Quick Construction Delivery Contract for Pedestrian and Bicycle Facilities

Madeline DeClerck
Stephen Simoglou

MassDOT – Highway Design
1) Background
2) Planning-Design
3) Construction
4) Review
5) Future
Agenda

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Background

- **NEED** *(WHAT ARE WE TRYING TO ADDRESS?)*

Initiative 1: Complete prioritized pedestrian-specific projects on MassDOT-owned roadways and bridges that address safety, critical gaps in connectivity, and accessibility.

Initiative 1: Build connected, safe, and comfortable bicycle networks.
Background

IDEA (WHAT CAN BE DONE?)

- Address NEED through quick build contract
  - Separate from maintenance program
- Mimic other VL projects (ADA, Bridge)
- Develop reoccurring program
Background

- **IMPLEMENTATION** *(HOW WILL THIS BE ACCOMPLISHED?)*
  - Align work with MassDOT initiatives
  - Identify NFA funding source
  - Limit scope
    - Minimize Right of Way, Utility, Env. Impacts
  - Abbreviate design process
    - Mirror maintenance work orders
Agenda

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Planning - Design

- LOCATION SELECTION
  - Data driven
    - MassDOT GIS – Walkable/Bikeable Layers
    - Audit via field or desktop review
  - Coordination with local staff and stakeholders
  - Screen locations for feasibility
  - Prioritize locations to advance
Planning - Design

❖ DESIGN PROGRESSION

- Identify designer
- Survey requests
  - Dependent on scope
- Abbreviated submissions and schedule
  - Determined in advance with reviewers
- Address minor environmental permitting
Planning - Design

PLAN PRODUCTION

- Base plan
  - Surveyed or desktop generated
- Concept plans developed for preferred alternative
  - Stakeholder review
- Condensed deliverable
  - Combined sheets in plan set when feasible
  - Estimate to support contractor procurement
  - Location specific special provisions
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CONTRACTOR ASSIGNMENTS

- Active construction contract
- Rolling submittals to district construction section
  - Schedule work with contractor
- Construction phase services as needed
- Prioritization of locations vary
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LESSONS LEARNED - PLANNING

- Location Selection
  - Use mix of data and feedback
  - Prioritization
- Review locations for constructability
- Research planned or in-progress projects
  - Resurfacing, permits, private development
- Maintain limited project scopes
LESSONS LEARNED – DESIGN/PRODUCTION

- Develop review process for ‘quick-build’ projects
  - Plan detail, submittal schedule, review periods
- Deliverable standardization
- Staff training for existing conditions research and drafting
  - Limitations when foregoing survey
- Design during construction
  - Accuracy in items, quantities and schedule
Review

- LESSONS LEARNED – CONSTRUCTION
  - Contractor scheduling
    - Material procurement and labor resources
  - Items and quantities accuracy
  - Preconstruction coordination with contractor and stakeholders
  - As-Built Records
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Future

**MOVING FORWARD**

- Expand use of quick implementation model
  - Create pipeline of locations and projects
- Refine policy to streamline project delivery
- Track locations in Pinfo for project coordination