

# Construction Contract Finals: Vermont's Cloud Based Process Improvement Solution

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AASHTO SOC Annual Meeting

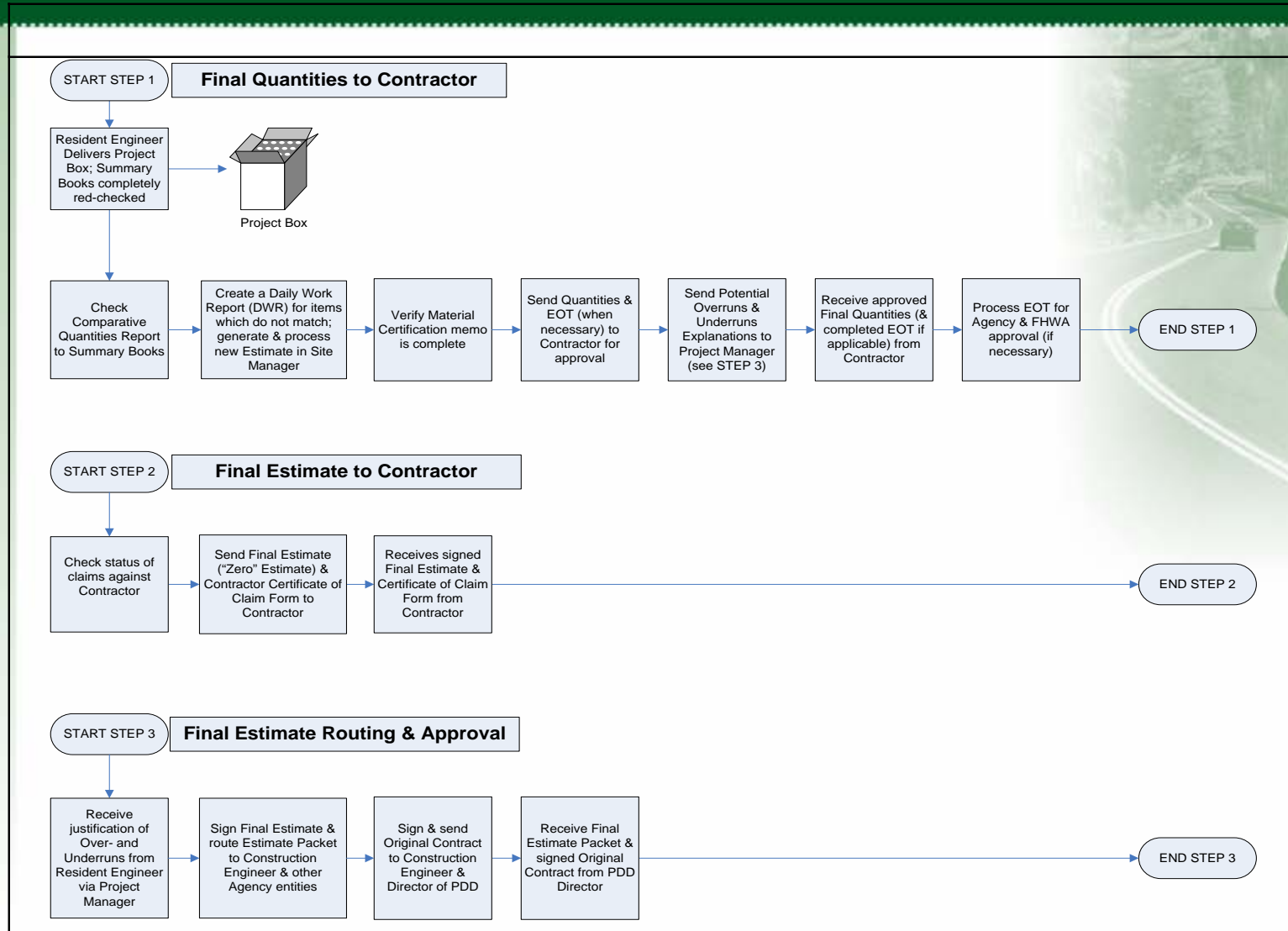
August 12, 2015

# Project Box Checklist

2015 Project Box Checklist	
Contract Name & Number _____	
Appointment Date: _____	CES number: _____
Resident Engineer: _____	Finals Representative: _____

Pre Final Requirements	By	Date	
1. Completion & Acceptance Memo written - Right of Way Encroachment Certification written			
2. Ratings Forms completed by RE, and distributed by Regional Office - Contractor, Subcontractor and Consultant			
3. Project Manager Closeout Comments Memo complete/distributed/Z:Drive			
4. All Summary Book quantities complete and checked by RE/RT a. All Book quantities verified to match Site Manager			
5. Final Field Estimate run by Regional Tech a. Stockpiles and Other Adjustments = \$0 b. All Dates entered into SM by RT (C&A, Substantial, etc.)			
6. Explanations for Overruns/Underruns(Completed <b>after</b> #4 & #5 are done) - Distributed and Placed in Z:/Drive (RE/Clerk)			
7. IPSM Explanations for Materials & Certs failures & omissions to Lab (RE)			
Project Box Contents	Included in Box ?		
	Yes	No	N/A
1. Project Summary (Orange Field) Books (Check Engineering Force)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Computations Binder – Must be bound	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Contract	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Written Orders (specifically check for Substantial and Interim Comp)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Change Orders - including all backup documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Paving Slips – Labeled in envelopes, by day and location and checked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Concrete Batch Slips and Test Results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Materials, Samples & Certifications Booklets - completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Inspectors Daily Reports, especially handwritten reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Contractor Daily Reports, including available Flagger & UTO reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Record Plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Environmental, including contractor plans and reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Correspondence: Utilities, Prop Owner, PR, Municipal, Contractor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Shop Drawings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Project Photos and Video Logs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Contractor's Progress Schedules.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Regional File added to Project Box, with duplicate documents “weeded”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Extension of Time information (additional info beyond written order)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Was there an interim completion date? If yes, note dates below. - Were any weather days credited. (Should NOT be)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Is there an overpayment? If yes, explain why in Notes below. - Contractor to be notified by Regional Staff. Who was notified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notes:			

# The Finals Process



# Processes and Sub-Processes

- Plan reviews
- Certified payroll reporting and reviews
- Paying a bi-weekly estimate
- Responding to complaints,
- Contractor submittals
- Executing a contract
- Material Sampling and testing
- Development of specifications



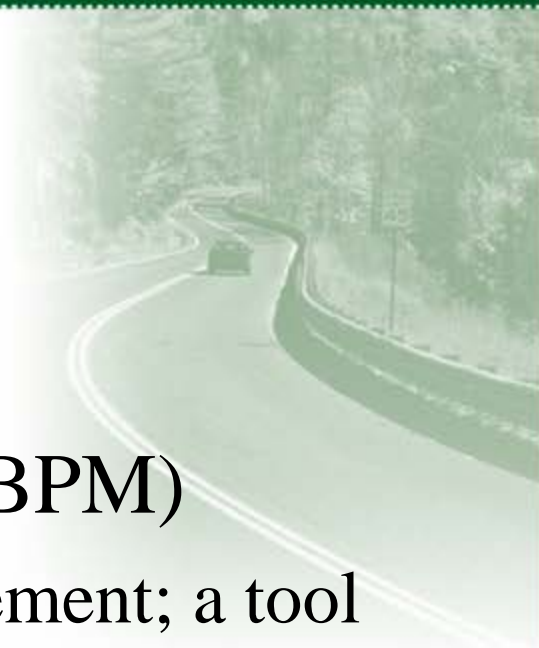
Who is managing your process?

# The Solution

- LEAN
- SIX-SIGMA

- Business Process Management (BPM)

A discipline devoted to process improvement; a tool to re-engineer your workflows.



# The Objective

- Efficient and Effective workflows
- Auto-generated tasks
- Fully Transparent
- Document Management
- Data Driven Reports and Metrics
- Accountability
- Performance Management



- Identifies a Problem
- Designs the Solution
- Implementation
- Monitor & Control (feedback)



Was the solution a success?

- Step 1: Document the AS-IS workflow
  - Who does what, where, when, why, how.
  - Preliminary list of errors, defects.
  - Preliminary list of opportunities for improvement (OFI's).
  - Collect the artifacts.



- Step 2: Analysis
  - Capture all problems and OFI's
  - Interview all stakeholders
  - Customer Centric
  - Requirements gathering
  - Quantitative & qualitative measurements of the existing process
  - Establish scope of the improvement project



- Step 3: Design
  - Develop new workflow
  - Identify implementation requirements
  - Design monitoring & control requirements
  - Report requirements

- **Step 4 : Implementation**
  - Training
  - Transition plan
  - Communication
- **Step 5: Monitor, Control & Measure**
  - Assess
  - Apply corrective action
  - Lessons learned
  - Close iteration

# The Value

- “It is the journey, not the destination”
- Employee engagement & buy-in
- Knowledge & mastery of the process
- Customer Centric



# Getting Started

- Hire a Business Process Analyst
- Find a process in need of improvement
- Find the right Manager
- Start documenting the existing work flows

## CCF Demo

Appian for Vermont Agency of  
Transportation



# Questions?

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