The Federal-aid Process



Project Authorization / Funds Obligation

FHWA commitment that Federal funds are available for the project

- **1.Preliminary Engineering (PE)**
- 2. Right of Way acquisition (ROW)
- **3.** Construction
- Required <u>prior</u> to incurring any expenses

 Work done before the date of FHWA Division authorization is NOT eligible for reimbursement

Planning Phase

- > 23 CFR 450: Federally mandated planning process.
- Metropolitan Planning Organizations and SDOTs
- Identification of a Transportation Needs
- Long Range Transportation Plans: Contains Programs and Projects

Programming Phase

Transportation Improvement Program (TIP)

Statewide Transportation Improvement Program (STIP)

Project Must Be Programmed in the STIP to Receive FHWA Project Authorization

Preliminary Engineering Phase (PE)

> Obtain PE Authorization.

- Solicitation and Hiring of Professional Engineering Firm including Advertising
- Preparation of Conceptual and Final Design
- Environmental Analysis

Preparation of Bidding Document (Plans, Specifications and Estimate (PS&E))

CEQ NEPA defines Classes of Action

- Environmental Impact Statements (EIS) When you know there will be significant environmental impacts
- Categorical Exclusion (CE) When you know there will <u>not</u> be significant environmental impacts
- Environmental Assessment (EA) When you don't know

Design Standards

National Highway System (NHS): 23 CFR 625.4

Projects off the NHS, the design, construction, maintenance and operation must be in accordance with State laws, regulations, directives, safety standards, design standards, and construction standards. (23 CFR 625.3(2)) As a minimum, FHWA requires design standards meet minimum AASHTO criteria.

> Americans with Disabilities Act (ADA)

Right-of-Way Phase

Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act)

Uniform Act applies when Federal dollars utilized in any phase of a project.

> ROW Certification Required to Advance Project.

Plans, Specifications & Estimates

> PS&E Package (not an all-inclusive list)

- FHWA Form 1273
- Buy America
- Standardized Changed Condition Clauses
- DBE
- Environmental Commitments
- WZ Traffic Control plan
- NO local preferences for contractors or materials (w/ some exceptions for materials)
- Regulatory Permits
- Engineers Estimate
- Certification (PS&E)

Engineer's Estimate

Applies to Federal-aid highway projects on the National Highway System (NHS)

Essential to FHWA project approval

- Estimate of financial obligation
- Evaluation of bids for unbalancing
- Comparison basis for award



Estimate accuracy tracking

• FHWA goal - EE +/- 10% of low bid 50% of time

 Guidelines on Preparing Engineer's Estimate, Bid Reviews and Evaluation" http://www.fhwa.dot.gov/programadmin/contracts/ta 508046.cfm

Ineligible Items Non-Conforming Material that Agency Accepts

- Material not meeting specifications
- Items not installed according to specifications
- "Experimental" Proprietary product (without <u>approved</u> experimental feature work plan)
- Public Interest Finding (PIF) not processed:
 - Patented / proprietary product
 - Force Account

Work that has been performed prior to the date of FHWA authorization or approval

Federally Required Provisions Form FHWA 1273

- A "Convenient collection" of Federal Regulations
- Required for all Federal-Aid CONSTRUCTION projects, regardless of size, location, or funding source
- Physically incorporated in PS&E
- Also Applies to Subcontracts and Purchase Orders
 - No modifications
 - Failure to include the FHWA-1273 could result in the loss of federal-aid funding



Prevailing Wages

- When is a project covered by prevailing wages?
 - Davis-Bacon and Related Acts
 - ■\$2,000.00
 - Covers "Laborers and Mechanics" work performed directly on the site of work
 - Construction, alteration or repair of public buildings or public works
 - No wage updates
 - Must be in proposal
 - Wage Decisions: http://www.wdol.gov/

DBE Contract Compliance

- The following examples illustrate situations where the DBE is <u>not</u> performing a commercially useful function.
 - The DBE does not actually perform, manage, or supervise the work in its subcontract
 - The DBE uses employees of the prime contractor or another subcontractor
 - DBE uses equipment of another subcontractor on the project without a lease agreement
 - A DBE uses supervisors of the prime contractor or another subcontractor
 - The DBE is not responsible for the execution of a precise element of the work of the contract

Buy America



- > 23 CFR 635.410
- All Federal-aid construction projects
- IRON & STEEL only
 - all manufacturing processes must take place domestically
 - includes coatings on these materials
 - Covers materials permanently incorporated into project.
 - Minimal Use Exemption = 0.1% (contract value) or \$2500 (whichever is greater)
- Covers all contract items including <u>100% State</u> <u>funded</u>. Keep material certification records.
- Waivers have to be given by FHWA Headquarters

Federally Required Contract Clauses and Conditions
Restriction of competition

- 23 CFR §635.110: Licensing and Qualification of Contractors
- No procedure or requirement may operate to restrict competition, prevent the submission of a bid or prohibit the consideration of a bid submitted by any responsible contractor, whether resident or nonresident of the State wherein the work is to be performed..

Construction Authorization for IMPP Projects:

✓ STIP

Categorical Exclusion (PA)
 ROW Certification
 PS&E (FHWA Approval not required)

Method of Construction (contracting method determination)

> 23 CFR 635.104 > 23 CFR 635 Subpart B > All Federal-aid construction projects Competitive Bidding the Key Tenet FHWA Policy: Contractors should furnish and select material sources

Exceptions

Force Account (Not Permitted under IMPP Agreement)

- > Publically-Owned Equipment
- Patented/Proprietary Products
- > Agency-Owned or Designated Material Sources
- Designated Disposal Sites

Public Interest / Cost Effectiveness Findings

> Applies to all Federal-aid highway construction projects

FHWA approval for Federal oversight projects; can be delegated to STA for all others

> Written documentation supporting finding
> FHWA considers effect or possible precedent set

Patented/Proprietary Products

Not Federal-Aid eligible unless:

- Specified in contract with "reasonable" number of acceptable (or "equal") products or materials.
- If no Alternative products, Public Interest Finding (PIF) required based on one of the following:
 - System synchronization (w/ PIF)
 - i.e. Coordinate with w/existing facilities (Functionally, Aesthetically)
 - No equally suitable alternative (w/PIF)
 - New product for experimental/research (w/PIF)
 - FHWA procedures include approved work plan

Agency Preference for Product or Materials Source

 > 23 USC 112, 23 CFR 635.409
 > All Federal-aid construction projects
 Cannot give preference to in-State or local materials sources, including labor. (Preferences Restrict Competition)

Advertising for Bids

<u>Federal Construction Authorization is needed</u> <u>Prior to the Advertisement for Bids</u>

Following Approved PS&E and Cleared ROW and Utilities.

Publish Minimum of 3 Weeks Prior to Bid Opening

Shorter Advertising Periods may be approved by FHWA.

Bid Opening & Tabulation

> 23 CFR 635.113 > All Federal-Aid construction projects Federal Law states 132 ... "Bid openings shall be public and read aloud"... Select Lowest Responsive

And Responsible Bidder

Suspension & Debarment

Debarred firms and/or individuals are prohibited from award of ANY contract requiring the consent of USDOT

- Prime contract
- Lower tier transactions:
 - Exceeding \$25,000 or
 - Where a person can exert critical influence (i.e. Auditing, inspection, quality assurance)

Excluded Parties List System https://www.epls.gov/

Responsive Bids

Some reasons for not reading a bid due to bidding irregularities may include:

- Failure to sign the bid
- failure to furnish the required bid bond
- Failure to include a unit bid price for each item
- Failure to include a total amount for the bid
- Failure to prepare the bid in ink
- failure to submit a non-collusion affidavit
- failure to commit to the achievement of the DBE contract goals or demonstrate good faith efforts to do so

Bidding

Negotiation with contractors, during the period following the opening of bids and before the award of the contract shall not be permitted. (23 CFR 635.113(a))

Concurrence in Award

- Authorization to proceed with construction on FHWA Oversight Projects
- Prerequisite for Federal-aid participation
- >Under IMPP, FHWA Concurrence not required.

Subcontractor Agreements

> 23 CFR 635.116

- Prime Contractor must perform at least 30% of the work
- Subcontract must be in the form of a written agreement containing all the requirements and pertinent provisions of the prime contract.

FHWA 1273 must be physically included in each subcontract

Project Staffing & Supervision

Project must be adequately staffed & suitably equipped to undertake & satisfactorily complete the work; and

Full-time employee of public agency must be in <u>responsible</u> <u>charge</u> of project

Pre-Construction Meeting

- Required by NCDOT
 - After Contract Award
 - Before Start of Work
- Attended By
 - Sponsor's Person in Responsible Charge
 - Construction Inspector
 - Contractor
 - NCDOT and FHWA Area Engineer
 - Consultant(s)
 - Any Affected Regulatory Agencies

Inspection and Documentation

- Procedures for inspection & documentation
 - NCDOT Construction Manual & other guidelines
 - Electronic record keeping
 - Regular review of records
- Major areas of documentation
 - Daily diaries or Inspector's daily reports
 - Method of Measurement & Basis of Payment
 - Estimated vs. final quantities
 - Materials submittals (certificates of compliance, test reports, etc)
 - QC, QA, Acceptance, IA
 - Shop drawings
 - Payroll and DBE Records
 - Work zone safety & traffic control
 - Change Orders, Extensions of Time
 - Claims



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	Contractor's EEO policy statement	Required by 41 CFR 60-741.44 through FHWA-1273, §II(1)(b).	
	Letter appointing contractor's EEO officer for project	Required by 41 CFR 60-741.44 through FHWA-1273, §II(1)(b).	
HWA-1022 Revised 9/1994	Notice - Federal Aid Projects	False statements notice Required by 18 CFR 1020 and 23 CFR 635.119Available on FHWA w	vebsite.
	Wage Rate Information	May be substituted for WH-1321 per FHWA-1273, §IV(1)(a). Available on FHWA website.	
WH-1321 Revised 1/1986	Notice to Employees	Davis-Bacon wage rate posterRequired by 29 CFR 5.5(a)(1) and FHV (1)(a)	VA-1273, §IV

http://www.fhwa.dot.gov/programadmin/contracts/poster.cfm

http://www.fhwa.dot.gov/economicrecovery/whistleblowersposter.

Work Zone Traffic Control -Implementation



Change Orders

- Provides for Equitable Adjustment of the Contract
- The standardized changed condition clauses in 23 U.S.C. 112(e) <u>must be included verbatim in all contracts,</u> <u>unless State statute prohibits their inclusion</u>. Or, an alternate clause developed by the STA may be used.
- The regulation requires the use of three different clauses (23 CFR 635.109):
 - Differing Site Conditions Clause
 - Suspensions of Work Ordered by the Engineer
 - Material Changes in the Scope of the Work

Measurement of Pay Quantities

> Appropriate quantities of completed work

- Measured in units per contract
- Material delivered and incorporated into work
- Based on weight/mass or volume

 Adequate assurance that quantities of completed work are accurate
 Initial source documents pertaining to pay quantities must be retained & made a matter of record

Definitions

Quality Control - QC

- Also called process control. Those actions and considerations necessary to assess and adjust production and construction processes so as to control the level of quality being produced in the end product.
- All contractor/vendor operational techniques and activities that are performed or conducted to fulfill the contract requirements. 23 CFR 637B

Definitions

Quality Assurance – QA

All those planned and systematic actions necessary to provide confidence that a product or facility will perform satisfactorily in service.

Acceptance Program

All factors that comprise the State transportation department's determination of the quality of the product as specified in the contract requirements. These factors include verification sampling, testing, and inspection and may include results of quality control sampling and testing. 23 CFR 637B

Progress Payments

> 23 U.S.C. 121> 23 CFR 635.122



- Compensation For Work Performed
- Generally Monthly
- Include Stockpiled Material
- Support Documentation
- Prompt Pay Provision

Claims

- > 23 CFR 635.124: Applies to NHS Projects.
- Demand for Additional Compensation that is Formally Submitted Outside of the Normal Process for Change Approvals.
- Eligibility for and Extent of Federal-aid Participation Determined on a Case-by-Case Basis.
- Burden of Proof to Document the Reasonableness of a Claim Remains Vested in the NCDOT.

Liquidated Damages

- > 23 CFR 635.127: Applies to NHS Projects.
- Provision provides a mechanism for the contracting agency to recover costs associated with a contract time overrun.
- An STA is required to incorporate liquidated damages provisions into its Federal-aid NHS contracts as a condition of the project agreements.

NCDOT Final Inspection and Final Acceptance

NCDOT Final Inspection completed after any deficiencies are resolved

Final Acceptance

- Accept quality of work (Letter of Acceptance)
- All required documents, certifications and other requirements satisfied as contained NCDOT Construction Manual and Specifications Book
- Final Payment
 - Starts the Records Retention clock (3 years)

FHWA Contract Administration Core Curriculum

🖉 CACC Manual & Reference Guide - Contract Admin - Construction - FHWA - Windows Internet Explorer					
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File Edit View Figure Favorites Iools Help Search (Alt+Enter to search in a new tab) Exponents Links **					
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Construction					
Quality Management & Coordination Details Safety Materials Contract Administration					
FHWA > Engineering > Construction > CACC Manual & Reference Guide					
Construction Guide	Next >>	Events			
Fact Sheets	Contract Administration Core Curriculum Participant's Manual and Reference Guide 2006	View all Upcoming Construction			
		Events			
Links	PDF Version (0.6 mb)	Contact			
Memos	Please contact Douglas Townes, FHWA Resource Center, Construction and Project Management Team (404-562-3914; Douglas.Townes@dot.gov) regarding the scheduling of Contract Administration Core Curriculum Course presentations and hard copies of	Jerry Yakowenko			
Publications	the course manual.	Office of Program Administration 202-366-1562			
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http://www.fhwa.dot.gov/programadmin/contracts/coretoc.cfm

Questions?

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