

PROJECT DELIVERY ACADEMY

MODULE 5: PROJECT ADVERTISING AND CONSTRUCTION

DISTRICT CONSTRUCTION (District Coordination)

ARIZONA
— DEPARTMENT OF —
TRANSPORTATION

Presented by:
Andrew Roth - Assistant. District Engineer
Northwest District



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Kingman Offices

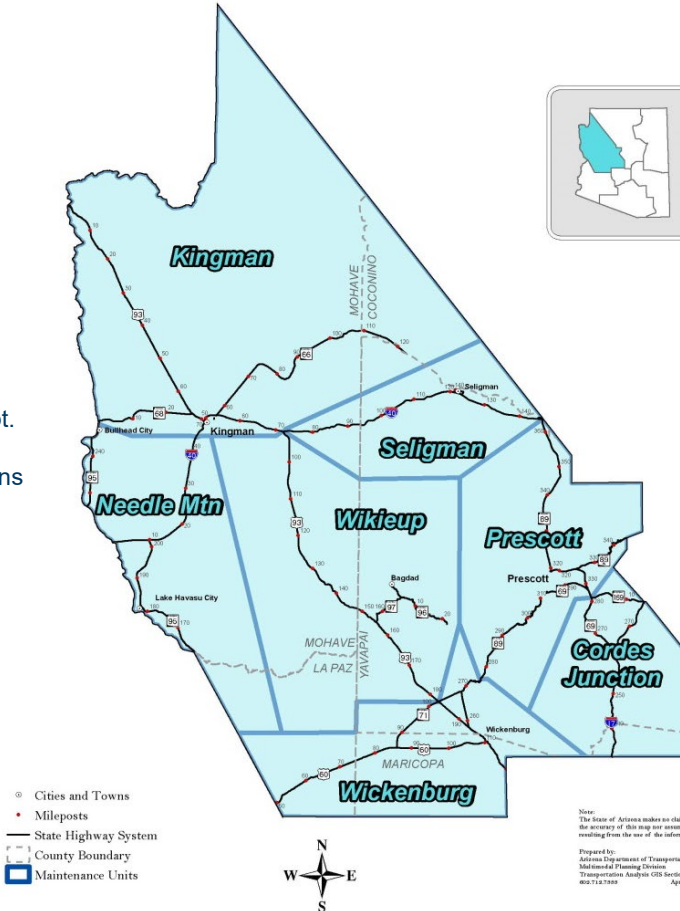
Todd Steinberger - Asst. DE - Maintenance
Darin Dryden – Senior RE
Hien Nguyen - RE
Nathan Escoffier - Maintenance Supt.
Sam Massey – Development TES
Michele Beggs - Community Relations

Prescott Office

Anthony Brozich – District Administrator
Andrew Roth - Asst. DE - Construction
John Casey – Senior Trans. Engr. – Development
Gabe Alvarado – Maintenance Supt.
Richard Perez - Permits Supervisor
Nicole Underwood- Community Relations
Jason Elmer - Environmental Coordinator

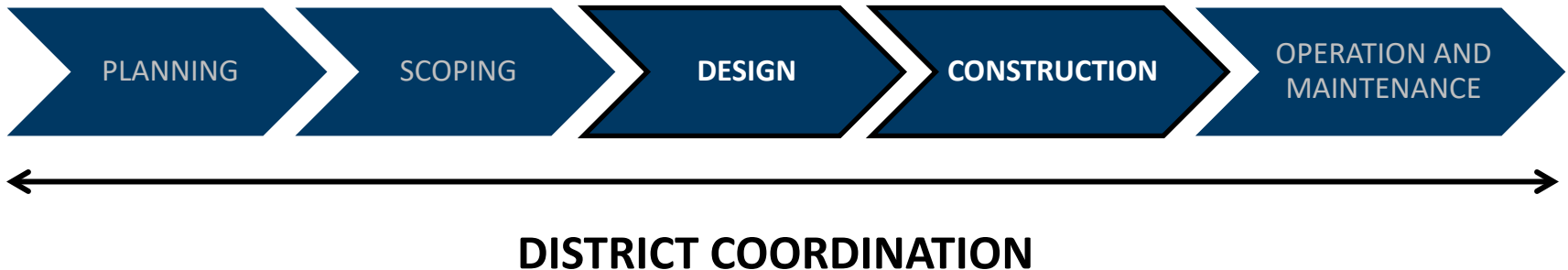
Prescott Valley Office

Joshua Wentzlof - Senior RE
Kara Lavertue - RE



INTRODUCTION

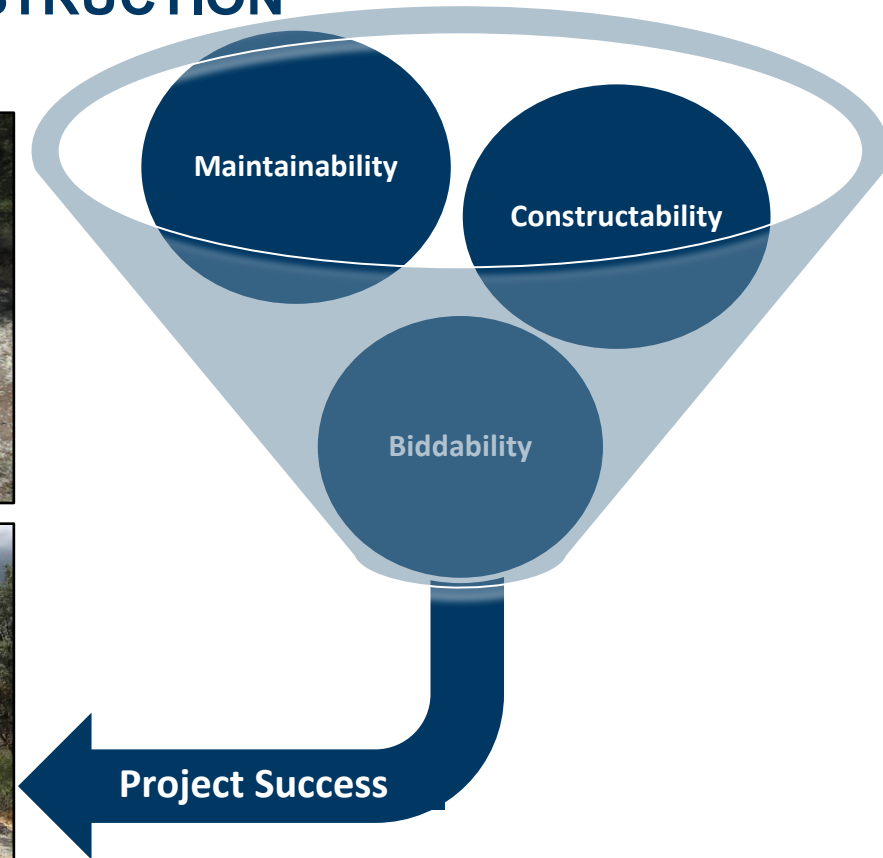
The goal of this session is to cover District coordination during project development and during construction.



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PRESENTATION CONTENT

District Coordination During Project Development

Clearances and Agreements

Project Advertisement and Post-Award

Construction Administration and Post Design

Supplemental Agreements

Project Manager Roles and Responsibilities

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District Coordination During Project Development

- Input on Design Alternatives and Project Delivery Method
- Constructability Reviews and Maintenance Concerns
- Specifications and Contract Requirements
- Traffic Control - Closures, Restrictions
- Schedule / Contract Time / Seasonal Shutdowns
- Phasing and Sequencing
- Liquidated Damages / Intermediate Milestones
- Earthwork Coordination / Material Sources / Suppliers
- ADA Issues / ADA Transition Plan

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District Coordination During Project Development

- Field Reviews
- Value Engineering
- Permits
- Environmental Mitigation Measures
- Clearances and Agreements
- Other: Sole Source Products, Warranty Requirements, etc.

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Clearances and Agreements

- Utility Clearance and Utility Agreements
- Environmental Clearance
- Right-of-Way Clearance
- Railroad Agreements and Permits
- Joint Project Agreements / Intergovernmental Agreements
- Tribal Agreements

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Project Advertisement and Post Award

Plans, Specifications and Estimate (PS&E)

- Advertisement Coordination
- Quantity Breakdown / Calculations
- Reports (Geotechnical, Drainage, Noise, Asbestos Containing Material and Lead-based Paint), Cross Sections, etc.
- Cost Risk Assessment – Risk Register
- Addendums and attachments to the Special Provisions
- Post Design Contract
- CE Costs / Below the Line Costs

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AGREEMENT ESTIMATE RECAPITULATION

CREATED:

REVISED:

ENGINEER:

DESCRIPTION	FHWA CODE	CONTRACTOR'S BID	FEDERAL PARTICIPATION	FEDERAL FUNDS 94.30%	STATE FUNDS 5.70%	LENGTH IN MI
ROADWAY	4	1,467,525.58	1,467,525.58	1,383,876.62	83,648.96	1.260
PATH	28	734,006.12	734,006.12	692,167.77	41,838.35	
TRAINEES	42					
SUBTOTAL		2,201,531.70	2,201,531.70	2,076,044.39	125,487.31	1.260
CONSTRUCTION ENGINEERING 14%	17	308,214.43	308,214.43	290,646.20	17,568.23	
CONSULTANT SERVICES 1%	17	22,015.32	22,015.32	20,760.45	1,254.87	
CONSTRUCTION CONTINGENCY 5%		110,076.59	110,076.59	103,802.22	6,274.37	
PAVEMENT INCENTIVES						
AC SMOOTHNESS \$9,000.00 per Lane-Mile						
AC QUALITY LOT \$1.50 per Ton						
PCCP SMOOTHNESS \$7,000.00 per Lane-Mile						
PCC QUALITY LOT \$1.50 per Sq. Yd.						
OTHER INCENTIVES						
FLAGGING SERVICES						
DPS OFFICERS	21					
RAILROAD/OTHER	21					
OTHER						
PROJECT TOTAL:		2,641,838.04	2,641,838.04	2,491,253.26	150,584.78	1.260

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Project Advertisement and Post Award

Post Award – Construction Office Needs

- Approved Post Design Contract
- Quantity Breakdown / Calculations
- Reports (Geotechnical, Drainage, Noise, Asbestos Containing Material and Lead-Based Paint), Cross Sections, etc.
- Agreement Estimate (Recalculate / Verify all line item costs)

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AGREEMENT ESTIMATE

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PROJECT : XXXXXXXXXX
SECTION : 1 (21) CHIP SEAL COAT

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
7040077	PAVEMENT SYMBOL (EXTRUDED THERMOPLASTIC)(ALKYD)(0.120")	EACH	1	\$135.00	\$135.00
7060015	PAVEMENT MARKER, RAISED, TYPE D	EACH	15	\$25.00	\$375.00
7080001	PERMANENT PAVEMENT MARKING (PAINTED) (WHITE)	L.FT.	360,000	\$.08	\$28,800.00
7080011	PERMANENT PAVEMENT MARKING (PAINTED) (YELLOW)	L.FT.	360,000	\$.08	\$28,800.00
7080101	PERMANENT PAVEMENT MARKING (PAINTED SYMBOL)	EACH	1	\$280.00	\$280.00
9010001	MOBILIZATION	L.SUM	1	\$46,630.00	\$46,630.00
9250001	CONSTRUCTION SURVEYING AND LAYOUT	L.SUM	1	\$26,060.00	\$26,060.00
9280036	GROUND-IN RUMBLE STRIP (8 INCH)	L.FT.	29,000	\$.33	\$9,570.00

Part Subtotal : \$2,269,602.05

Section Subtotal CHIP SEAL COAT: \$2,269,602.05

PROJECT TOTAL: \$2,269,602.05

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Construction Administration

- Construction Kickoff - Partnering and Preconstruction Meetings
- Construction Progress Meetings
- Coordination with RE's, adjacent projects, and others
- Post Design Process
- Supplemental Agreements

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Post Design Services

Post Design Services are the services provided by the designer of record after Board award of the project to the Contractor until project closeout.

Past Process:

PDS Budget was established at :

- 1% for Projects < \$ 20M
- 0.5% for Projects > \$20M
- Other - Special Circumstances

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Post Design Services

Current Process:

PDS Budget needs to be developed and requested

- No longer automatic percentage of contract
- Can request budget for fixed amount
 - ❖ e.g. contracts with specialty inspections (Structural Steel)
- Approval of Contract Mods
 - ❖ Within budget – generally no issues
 - ❖ Over budget – need to discuss with State Construction Engineer prior to submitting

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Post Design Services

Post Design Scope of Work

- Meetings and Site Visits
- Review and Approve
 - ❖ RFI's
 - ❖ Shop Drawings and Submittals
- Design Revisions and Modifications
- Coordination with Stakeholders, Utility Companies, Technical Groups, and Other Designers
- Record Drawings (As-Built)

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Supplemental Agreements

A written agreement between the Department and the Contractor covering work not otherwise provided for in the contract, for extensions or reductions of contract time or revisions in or amendments to the terms of the contract. A Supplemental Agreement becomes a part of the contract when signed by the Contractor and the Department.

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Supplemental Agreements

Types of Supplemental Agreements

- Letter of Agreements
- Change Orders (including Procedural Change Orders)
- Force Accounts
- Time Extensions

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Supplemental Agreements

Supplemental Agreement Reason Codes

1. Value Engineering
2. Work Out of Scope (ADOT)
3. Work Out of Scope (Other Jurisdiction)
4. Quantity Omissions
5. Plans Revisions / Oversights
6. Changed Condition
7. Penalties or Bonuses
8. Other

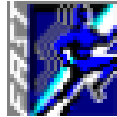
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Supplemental Agreement Tracking System (SATS)

FAST – Supplemental Agreement Tracking System (SATS)



Desktop.exe



Sats.exe

Reports

- SA Tracking by Project
- Detailed CO / LOA / FA Project Report
- SA Reports and Graphs by Reason Code
- Error and Omission Report

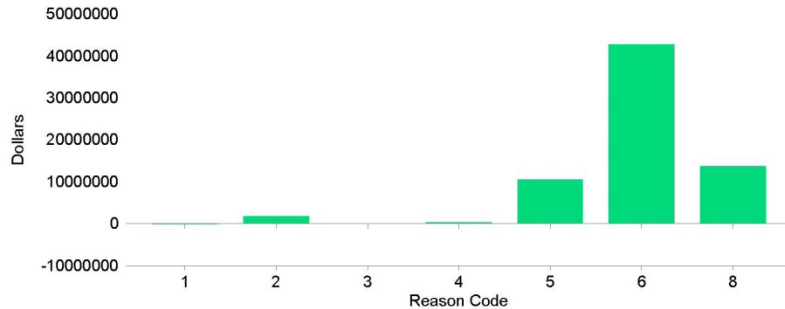
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Cost by Supplemental Agreement Reason Code

From: 07/01/2023 Thru 06/30/2024 with 490 supplemental agreements

Supplemental agreements include change orders, force accounts, and letters of agreement

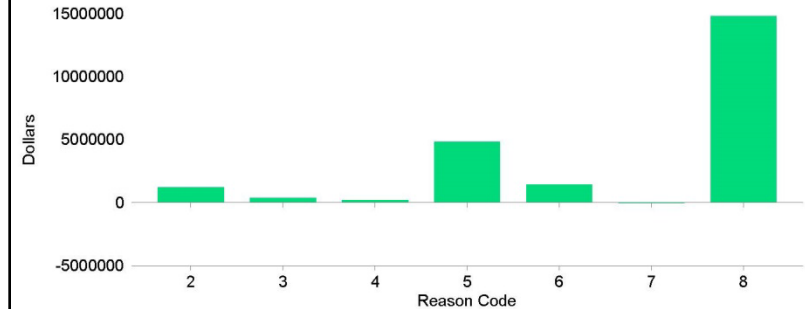


SA Reason	Total	Total Number
1 Value Engineering	-155,850.50	3
2 Work Out of Scope (ADOT)	1,813,722.66	26
3 Work Out of Scope (Other Jurisdiction)	4,930.86	2
4 Quantity Omissions	241,444.14	13
5 Plans, Revisions, and Oversights	10,443,001.25	200
6 Changed Condition	42,678,410.90	98
8 Other	13,648,957.00	148
Grand Total	68,674,616.31	490

Cost by Supplemental Agreement Reason Code

From: 07/01/2024 Thru 11/08/2024 with 192 supplemental agreements

Supplemental agreements include change orders, force accounts, and letters of agreement



SA Reason	Total	Total Number
2 Work Out of Scope (ADOT)	1,214,516.14	16
3 Work Out of Scope (Other Jurisdiction)	375,991.25	3
4 Quantity Omissions	214,732.58	3
5 Plans, Revisions, and Oversights	4,850,970.65	69
6 Changed Condition	1,433,670.77	33
7 Penalties or Bonuses	-24,170.23	1
8 Other	14,831,084.64	67
Grand Total	22,896,795.80	192

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Project Manager Roles and Responsibilities

- Review SA's and provide input / concurrence
- Assist RE's during post design process with design changes and specification changes
- Technical Group(s) coordination
- Construction Bulletin 04-01 – Consultation with Technical Managers on Proposed Supplemental Agreements
- Acceptance and Maintenance Handoff

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QUESTIONS



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THANK YOU