property acquisition.
- Provide landscaping and irrigation throughout corridor where feasible.
- Provide hardscape improvements throughout corridor, including brick paver bands in sidewalks, etc.
- Add decorative lighting in the corridor and/or assist in coordinating with Duke Energy to add decorative lighting.
- Analyze other ways to connect to or support the Seminole Wekiva Trail extension (that will be under construction in this area), including better connectivity, trail amenities (water fountain, benches, etc) or other needs.

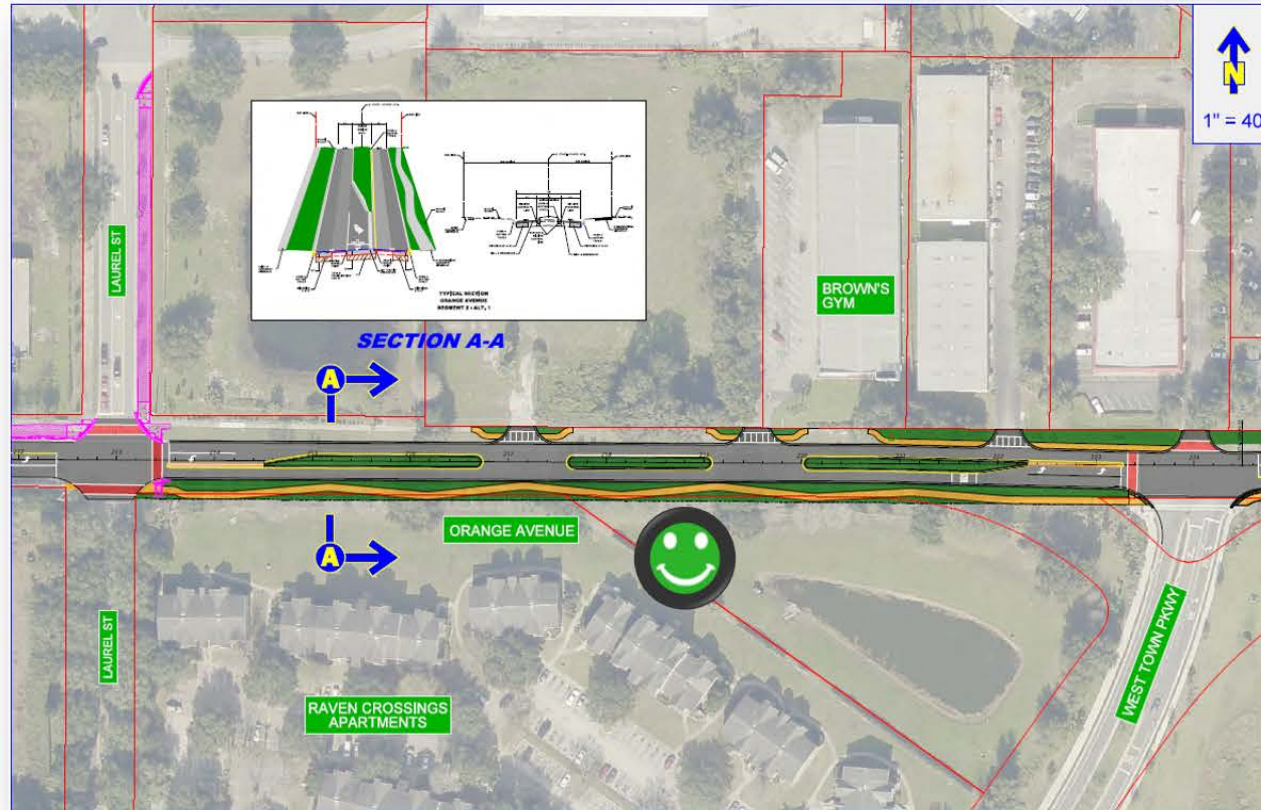
Project Stakeholder Management

- The PMBOK has the following guidance:
 - ✓ 13.1 – Identify Stakeholders
 - ✓ 13.2 – Plan Stakeholder Engagement
 - ✓ 13.3 – Manage Stakeholder Engagement
 - ✓ 13.4 – Monitor Stakeholder Engagement
- Identifying of Stakeholders is the second thing in the entire PMBOK project management process.
- Simply sending out reports or plans for stakeholder review often yields limited feedback.
- Setup a meeting at the end of the preliminary engineering phase and get as many stakeholders in this meeting as possible to offer real-time feedback.
- The consultant (or project staff) will need to more work up front to prepare for this meeting, but the long term benefits are worth it.



Project Stakeholder Management

Segment 2 Alternative Concept 1



ATKINS

Project Stakeholder Management

Sample Project Elements



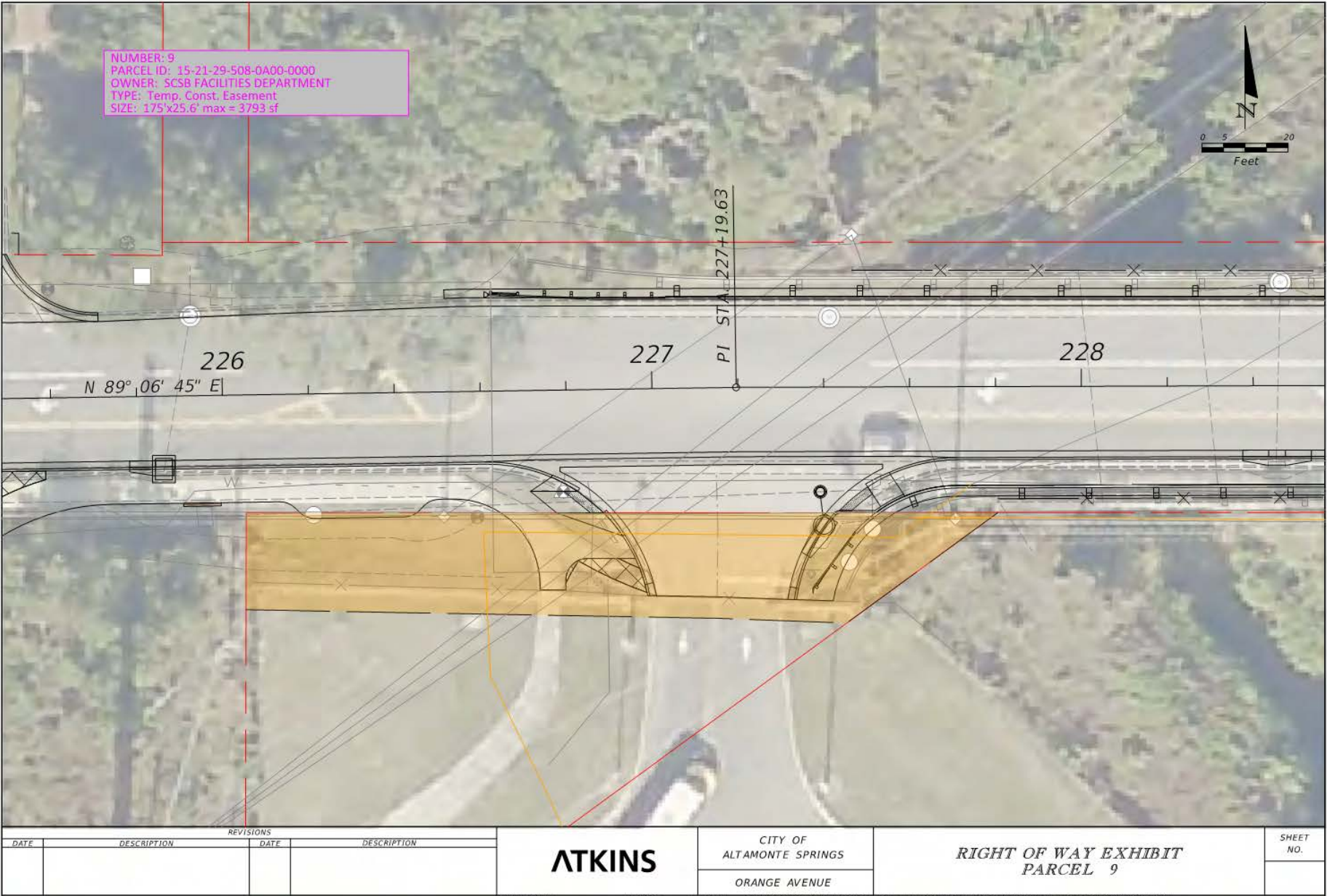
ATKINS

Project Stakeholder Management

- Other key stakeholder management activities that occurred during the Orange Ave project:
 - ✓ Setup an early presentation to Costco and had several follow-up meetings to discuss proposed access management changes and the need for TCE's.
 - ✓ Contacted Home Depot early in the process and presented the case for a donation of the needed signal easement for our project.
 - ✓ Met with the elementary school resource officer multiple times and observed both the AM and PM school drop off periods.
 - ✓ Met with all property owners that required easements or TCE's early in the process on-site to describe the project and the benefits to them.



Project Stakeholder Management



Orange Ave Project Status

- Preliminary Engineering started in January 2017 and was completed in April 2017
- Final Design started in April 2017 and was completed in March 2018.
- The project was bid for construction in April 2018.
- Property acquisition meetings started in April 2017 and there is only one outstanding signal easement still in final processing. All 5 of the needed TCE's, including Costco and the school, were all donated. Home Depot donated a signal easement as well.
- The actual lowest construction bid was within \$1,000 of the last construction design estimate.
- Construction/Utility Relocations will begin in July (the real challenges begin).



Questions?

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