

 Illinois Department of Transportation

E-Construction in Illinois






Illinois Asphalt Pavement Association
e-Construction Webinar March 26, 2020
Justan Mann P.E., S.E.

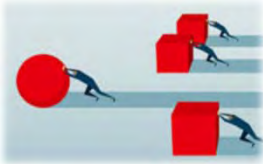
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1

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Why E-Construction?


- Create
- Collect
- Store
- Disseminate
- Utilize







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2

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Why E-Construction?

- Reduce dependence on paper processes
- Expedite communication/collaboration
- Enable efficient retrieval and use of data

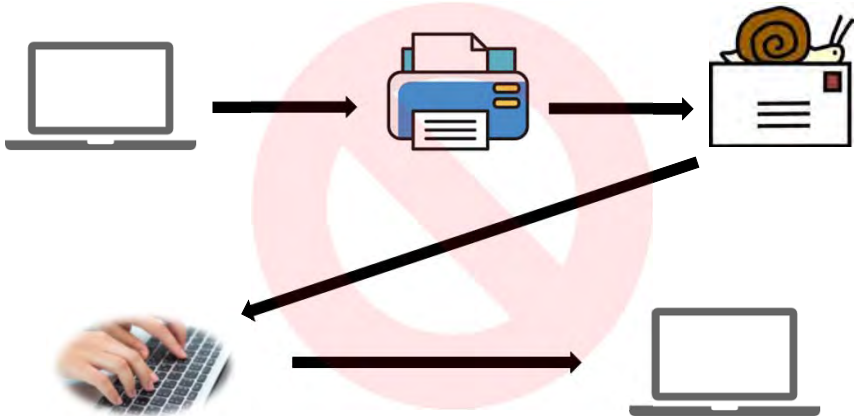


3

3

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Why E-Construction?



4

4



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Why E-Construction?

- Keep electronic data electronic
- Capture data once use it by many
- Leverage data in decision making



5

5



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Const. & Mat. Mgmt. Sys. (CMMS)

CMMS will Replace:

- Construction Records System (ICORS)
- Materials Record System (MISTIC)
- Contract Payment Management System (BCM)



CMMS – Web based contract administration solution

6

6



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Existing Records Systems

- Construction Records System developed in 1991 (Microsoft Access platform on local computers)
- Materials Record System developed in the 1970's (hierarchal mainframe database developed using COBOL)
- Contract Payment Management System developed in 1992 (hierarchal mainframe database developed using COBOL)

7

7



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Existing Contract Management

Heavy reliance on paper driven processes and re-entry of data into disconnected systems



8

8



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Web-based Contract Management

- Facilitate paperless contract administration
- Enable electronic submission of construction documentation by stakeholders
- Enable electronic approvals and expedite decision making

9

9



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Web-based Contract Management

- Provide secure digital management of construction data
- Allow distribution of construction data to all project stakeholders through internet connected devices



10

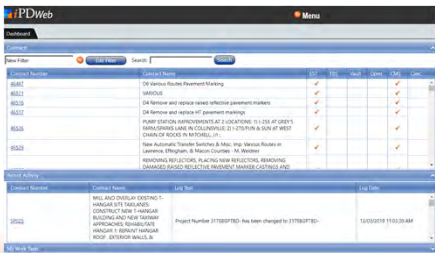

10



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Const. & Mat. Mgmt. Sys. (CMMS)

- Issued a Request for proposals
- Selected ExeVision Inc.
- CMMS is being rolled out in a series stages

11

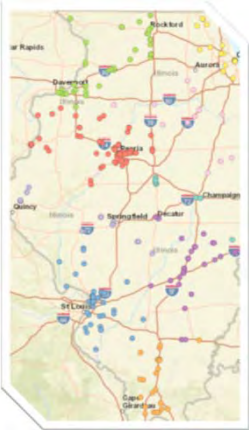
11



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CMMS

- Began releasing epic 1 functionality in April 2019
- Currently using CMMS on ±500 contracts statewide
- Includes State let State and State let local agency contracts



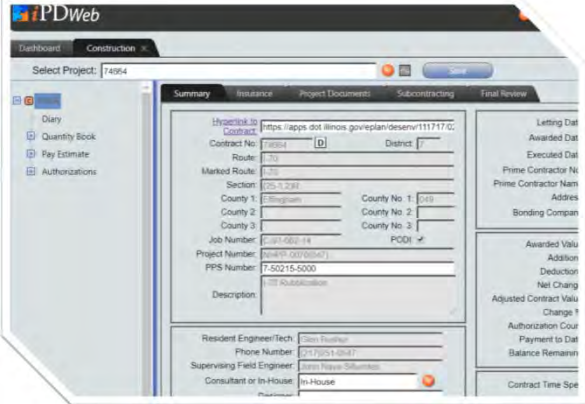
12

12

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CMMS

- Diary
- Quantity Book
- Pay Estimates
- Changes
- Documentation
- Reports



13

13

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CMMS

- Materials Functionality Coming Soon
 - Mat. Assignments and Jobsite Tracking
 - Mat. Vendor Mgmt.
 - Mat. Assoc. to Vendors
 - Mat. Spec. Mgmt.
 - Mat. Test Mgmt.
 - Mat. Mix Designs




14


14

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CMMS

- Mat. Lab. Mgmt.
- Mat. Inspector Mgmt.
- Mat. HMA & PCC Plant Insp. Mgmt.





15

15

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CMMS


- Replace Contract Payment Mgmt. System
- Workflow Enhancements





16

16

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CMMS

Electronic Approvals


Items Attachments Approval	
Position	Approval
Resident	<input checked="" type="checkbox"/>
Field Engineer	<input checked="" type="checkbox"/>
Construction Engineer	<input checked="" type="checkbox"/>
Project Imp Engineer	<input checked="" type="checkbox"/>
Regional Engineer	<input checked="" type="checkbox"/>




17

17

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CMMS


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18

18

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Summary Insurance Project Documents Subcontracting Final Review

Hyperlink to Contract: [Link]
 Contract No: 60059 [D] District: 4
 Route: IL 40
 Marked Route: IL 40
 Section: 401 RS
 County 1: Peoria County No. 1: 143
 County 2: County No. 2:
 County 3: County No. 3:
 Job Number: C8400000 PODI:
 Project Number: PRL-FOR-00659
 PPS Number:
 Description: Downturn

Resident Engineer/Tech: CBC Resident
 Phone Number:
 Supervising Field Engineer: CBC SFE
 Consultant or In-House Designer:

Prog. Schedule Recv Date: [Link]
 Prog. Schedule Appr Date: [Link] [D]
 Preconstruction Minutes Date: [Link] [D]
 Notice of Intent Required:
 Notice of Intent Processed Date: [Link]
 Notice of Termination Submitted Date: [Link]
 Notice of Termination Accepted Date: [Link]
 RR Insurance Required:

Letting Date: 03/09/2018 Item Number: 59
 Awarded Date: 3/29/2018
 Executed Date: 4/9/2018
 Prime Contractor No: 510000
 Prime Contractor Name: Brave Paving
 Address: 1501 W Bradley Ave Peoria IL 61625
 Bonding Company: Fidelity and Deposit Company of M

Awarded Value: \$4,044,715.36
 Additions: \$397,431.94
 Deductions: (\$175,140.00)
 Net Change: \$222,291.94
 Adjusted Contract Value: \$4,267,007.30
 Change %: 5.50%
 Authorization Count: 12
 Payment to Date: \$1,410,405.40
 Balance Remaining: \$2,856,601.90

DBE%:
 Trainees:
 HMA Adj:
 Steel Adj:
 Fuel Adj:

Contract Time Specification: Completion Date: [Link]
 Contract Working Days: Working Days Used: [Link]
 Contract Calendar Days:
 Contract Completion Date: 7/8/2019 [Link]
 Contract Completion Date via Calendar Days:
 Contract Start Date: 4/19/2018 [Link] Working Days Added: [Link] [D]
 Construction Start Date: 5/1/2018 [Link] Calendar Days Added: [Link] [D]
 Contract Suspended Date: 09/20/2019 [Link] Revised Contract Working Days: [Link]
 Contract Resumed Date: 05/20/2019 [Link] Revised Contract Completion Date: [Link]
 Diary Suspended Date: 05/20/2019 [Link] % Complete Based on Dollars: 33.05%
 Diary Resumed Date: 05/20/2019 [Link] % Complete Based on Time: 134.00%
 Significantly Completed Date: [Link] % Completed by Resident: 10.00%
 Punch List Completed Date: [Link] % Completed Date: 7/3/2019 [Link]
 Final Inspection Date: [Link] # of Pay Estimates Processed: 18
 Final Papers Received Date: [Link]
 Final Acceptance of Improvement Date: [Link]
 Fed Voucher Approved Date: 7/8/2020 [Link]

19

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Summary Insurance Project Documents Subcontracting Final Review

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Contractor Insurance

Contractor No: ST0000 Prime Contractor Name: Brave Paving
 Letting Date: 03/09/2018 Item No: 59 Final Acceptance of Improvement Date: [Link]
 Award Date: 03/29/2018 % Completed: 10.00% % Complete Date: 07/03/2019


General Liability - Policy Status: Blanket Certification [Link] Expiration Date: 12/12/2019 [Link]
 Automotive Liability - Policy Status: Individual Certification [Link] Expiration Date: 12/12/2019 [Link]
 Umbrella Liability - Policy Status: Blanket Certification [Link] Expiration Date: 12/12/2019 [Link]
 Workman's Compensation - Policy Status: Blanket Certification [Link] Expiration Date: 12/19/2019 [Link]

Railroad Insurance Information

Policy #	Railroad Company	Expiration Date	Approval Requested Date	Approval Receipt Date	RR Work Completed Date
BNSFCSXUP1	BNSFCSXUP	11/2/2019 [Link]	5/5/2019 [Link]	7/8/2019 [Link]	9/10/2019 [Link]

20

20



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Summary	Insurance	Project Documents	Subcontracting	Final Review
Create Date	Company Number	Subcontractor Name		
4/25/2019 8:19:16 AM	ST0002	Cougar Concrete Construction		
4/25/2019 8:19:16 AM	ST0005	Huskie Traffic Corp.		
4/25/2019 8:19:16 AM	ST0001	Illini Electric		
4/25/2019 8:36:35 AM	ST0006	Leatherneck Fence LLC		
4/25/2019 8:19:16 AM	ST0004	Panther Patching		
6/7/2019 9:24:32 AM	4914	Quality Saw & Seal, Inc.		
4/25/2019 8:19:16 AM	ST0003	Saluki Striping		

21

21




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Summary	Project Log	Search	Selected Date: 12/7/2019		Signed: <input type="checkbox"/> Report	Copy From Previous
Weather						
Date	Weather	Temp	Wind	Precipitation (inches)	Comments	
Sat 12/07/2019	Sunny	50	Calm	0.00		
Controlling Item						
Controlling Item	Working Days Charged	Workable Days	Comments			
HMA Paving		1.00				
Prime / Subcontractor's Summary						
Name	Hours Worked	Person(s) Working	Creator	Summary		
Breve Paving	0.00	0.00	JMann	No Work		
Huskie Traffic Corp.	4	4		Adjusted traffic control for winter stage.		

22

22



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Summary [Printing](#) [Results](#)

Awarded Value	\$4,948,715.33	% Complete based on Dollars:	53.65%
Additions	\$267,431.84	% Complete based on Time:	134.05%
Deductions	(\$175,148.83)	% Complete by Resident:	48.00%
Net Change	\$222,298.34	% Complete Date:	02/27/2019
Adjusted Contract Value	\$4,239,998.34	# of Pay Estimates Posted:	15
Change %	5.53%	Retained Dollar Amount:	\$0.00
Authorization Count	12	Comment:	
Amount Completed	\$1,778,871.97		
Payment to Date	\$1,470,405.48		

Details [Quantity Ledger](#) [Evidence of Inspection](#)

MQA: QUAL AND CERT


Acceptable EOI: - (LIST AND CERT AND MARK)

Actual EOI	Actual MQA	Test ID	Special EOI	Approval	Note	Docs	Approval by
CERT	CERT			Approved			[H] [D]

Approved
 Approved as exception
 Rejected

23

23



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Estimate Number	Creation Date	To Date	Status	Submit Date	Vouchered Date	Amount
0	05/15/2019	04/09/2018	Vouchered	05/15/2019	05/15/2019	\$125,688.94
1	05/15/2019	05/01/2018	Vouchered	05/15/2019	05/15/2019	\$14,763.25
2	05/15/2019	05/02/2018	Vouchered	05/15/2019	05/15/2019	\$8,326.50
3	05/15/2019	05/03/2018	Vouchered	05/15/2019	05/15/2019	\$6,024.54
4	05/15/2019	05/04/2018	Vouchered	05/15/2019	05/15/2019	\$37,524.54
5	05/15/2019	05/05/2018	Vouchered	05/15/2019	05/15/2019	\$29,610.00
6	05/15/2019	05/06/2018	Vouchered	05/15/2019	05/15/2019	\$59,850.00
7	05/15/2019	05/13/2018	Vouchered	05/15/2019	05/15/2019	\$3.00
8	05/15/2019	05/18/2018	Vouchered	05/15/2019	05/15/2019	\$2,419.20
9	05/16/2019	05/14/2018	Vouchered	05/16/2019	05/16/2019	\$685.00
10	05/20/2019	05/17/2019	Vouchered	05/20/2019	05/20/2019	\$25,163.25
11	05/20/2019	06/05/2019	Vouchered	06/06/2019	06/06/2019	(\$17,052.64)
12	07/03/2019	07/03/2019	Vouchered	07/03/2019	07/03/2019	\$9,219.93
13	07/03/2019	07/12/2019	Vouchered	07/12/2019	07/12/2019	\$1,060,768.96
14	08/01/2019	08/01/2019	Vouchered	08/16/2019	08/16/2019	\$41,896.31
15	09/26/2019	09/02/2019	Vouchered	09/26/2019	09/26/2019	\$0.00

24

24

The diagram features the Illinois Department of Transportation logo in the top left. In the center, the text "CMMS" is displayed. To the right of "CMMS" are three logos: the Illinois State Seal, the Illinois Asphalt Pavement Assn. (iapa) logo, and the Illinois Road and Transportation Builders Association logo. A large black arrow points from the right side of the diagram towards a larger, circular version of the Illinois Department of Transportation logo on the left. The number "25" is located in the bottom right corner of the slide.

25

The slide features the Illinois Department of Transportation logo in the top left. On the left side is a cover image for the "Illinois Construction Manual" dated "January 2020", showing a construction site with a large yellow machine. To the right of the cover image, the text "e-Ticket Information Section 102.01-5" is displayed. Below this text is the URL <http://www.idot.illinois.gov/>. The number "26" is located in the bottom right corner of the slide.

26



27

27