INDIANA TRANSPORTATION TEAM

PARTNERING CONFERENCE Dec. 21, 2023

Indianapolis Convention Center 500 Ballroom

WiFi Code SSID: ITTShindig Password: 3-Legs!! Visit the ITT website



ITT PARTNERING CONFERENCE

December 21, 2023 Indianapolis Convention Center 100 S. Capitol Ave., Indianapolis, IN 46225

AGENDA

8:00-8:45	Registration & Networking								
8:45-9:00	Special Welcome from Indiana Governor Eric J. Holcomb								
9:00-9:15	Meet Your Table What's your favorite Indiana road or bridge, and why?								
9:15-10:30	Progress Reflection	Richard Hedgecock, ICI							
10:30-10:45	Break								
10:45-11:45	District Presentations Crawfordsville: Decision-Making Process For Construction Ma Fort Wayne: Workforce Retention & Recruiting Greenfield: Stage 2 Constructability Review	anagement Personnel							
11:45-1:30	Lunch in District Rooms—assigned on name badges District Leaders to Open Discussion on Future Topics for	District Collaboration							
1:30-2:45	District Presentations LaPorte: Clarify Specification Interpretation Seymour: Knowledge Transfer Vincennes: Young Professionals, Materials Forecasting, Utility	y Improvements							
2:45-3:00	Priority Polling	Beth Bauer, ACEC							
3:00-3:30	Final Session	Roland Fegan, INDOT							
3:30-5:00	Happy Hour Opens 500 Reception Room Drink tickets for the happy hour are in your name badge								

THANK YOU TO OUR SPONSORS!



































Activities initiated in 2022 through District and Statewide meetings.

Activities initiated in 2023 through District and Statewide meetings.

2022 District Objectives



2023 District Objectives



INDIANA TRANSPORTATION TEAM STEERING COMMITTEE AS OF 08/25/2023

STATEWIDE			
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We, the members of the American Council of Engineering Companies of Indiana, Indiana Constructors Inc. and the Indiana Department of Transportation, through cooperation and collaboration, open and honest communication and trust, promise to strive for the safest, highest quality and best maintained transportation network in the country on behalf of all Hoosiers. In doing so, we promise to approach each and every problem as a teammate of the Indiana Transportation Team to foster and maintain a spirit of cooperation to serve Hoosiers and the traveling public.

We will continue to earn trust in each other while maintaining our membership on the Indiana Transportation Team by adhering to the following principles:

- Remembering our compensation always comes from the taxpayer.
- Endeavoring to make the most appropriate decisions while considering safety, constructability and general public welfare first and foremost.
- Believing that each problem has three teammates working towards a solution.
- Striving to make decisions at the lowest levels possible.
- Respecting the chain of command and elevating all disputes together in a transparent manner.
- Keeping in mind that INDOT, the State of Indiana and all Hoosiers are our customers.
- Enjoying professional relationships and having fun.



of Indiana





WHAT IS PARTNERING?

Partnering is simply a way of conducting business in which two or more organizations make long-term commitments to achieve mutual goals. This sometimes requires changing traditional adversarial relationships into team-based relationships. Partnering promotes open communication, trust, understanding, and teamwork among participants.

The principles of Partnering are simple: participants must believe that each team member is honest and has intentions of doing a good job and that an effective team begins with respect and results in win-win relationships.

Partnering Communication Tips:

Seek to understand the problem – Ask probing questions to try to flush out all aspects of the problem, no matter how angry or hostile the other parties seem. Don't become defensive; you are trying to understand the problem and the assumptions of the other stake-holders. This will give you a clearer picture of what the real issues are.

Don't make it personal – Take an objective point of view – don't become engaged in the battle. Take the role of negotiator or fact finder. Remember, it's a project issue, and your success will depend on your ability to not take things personally.

Don't seek to blame – Instead of blame, seek solutions and understanding. People generally act logically. Your job is to find the logic behind their actions. No project problem was ever solved by blaming someone. Remember, you are all in the project together – you will succeed or fail together. Agree on the problem – Work to gain agreement on what the problem is before you attempt to find solutions. If you don't agree on what the problem is, you can not agree on a solution.

INDIANA TRANSPORTATION TEAM CHARTER

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PARTNERING

for Small and Medium Sized Contracts







TOP 10 STEPS FOR EFFECTIVE COMMUNICATION

- OI > COMMUNICATE. Schedule specific times for discussing job issues to assure that regular communication is taking place.
 OI > TRUST YOUR PARTNERS. Trust that others
- TRUST YOUR PARTNERS. Trust that others will meet their responsibilities in a quality way.

МО

 EXPECT QUALITY. Clearly communicate your quality expectations and be prepared to talk with your partners if expectations aren't being met.

DETERMINE AN ISSUE RESOLUTION CHAIN-OF-COMMAND. Define the

0 4 process, giving each participant in the process time to seek resolution and advance the issue to the next level if not resolved.

 SEEK WIN-WIN SOLUTIONS. Each partner must work hard to understand the perspective of others and seek solutions that are fair for all.

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LISTEN AND QUESTION. The key to understanding other partners' perspectives is to listen closely and ask questions.

90

 INVOLVE ALL KEY PARTNERS. Different matters may require the involvement of different portners. All of those significantly.

0

- different partners. All of those significantly impacted by a matter should be part of the solution identification process.
 - TAKE OWNERSHIP IN THE TEAM'S GOALS. Be willing to help your partners

80

achieve their goals.

 SEEK HELP: Contractor personnel should look to the home office for help.

60

9

REFERENCE THE PARTNERING HANDBOOK OFTEN. Further tips on effective partnering relationships can be found

in the handbook

PARTNERING ROLES AND RESPONSIBILITIES

Partnering exists on every project, whether formalized or not, but regardless of the contract arrangement, these roles and responsibilities should be modeled by project leadership on every job.





DECISION-MAKING PROCESS FOR CONSTRUCTION MANAGEMENT PERSONNEL CRAWFORDSVILLE DISTRICT



Decision-Making Process for Construction Management Personnel

Construction projects are complex endeavors that involve a multitude of decisions at various stages, from planning and design to execution and delivery. These decisions significantly impact the project's outcome, including its cost, schedule, quality, and safety. In this white paper, we discuss the decision-making steps and tools that can help construction project managers and stakeholders make informed choices to achieve project success. This white paper is intended to be used in conjunction with the Decision Rights Matrix.

1. The first step in the process occurs prior to construction. During the preconstruction conference, the need for timely decisions and the personnel authorized to make decisions should be discussed. The Preconstruction Key Personnel Form is to be filled out and distributed to everyone.

2. The Importance of Timely Decision-Making in Construction Projects

Effective decision-making at the lowest level of construction is critical for several reasons:

- **2.1 Budget Control:** Decisions impact project costs directly. Poor decisions can lead to cost overruns, while informed/timely choices can help optimize budgets.
- **2.2 Schedule Management:** Timely decisions keep projects on schedule. Delays due to indecision can result in missed deadlines. Decisions should be made at the lowest level to maintain the schedule. Reference the matrix for the decision time -rame before escalation at each level.
- 2.3 Well-informed choices lead to better quality outcomes.
- **2.4 Risk Management/Mitigation:** Proper and timely decision-making can mitigate risks and prevent accidents, delays, and legal issues.

3. Decision-Making Steps in Construction Project Management

3.1 Define the Issue/Opportunity

- Be proactive Alert your counterpart of a potential issue that is foreseen early, preferably face-to-face even if details are not known or remain unclear.
- Reference the matrix for typical issue types and the roles and time frames for each member of the decision-making team.
- Follow up and clearly communicate the issue or opportunity that requires a decision, verbally and in writing. Notify each person that should be involved, and request input as needed.
- Offer solutions and potential consequences of those decisions.
- Define the project's objectives and limitations related to the decision (budget, schedule, etc.)

3.2 Gather and Review Information

- Collect data and information relevant to the problem. Contact appropriate stakeholder(s) as needed for information.
- Review relevant plans, specifications, and contract details.
- Consider historical project data, industry standards, and construction best practices when compiling information.

3.3 Reference the Decision-Making Matrix

- Determine if the decision falls within your level of responsibility for making the decision.
- Escalate the decision to the appropriate tier within the time frame defined in the decision matrix.

3.4 Identify Stakeholder(s)

- Identify stakeholders involved in or affected by the decision, utilizing the decision matrix and decision tree.
- Understand the interests, concerns, and expectations of all stakeholders.
- Involve key stakeholders early to assist in refining the issue.

3.5 Generate Solution(s)

- Generate potential solutions or alternatives to address the issue or opportunity.
- Include key stakeholders in the development of possible solutions.
- Encourage diverse viewpoints from internal and external team members when developing solutions.
- Keep project personnel at all levels aware of the possible solutions and remain receptive to suggestions for issue resolution.

3.6 Evaluate Alternative Solution(s)

- Use decision criteria (decision matrix, previous project experience, mentors) to assess each alternative.
- Consider factors like cost, schedule, quality, and risk.

3.7 Make the Decision

- Select the solution that best supports project objectives and stakeholder interests.
- Document the decision-making process and reasoning.
- Make the rank or score alternatives based on these criteria.
- Make decision at the lowest level possible.

3.8 Implement the Decision

- Develop an action plan to execute the chosen alternative.
- Assign necessary resources and responsibilities.
- Communicate the decision to stakeholders.

3.9 Monitor and Review

- Continuously assess the implementation of the decision.
- Adjust as needed to ensure the desired outcome/effectiveness of the decision chosen.
- Keep stakeholders informed of progress.

4. Challenges in Construction Decision-Making

- **4.1 Incomplete Information:** Lack of data and communication can hinder informed decision-making and adversely affect the time it takes to reach resolution.
- **4.2 Complex Stakeholder Relationships:** Differing interests among stakeholders can complicate decisions. Effective communication and conflict resolution are essential.
 - Work to build trust among team members throughout the project.
 - Keep communication open and honest at all times.
- **4.3 External Factors:** Changes in regulations, economic conditions, and unexpected events can disrupt decisions. Maintain flexibility and adaptability.
 - INDOT communicates much of this information through their website, memorandums, and other means. Review INDOT communications frequently to remain up to date.
- **4.4 Project Uncertainty:** Construction projects often involve unpredictable market factors. Develop contingency plans to address unforeseen challenges.

5. Conclusion

In construction project management, decisions play a pivotal role in determining project success. Following a structured decision-making process, using appropriate tools and techniques, and being aware of common challenges are essential for making informed and effective decisions. By prioritizing sound decision-making, construction professionals can improve project outcomes, control costs, and enhance stakeholder satisfaction.

Decision Rights Matrix

		Level		Field			Field	Manage	ement	Area Management			
		Change Or	der Cost Authority		\$20,000			\$20,000			\$250,000)	
		Change Orc	ler Time Authority				10 0	alendar	days	50 C	alendar	days	
		Decision Time	before Escalation	0-1 days				1-5 days		5-10 days			
R = Recommend	Person(s) who	recommend the s	olution/options					t	er		er		
A = Agree	Person(s) who	must agree to the	solution/options		c	ΒE	leer	enden	Manag	L.	Manag		
P = Perform	Person(s) who i	implement the so	ution/options	spector	oremar	sistant	t Engir	uperint	oject l	inginee	oject l		
l = Input	Person(s) provi	ding input to the s	olution/options	- HT/In	actor Fe	- PS/A	- Projec	actor Si	actor PI	- Area E	actor PI	older	
D = Decide	Person(s) who) who make the final decision			Contrac		logni	Contra	Contra	INDO Contr Place		Placeł	
Issue Type	Issue Sp	pecifics	Priority Level										
	Major utility located on the	d on site that is not plans	н				RAPI	RI	R A	A D			
Utility Conflict	Utlity in conflict that cle	: was deemed to be ar	М				RAPI	RI	R A	A D			
	Contractor refuses utility/IUR	to dig within 2' of C Dispute	Μ				A P D	RI		A D			
	Minor detail om plans/	nitted from the specs	L	R A P I D	RI	RAPI	APID	RI	RAPI	A D			
Design Items	Pay item omitted f	from the contract	н	R A	R A	RPD	RPD	A D	A D	A D	A D		
	Quantity bust that loop	eads to major item run	М				RAPI	RI	R A	A D	١D		
Change Order	Contractor submitte no back	ed CO pricing with up info	М	R A P I D	RI	RAPI	APID	RI	RAPI	A D	R P		
Change Order	Contractor pricing ex in INDOT	kceeds unit average database	М	R A	R A	R P D	RPD	A D	A D	IA	RP		
	Service Point - No avaialbe at det	o power service ailed location	н	R A P I D	RI	RAPI	APID	RI	RAPI	A D			
Traffic Items	Maintenance of Tra	offic items / details	н										
	Contractor want materials o	to use alternate r methods	М	R A	R A	RPD	RPD	A D	A D	I			
	Areas of failure that require	won't pass testing ments	М	R A P I D	RI	RAPI	APID	RI	RAPI	A D	R P		
Geotechnical Items	Compacted agg. n testing requ	ot meeting LWD uirements	М	R A	R A	RPD	RPD	A D	A D	A D	R P		
	Soils not meeting [OCP requirements	М	R A P I D	RI	RAPI	APID	RI	RAPI	A D	RP		
	Proof roll failures - n remedy in Geote	o clear direction on echnical Report	М	R A	R A	RPD	RPD	A D	A D	A D	R P		
	Piling overrunning	planned quantity	М	R A	R A	R P D	RPD	A D	A D	A D	RP		
	Clearing not comple timefr	te within allowable rame	н	R A P I D	RI	RAPI	APID	RI	RAPI	A D	R P		
	Parcels not available	e at time of letting	н	R A	R A	RPD	RPD	A D	A D	A D	RP		
Right of Way	Property owner i promises made	issues - claim of during buying	М	R A P I D	RI	RAPI	APID	RI	RAPI	A D	RP		
	Construction lim	its exceed ROW	н	R A	R A	RPD	RPD	A D	A D	A D	RP		

Additional Notes:

This Decision Matrix should be modified to fit the needs of the project. Additional Issues and/or contact persons can be added as necessary The INDOT CPM Project Manager will include the INDOT Asset Owner as necessary for recommendations and guidance

The INDOT CPM Project Manager is the owner of the contract and should be include in all team correspondence

Legend - Priority Level: L = Low priority level

M = Medium priority level

H = High priority level

Decision Rights Matrix

			Level	Dis	trict Mg	gmt	Exec	utive N	lgmt								
		Change Or	der Cost Authority	1	\$750,000)	\$2	2,000,000) +								
		Change Ord	ler Time Authority	100	Calendar	days	200 +	Calenda	r days			_					
		Decision Time	e before Escalation							_		Ex	ternal I	Resource	es		
R = Recommend	Person(s) who	recommend the s	olution/options	ion	ıager		c	ruction		- Capita		ug		SI	gineer	ineer	
A = Agree	Person(s) who	must agree to the	solution/options	struct	al Mar		ructio	Consti	hip	lager		/Desi		ratior	fic En	al Eng	
P = Perform	Person(s) who	implement the so	lution/options	ict Con	Regiona		e Consti	ctor of (Owners tive	ect Mar ngmt	dinator	Record 1ager		ict Ope	cit Traf	technic	Agency
l = Input	Person(s) prov	viding input to the s	solution/options	l Distr	actor	nolder	r State eer	l Dire	actor senta	r Proj am M	Coor	ner of ct Mai	nolder	r Distı eer	r Distı	l Geot	Public
D = Decide	Person(s) who	make the final decision		INDO [.] Direct	Contr	Placel	INDO [.] Engin	INDO'	Contr Repre	Progr	Utility	Desig	Placel	INDO [.] Engin	.ODNI	.00NI	Local
Issue Type	Issue S	pecifics	Priority Level														
	Major utility locate on the	ed on site that is not e plans	н	A D	١D		A D	١D		А	A P D	I					A D
Utility Conflict	Utlity in conflict that cl	at was deemed to be ear	М	A D	I D		A D	١D		A	APD	I					A D
	Contractor refuse utility/IU	s to dig within 2' of RC Dispute	М								А						А
	Minor detail o plans	mitted from the s/specs	L														А
Design Items	Pay item omitted	from the contract	н	A D	A D		A D	A D	A D	А		APID					А
	Quantity bust that ove	leads to major item errun	М							А		T					А
Change Order	Contractor submit no bac	ted CO pricing with kup info	М														А
change ofder	Contractor pricing e in INDOT	exceeds unit average database	М							А							А
	Service Point - I avaialbe at de	No power service etailed location	н							А				RI	RI		A
Traffic Items	Maintenance of T	raffic items / details	н														
	Contractor wan materials	t to use alternate or methods	М							А		APID		RI	RI		А
	Areas of failure that requir	at won't pass testing rements	М							А		APID				RAID	
	Compacted agg. testing re	not meeting LWD quirements	М							A		APID				RAID	
Geotechnical Items	Soils not meeting	DCP requirements	М							А		APID				RAID	
Items	Proof roll failures - remedy in Geo	no clear direction on technical Report	М							А		APID				RAID	
	Piling overrunnin	g planned quantity	М							А		APID				RAID	А
	Clearing not compl time	ete within allowable frame	н	A D			A D										А
Right of Wow	Parcels not availab	ble at time of letting	н	A D			A D			А		APID					
NIGHT OF WAY	Property owner promises mad	r issues - claim of e during buying	М									APID					А
	Construction lin	nits exceed ROW	н							А		APID					

Additional Notes:

This Decision Matrix should be modified to fit the needs of the project. Additic The INDOT CPM Project Manager will include the INDOT Asset Owner as neces

The INDOT CPM Project Manager is the owner of the contract and should be in Legend - Priority Level: L = Low priority level

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WORKFORCE RETENTION & RECRUITING FORT WAYNE DISTRICT



Defining the Problem

 Indiana Transportation Industry INDOT 3,600 INDOT employees 	91,000 out of 3,100,000 in Indiana 3 % of labor force
 Indiana Constructors, Inc. (ICI) 83,000 contractor employees 	
 American Council of Engineering C 4,500 consultant employees 	Companies (ACEC)

Matthew Nance, director of the Indiana Construction Roundtable Foundation, said in a June 2023 interview, "Our best projection is that Indiana will need 275,000 construction workers by the year 2026." To accomplish this, an additional workforce of 110,000 needs to be found, trained, and added to the current 165,000 individuals in the overall construction industry. Transportation construction is a sizable portion of this number.

Berggoetz, Barb. "Construction industry educates K-12 students about building trades in effort to close job gap." Indianapolis Business Journal 02 Jun 2023. <https://www.ibj.com/articles/starting-young-2>. In July 2023, a survey gathered feedback on how to improve retention and recruit new employees to the Indiana transportation construction industry.

The full paper of survey results and analysis can be

found at the ITT website.



The easy way to increase your workforce is to hire more people. But what do you do if there are no more people?

The demographics for Indiana show that population growth is plateauing. In fact, when we compare the 2023 college graduating class (high school class of 2019) with this year's new group of kindergarteners (high school class of 2037), Indiana is projected to see a decrease of 7% in the available work force.

Bransberger, Peace, Colleen Falkenstern, and Patrick Lane. Knocking at the College Door: Projections of High School Graduates, 10th Edition. Western Interstate Commission for Higher Education, Dec 2020. <https://knocking.wiche.edu/>.





Addressing INDOT Employees Concerns



BENEFITS Total Contractor Consultant O Consultant D Consultant Consultant Consultant D Consultant Cons

When asked what brought you to the industry, while wages were a detriment, benefits were cited as a good reason to join INDOT. Regardless of how the questions were worded, wages is the obvious element that restricts recruiting and retention for INDOT. As one anonymous INDOT response succinctly stated, "I don't make enough money."



What can INDOT do to emphasis the positive aspects of the entire compensation package of wages, benefits, holidays, etc.?



Encouraging Contractor Growth



"Lost a few people due to work from home. How do you work from home with a construction company!?" – Anonymous Contractor

Given that many contractors mentioned a lack of work / life balance, long hours, and stress, how can contractors improve this aspect?



Promoting Consultant Passion

Our industry needs to engage students in college, high school, and even earlier. STEM (science, technology, engineering, and math) is a major focus in education, and we need to include the transportation construction industry specifically. We need to market and mentor these programs to encourage interest in the transportation construction industry. In fact, our "threelegged ITT stool", in relation to this topic, may need to a be a "four-legged chair" with educators a part of the solution.

"For engineers, engage people earlier than when they are making their decision about a career. This usually happens when they are picking college, so make civil engineering and transportation and infrastructure important to them. Tell the story about building things. About how their work can help make their community a better place to live. This sounds like a PR campaign, so maybe that is needed in Indiana schools and communities." – Anonymous Consultant

"We can't rely on traditional methods, i.e., word of mouth. We have to effectively tell our story to high school kids." – Anonymous Contractor



Programs do exist to encourage and mentor students. Future City, bridge building competitions, Canstruction, vocational construction programs such as at Garrett High School and Arcadia's Hamilton Heights High School. But many of these programs are not widely known, even by those in the industry.

Would you recommend your own children enter this industry? How can we encourage the younger generation to enter the profession?

Workforce Development . Training Matrix

Current/Standard Industry Training	EC CIVI	U-T rears		Cibat C-L	5+ rears	Resource
	INDUI	Contractor C	onsultant	INDUI Contractor Consultan	INDUI Contractor Consulta	
CPR/First Aid	×	×	×			<u>Red Cross Training Take a Class Red Cross</u>
Certified Technician	×		×			https://www.in.gov/indot/current-programs/certified-technician-program/
OSHA 10		×	×			OSHA 10-Hour Training Courses Online - OSHA.com
Stormwater Quality Manager Level 1	×	×	×			https://www.in.gov/indot/engineering/environmental-services/storm-water/construction-storm-water-management-training/
American Concrete Institution		×	×			Certification Programs (concrete.org)
INDOT Qualified Technician	×		×			https://www.in.gov/indot/doing-business-with-indot/contractorsconstruction/division-of-materials-and-tests/
ICI's Work in Roads Initiative		×				https://workinroads.org/
IDOE Civil Construction Pathway						https://www.in.gov/indot/doing-business-with-indot/equity-initiative-services/external-workforce-programming/civil-construction-pathways-fc
ACEC's National Engineers Week Outreach	×		×			https://www.acecindiana.org/page/EWeek
NCEES Engineer in Training	×	×	×			Home NCEES
Certified HMA Field Supervisor				×		CertifiedHottMixAsphaltFieldSupervisorPolicy.pdf (in.gov)
OSHA 30				××		OSHA 30-Hour Training Courses Online - OSHA.com
AGC - Construction Supervision Fundamentals				×		Construction Supervision Fundamentals Associated General Contractors of America (agc.org)
ATSSA Traffic Control Supervisor				×		https://atssa.com/Training/Certification
Stormwater Quality Manager Level 2				×		https://www.in.gov/indot/engineering/environmental-services/storm-water/construction-storm-water-management-training/
Certified Erosion, Sediment, & Storm Water Inspector						
(CESSWI)				× × ×		CESSWI - EnviroCert
INDOT Utility Coordination Certification				×		INDOT: Doing Business with INDOT: Utilities
INDOT Railroad Coordination Certification				×		INDOT: Doing Business with INDOT: Railroads
INDOT CE/NEPA Training				×		https://secure.in.gov/indot/engineering/environmental-services/environmental-services-training-calendar/
INDOT Pavement Design				×		
ACEC Emerging Professionals Events (<35 yrs old)				×		https://www.nhifhwa.dot.gov/
INDOT Hydraulics					××	INDOT: Engineering: Hydraulic Engineering
Indiana Tech CM Certificate					×	Construction Management, Certificate - Academics (indianatech.edu)
AGC - Project Manager Development					×	Project Manager Development Program - AGC Edge
Project Management Professional (PMP) Cert.					× × ×	Project Management Professional (PMP) [®] Certification PMI
Indiana Constructors Leadership Institute - Future						
Leaders					×	<u>Leadership Institute – Indiana Constructors, Inc.</u>
Professional Engineer License					× × ×	Home NCEES
Certified Professional in Erosion & Sediment Control						
(CPESC)					××××	CPESC - EnviroCert
ACEC Engineering Leadership Program (8-13 years exp.)					× :	https://www.acecindiana.org/page/Leadership
ACEC Pinnacle Leadership Series (13+ vears exp.)					×	https://www.arecindiana.org/nage/Dinnacle

Succession Planning Design/construction crosstraining (designers and contractors) Additional Industry Training to discuss/develop/normalize Design software (Civil 3D, AutoCAD, etc.) General plan reading Networking skills/opportunities Soft Skills

Scan QR Code to Access Document Electronically with Links:





FULL 46- PAGE HANDOUT AVAILABLE ONLINE:





STAGE 2 CONSTRUCTABILITY REVIEW GREENFIELD DISTRICT



Stage 2 Constructability Review

- 1.) Create new GovDelivery subscription subtopic specifically for Stage 2 Constructability Reviews, under "Doing Business with INDOT" topic.
- 2.) Automate dissemination of monthly Stage 2 Constructability Review notifications via GovDelivery or delegate task to ensure regular frequency.
- 3.) Update Stage 2 Constructability Review notification template
 - a. Questions about Stage 2 Constructability Reviews should be directed to an email other than <u>ConstructionLetting@indot.in.gov</u>.
 - b. Clarify process for reviewing published files and returning Stage 2 Constructability Review comments.
- 4.) Add capability to filter first column of Eighteen Month Letting List Search dashboard (<u>https://entapps.indot.in.gov/lettings/Dashboard</u>) to filter projects with published Stage 2 Constructability Review files from those without published files available for review.
- 5.) Link the DES number in the second column of the Eighteen Month Letting List Search dashboard (<u>https://entapps.indot.in.gov/lettings/Dashboard</u>) to the SPMS DES map location for that specific project.
- 6.) Establish consistent navigation between Eighteen Month Letting List Search dashboard (<u>https://entapps.indot.in.gov/lettings/Dashboard</u>) and other INDOT Contracts pages <u>https://www.in.gov/indot/doing-business-with-indot/home/contracts/</u>. Add a tab to the Contract Letting Information page (<u>https://www.in.gov/indot/doing-business-with-indot/home/contracts/</u>) navigating to the Eighteen Month Letting List Search dashboard <u>https://www.in.gov/indot/doing-business-with-indot/home/contracts/</u>.
- 7.) Add Stage 2 Constructability Review Comment Form to Design Manual Editable Documents page <u>https://www.in.gov/dot/div/contracts/design/dmforms/</u> or make available directly from Eighteen Month Letting List Search dashboard (<u>https://entapps.indot.in.gov/lettings/Dashboard</u>).
- 8.) Modify Eighteen Month Letting List Search dashboard (<u>https://entapps.indot.in.gov/lettings/Dashboard</u>) to return Stage 2 Constructability Review forms directly to project Managers and/or Construction Project/Area Engineers pulled from SPMS.

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CLARIFY SPECIFICATION INTERPRETATION LAPORTE DISTRICT



Clarify Specification Interpretation

(ITT LaPorte District Steering Committee)

A common source of dispute during construction is interpretation and application of the specifications. Some examples of this include using a standard spec and pay item for a non-standard situation, the designer's intent being unclear, and inconsistent interpretation of the specs between districts, among others. The topic of Clarify Specification Interpretation is not clear in itself as to what is the issue to be resolved. There are multiple directions that could be considered: 1) evaluate the effectiveness of the current spec interpretation process, 2) attempting to revise specific specifications that are frequently disputed, 3) standardizing spec interpretations across all districts, or 4) looking at ways to avoid misinterpretation before the project gets to construction.

As part of the LaPorte District Steering Committee's approach to this topic, a survey was distributed across the Laporte District partners with questions meant to probe the surface of experiences with issues related to specifications and interpretation of the specifications. The Committee was looking for common issues to help narrow the focus of the initiative. In addition to the survey, the Committee held two district events to further explore the findings of the survey, and have open table discussions. The two events were well attended by the three branches represented in ITT, and provided an opportunity for positive discussion related to the topic, as well as relationship building and networking.

First and foremost, it is not the intention of this initiative to address individual specification clarifications, change the current interpretation process and hierarchy, or attempt to standardize the interpretations across districts. The LaPorte District Steering Committee has developed three ideas intended to preemptively address potential specification uncertainties during the bidding process and provide resource for information related to pay items. The three ideas are as follows:

- 1. Changes to the Q&A timeline during the bidding process
- 2. Special designation on pay items that have unique considerations
- 3. Tool kit to centralize pay item information

A more detailed description of these ideas is as follows:

Changes to the Q&A Timeline:

The recommended change is to require questions from the contractor at least 10 days prior to the letting date. Currently, contractor questions are to be submitted 5 days ahead of letting; however, any plan revisions from the designer must be submitted to INDOT no later than 7 days prior to letting. Questions received late in the bidding process do not provide sufficient time for INDOT and the designer to respond and make revisions needed. In some cases may result in the questions being unanswered or remaining unclear. By advancing the deadline for questions, the intention is that the contractors will develop and submit questions earlier in the process, providing that extra time for the designer and INDOT to respond, and hopefully reducing uncertainties for the contractor.

Implementation of this recommendation is anticipated to require a lower level of effort and could be tried on a select number of projects or letting dates prior to being fully implemented.

Special Designation on Pay Items with Unique Considerations:

This recommendation is to add a special character or designation to pay items that may have a unique consideration for the contractor. INDOT prefers designers to use standard pay items whenever possible; however there are situations that a unique characteristic of that item is intended. Typically, this would be described in a Unique Special Provision (USP), and this would continue to be the case, but the Recurring Special Provisions (RSP) and USP's can be a lengthy document with a lot of information for the contractor to consider as they develop their bids. Furthermore, contractors have a limited amount of time to review the bidding documents, and often are developing bids for multiple projects on a single letting. Providing an asterisk or other designation to the pay item list would alert the contractor of a potential unique characteristic for that pay item during the bidding process.

Implementation of this recommendation is anticipated to require a moderate level of effort. An amendment to the INDOT Cost Estimating System (CES) process could be developed by INDOT to be used by designers to note which pay items would receive the special designation. Then INDOT would include the designation on the contract pay item list. A defined policy and guidelines for when the designation is appropriate would need to be developed. It would also need to be recognized by the contractor that the designation is intended to help the contractor in the development of the bid, but does not relieve the contractor of the responsibility to understand the terms of the construction documents at the time of bid, regardless of whether the pay item has a special designation.

Took Kit for Pay Items:

A comment received in discussions during the LaPorte District ITT events was that there is significant information pertaining to pay items on the INDOT website, but it is not all organized in a singular, searchable location. This includes standard specifications, standard drawings, RSP's, design memos, the Indiana Design Manual, construction memos, etc. Developing an online Tool Kit to link the information to each individual pay item would benefit the designers and contractors by centralizing access to this information. The concept is to provide a pay item list with hyperlinks connected to the various documents that apply to that respective pay item.

Implementation of this tool kit idea is anticipated to require a substantial amount of effort in assembling the hyperlinks to each resource and pay item. Because of this, it is recognized that this concept may be infeasible in the short term, but perhaps could be developed over the long term, especially as the INDOT website goes through its periodic updates.

Summary

Tackling the topic of Clarifying Specification Interpretation was initially difficult to identify the specific issues to be addressed. In reality, there will always be some level of interpretation required, and all parties will not always agree on the interpretation. INDOT has a policy in place for how to address those disagreements through the claims process, when necessary. However, as the LaPorte Steering Committee continued on this topic and discussed with industry colleagues, the approach was taken to look for ways to proactively address potential misunderstandings or considerations that could easily be missed during the bidding process but could have an impact on how a pay item is bid. The three ideas presented will require varying levels of effort to implement. It is the LaPorte District ITT Steering Committee's recommendation for INDOT to review these ideas and determine if they could be developed further for possible implementation.



KNOWLEDGE TRANSFER SEYMOUR DISTRICT



SEYMOUR DISTRICT **KNOWLEDGE TRANSFER**

ITT is developing a video catalog series to share stories of lessons learned, partnering, overcoming technical obstacles, best practices, etc. to help share knowledge and experiences across the industry. Please take a moment to reflect. Is there a story you know would be beneficial to share throughout the industry or a reoccurring problem you are curious if someone may have solved?

1. Please express in a few words the subject matter you are about to relate (i.e. Interstate Pavement Patching).

2. In a few sentences (2-4), tell the story in a short narrative.

3. Subject Ma	atter Reference		
O ACEC			Scan QR code to complete survey online:
Name:			
Company: _			
Email:			
Email:			



YOUNG PROFESSIONALS, MATERIALS FORECASTING, UTILITY IMPROVEMENTS VINCENNES DISTRICT



ITT Southwest Young Professionals Group



ITT's Southwest Team was excited to pilot a young professional's group in 2023. This group saw over 35 individuals from INDOT, consulting, and contracting come together to visit infrastructure points of interest in southwest Indiana and attend technical sessions that deepened industry knowledge. Tours included the Evansville Regional Airport and Port of Indiana, Posey County, while technical sessions included a roundtable on the US 41 Pigeon Creek Bridge hit and repair, introduction to the Evansville Metropolitan Planning Organization, and a look ahead at what the challenges the transportation industry will face in the coming year. We look forward to an exciting 2024 as we continue to grow this program!

GOAL

Improve availability of materials by communicating needs

earlier to contractors and suppliers in an accessible format



INSPIRATION



HMA Pay Factors and Comparison





DEVELOPMENT PROCESS

o Team of suppliers, contractors, designers, and INDOT

o Discussed needs, wants, and dreams

Coordinated with
 INDOT Contracts
 INDOT Legal
 INDOT Materials & Test
 INDOT Standards
 INDOT IT



WHAT IT WILL BE

o Quantities per pay item

- Filter by:
 - Spec section
 - District
 - County
 - Letting year

WHAT IT WILL BE

Indicate Development level of source data (ex. Stage 3)

- Data display concepts:
 - Tabular
 - Histogram over time
 - Graphical by geography
 - "Heat" map across counties

WHAT IT WILL NOT BE

o Data analytics

• Different source for new product approval info

o Different source for new Standard info

NEXT STEPS

o Include project in INDOT IT development cycle

o Publish to the ITT community



UTILITY LONG TERM IMPROVEMENTS

- Updating the Utility Authorized Representative List
 - An updated list is anticipated to be available the end of 2023
- Implementing SUE and Utility As-Built Requirements
- Evaluating SUE Decision Making Points
- Education Outreach to Colleges & Universities
- Addressing Utility Relocations Outside Construction Limits



UTILITY SHORT TERM IMPROVEMENTS

- Renewed emphasis with respect to utility partnership
- Shift of focus from relocation to accommodation in design
- Implementation of regional utility summits



REGIONAL ITT UTILITY SUMMIT

- Area Engineer
 - \circ Welcome Address
 - $\circ\,$ Introductions around the room
 - o Reminder about Authorized Representative List
 - Begin passing around sign-in sheet (have section for utilities to update authorized rep if needed).
- Project Manager
 - $_{\rm O}$ Short presentation on the goal of the meeting.
 - Statement of intent to partner with utilities to deliver projects with minimal impacts to their facilities, and to make each other aware of planned improvements from both ends.
 - Mention of accomplishments of the ITT.
- Utility Engineer
 - Brief presentation of INDOT's Utility Coordination process.
 - O Update on efforts to improve the coordination process earlier in project life cycle.

- Project Manager and Scoping Engineer
 - Share GIS map locations for highlighted projects.
 - Scoping elaborates on proposed work, as well as highlighting potential utility risk.
- Short term projects receive special attention (preletting jobs). Utility Coordinators for these projects are invited to share about anticipated conflicts and lessons learned.
 - Utility Representatives
 - o Discussion of planned improvements.
 - Highlight foreseen possibilities for conflict with INDOT projects or assets.
 - Open Floor Discussion
 - o Challenges posed by the new BABA restrictions,
- and discussion of the new waivers.
 - o Particular Utility challenges.
- Suggestions for improvement and other feedback.
 - Adjournment



Regional ITT Utility Summit

- Area Engineer
 - Welcome Address
 - o Introductions around the room
 - o Reminder about Authorized Representative List
 - Begin passing around sign-in sheet (have section for utilities to update authorized rep if needed).
- Project Manager
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