Preliminary Engineering (PE)

- Engineering Study
- Preliminary Design
- Final Design / PS&E
- Bid Phase
Prior to Beginning

- Preliminary Design approved by NHDOT
- NEPA Completed (less than 3 years ago)
- Cost estimate updated with NHDOT
- Schedule updated with NHDOT
- “Received Authorization to Start”

Final Design

or “RATS” work is ineligible!!
7 Final Design Steps

1) Acquire needed Right-of-Way
2) Attend NHDOT’s Office of Federal Compliance training: “Labor Compliance for Federally Funded Projects”
3) Select engineer for Construction Engineering (CE) Services – QBS
4) Submit Public Interest Findings (PIF’s)
5) Develop Final Design (plans, quantities, specifications and cost estimates)
6) Submit Final Design for NHDOT review and approval
7) Submit PS&E with Certifications
Step #1 - Acquire Right-of-Way

ROW Basics (Before Final Design)

- Existing ROW has already been determined ✓
- Temporary and permanent impacts outside of existing ROW have already been identified ✓
- Public hearing for eminent domain was already conducted (if necessary) ✓
Acquire Right-of-Way

ROW Basics (During Final Design)

- Know the Law
- Develop ROW plan information
- Determine “Just Compensation” for project impacts (appraisals)
- Acquire needed property rights
- Certify that rights have been acquired

These items cannot be started until Final Design

Section #19
The Law

 Federal law
  Uniform Act of 1970
  49 CFR Part 24 (as amended)

 State law
  RSA 230 and 231, Public Hearings and Finding of Necessity
  RSA 498A, Eminent Domain Procedures

Section #19
Acquire Right-of-Way

Uniform Act

When does it apply?

The Uniform Act applies to all projects receiving Federal funds or Federal action where real property is acquired or persons are displaced as a result of acquisition, demolition or rehabilitation

Section #19
Provides important protections and assistance for people affected by federally funded projects

Ensures that people whose real property is acquired, or who move as a result of projects receiving Federal funds, will be treated fairly and equitably and will receive assistance in moving from the property they occupy

FD #1

Section #19
Acquire Right-of-Way Uniform Act

Where to find more information?
- www.fhwa.dot.gov/real_estate/uniform_act
- www.nh.gov/dot/org/projectdevelopment/rightofway

Section #19
Acquire Right-of-Way

Types of impacts per parcel can include:

- Property acquisition, and/or
- Permanent easements, and/or
- Temporary easements
  (slope, drainage, sightline, etc..)
Acquire Right-of-Way

Remember the public plan?

Slope, Drainage, and Clearing Easements

Existing ROW

Section #19
Acquire Right-of-Way

Develop Right-of-Way plans

- Show proposed work in relation to the existing Right-of-Way
- Show sizes of **Permanent** and **Temporary Easements** needed to perform work
- Quantify/List amount and types of impacts per parcel

Section #19
Acquire Right-of-Way

ROW plans includes:

- Parcel numbers with ownership info
- Calculated square footage of each type of impact on each parcel
- Visual illustration of impact areas

Separate ROW plans may not be necessary but information still needs to be shown

Section #19
FD #1

Sample ROW Plan

Section #19

Acquire Right-of-Way
Acquire Right-of-Way

Just Compensation

- The Fifth Amendment of the United States Constitution provides that private property may not be acquired for a public use without payment of "Just Compensation"
- It is essential that property owners hear from the Sponsor that property owners have rights relative to the law in writing upon first contact

Section #19
Acquire Right-of-Way

Notify all owners in writing they have rights to:

1) Receive Just Compensation
2) Have property valued by an appraisal
3) Have a written statement of the established Just Compensation
4) Be present during the appraisal process
5) Challenge the Just Compensation offer
6) Receive payment before surrendering property
7) Receive reimbursement for incidentals

Section #19
Acquire Right-of-Way

Donations

- The new donation process was recently approved by FHWA
- See your Project Manager if you have property owners interested in making donations

See handout for sample donation form

Section #19
The following would not be included in determining “just compensation”

- Changes in traffic patterns that increase or decrease traffic
- Temporary blockage of a street or highway
- Loss of business
- Tenant relocation
- Interference with owner’s future plans
Appraisals are used to determine Just Compensation.

The Uniform Act mandates an appraisal process, governed by the following standards:

- **USPAP** – Uniform Standards of Professional Appraisal Practice
- **UASFLA** – Uniform Appraisal Standards for Federal Land Acquisitions

Section #19
All appraisals must be independently developed and reviewed by State of NH Certified Appraisers.

See NHDOT PM for list of NH Certified Appraisers.

Four (4) basic types of appraisal
Acquire Right-of-Way

Determine appropriate type of appraisal for EACH parcel

1. Complete Acquisition
2. Before & After Appraisal
3. Land Value Appraisal (LVA)
4. Waiver Valuation Process
   (most common for LPAs)
Acquire Right-of-Way

Complete Acquisition Appraisal

- Requires public hearing – see NHDOT Project Manager

Before & After Appraisal

- Full narrative before the project acquisition and a second appraisal of the property considering the project acquisition

- The difference between the two is the “Just Compensation”
Acquire Right-of-Way

Land Value Appraisal

- Used when there is no value difference in the property before and after the project
- Value of land only (per square foot or acre)
Waiver Valuation Process

- Limited to acquisitions < $10,000
- Must be done by qualified people
- Cannot be used for eminent domain
- Based on 49CFR 24.103(c)(2)
- Used for “uncomplicated” acquisitions to save time and money vs. a full appraisal process

Section #19
What is “uncomplicated”

- Certain questions must be answered to determine if an acquisition is “uncomplicated” and can use the waiver valuation process.
- A checklist has been developed from NHDOT’s ROW Manual with the list of questions.

See handout and next slide for list of questions.
Acquire Right-of-Way

Uncomplicated Checklist:

In order to determine whether or not an acquisition is “uncomplicated” the following questions must be answered:

- Is the acquisition over $10,000?
- Is the acquisition anything more than a strip acquisition?
- Are buildings, wells, signs, etc. affected?
- Is the acquisition severing any buildings from remainder?
- Are trees, shrubs, or other landscaping involved?
- Is the proposed right of way line closer to any building after the acquisition to require analysis of possible proximity damages?
- Is access to the property changed or limited?
- Is current highest and best use of property going to be changed as a result of the acquisition?
- Does a significant amount of the total compensation involve items other than land value?
- Is there reason to believe this parcel will proceed to Condemnation?
- Is more land than actually needed being acquired?
- Are there any other considerations that complicate the valuing of this parcel?

Section #19
Acquire Right-of-Way

Waiver Valuation Team

- Min 3 Person Team – Person in Responsible Charge, person with market experience, and Engineer of Record to determine Estimate of Compensation

- Compensation is based on market values in area and applied consistently to all parcels (not assessed value)
Draft Waiver Valuation

➢ Submit draft estimate of compensation package to NHDOT for review and approval prior to meeting with owner

See LPA Manual (Version #3.0) for Waiver Valuation Process

Section #19
Acquire Right-of-Way

Acquisition process for waiver valuation

- Meet with owner to present offer in writing
- Explain waiver process and owners rights,
- Describe project and show impact plan
- Offer Just Compensation determined by project team (Can't offer less than Just Compensation)
Negotiation Diary

Keep a written diary of all conversations and meetings with all people involved in the acquisition process.
Acquire Right-of-Way

About meeting with owner

- Make personal contact with each impacted property owner
- Call first to make an appointment
- If property owner does not want to meet, call first and mail information

Section #19
About Meeting with Owner

- Fully explain the project and impacts, listen to concerns, answer questions or get answers if you do not know
- Listen to the owners and be flexible
- Design flexibility will often yield positive results

Section #19
Acquire Right-of-Way

About Meeting with Owner

- Give the property owner time to consider the offer

- Typically call back after 1 to 2 weeks

- 45 days are required before you could start eminent domain proceedings

Section #19


Acquire Right-of-Way

Never coerce a property owner

- If owners say no, evaluate your options
- Can you pull off? Redesign? etc.
- Why are owners against the project? (find compromise)
- Eminent Domain? (if you have followed all appropriate RSAs)

Section #19
Administrative Settlements

This is a settlement amount above the just compensation amount, requires **written justification** and **approval by NHDOT**.

Sometimes they make sense!

Section #19
FD #1

Acquire Right-of-Way

When Owner Agrees:

- Owner signs the Offer/Agreement form
- LPA Schedules closing
- At Closing - exchange check for:
  - Signed Permanent Easements, and/or
  - Signed Temporary Easements, and/or
  - Signed Right of Entry

Section #19
Personal Property Relocation

- Signs, fences, lamp posts, small buildings, septic systems, wells, etc. can be relocated if warranted by the project.

- Reimbursement program, pay the lower of at least 2 reasonable estimates.
Who needs to take training?

- Sponsor’s Person in Responsible Charge
- PE Engineer of Record
- CE Engineer of Record
- Resident Engineer and
- Resident Engineer’s Designees
Federal Labor Compliance Training

What and When?

- 1/2 day training provided by NHDOT’s Office of Federal Compliance in Concord
- Must be completed prior to Final Plan approval
- Keep your certificate – needed later

See handout for training information
Federal Labor Compliance Training

What does it cover?

How to comply with Federal contracting requirements including:

- FHWA Form 1273
- Davis Bacon Wage Requirements
- CFR 23 and CFR 49, and
- Certain NH State Laws

Section #22
When does the Office of Federal Compliance get involved?

- During preparation of bid documents
- During award of construction bid
- During preconstruction meeting
- Frequently during construction
- During final payment release
What are some common items:

- Ensuring proper bid documents
- Providing subcontractor approvals
- Verifying employee sign in sheets
- Verifying employee wage rates
- Verifying timely payments to employees
- And many more…………….

See handout for “Responsibilities Guide”
Federal Labor Compliance Training

2 Field Auditors

Barbara Mitera

Denise Presby

Section 22
Step #3 - Select Engineer for CE Services

- Perform Qualification Based Selection (QBS) for Construction Engineering (CE) services during Final Design

- If initial QBS process for PE services included qualifying engineering companies for CE services as well, then LPA can proceed directly to Scope and Fee negotiations for CE services

Sections #13, #14 & #27
Select Engineer for CE Services

CE services typically include:

- Construction oversight and inspection
- Monitoring traffic control
- Monitoring environmental commitments
- Monitoring for a safe work environment
- Material testing/Quality Assurance Plan
- Documenting quantities and pay estimates
- Assisting Office of Federal Compliance
- Responsible of all project construction records

Sections #13, #14 & #27
Select Engineer for CE Services

Documentation needed for NHDOT CE selection review and approval:

- Consultant selection process (QBS)
- CE Scope & Fee negotiation
- LPA’s Independent Government Estimate (IGE)

Submit during Final Design to avoid delays

Sections #13, #14 & #27
Select Engineer for CE Services

When does CE start?
CE begins on day Construction Contract is awarded

- Bid phase services are part of PE
- PE charges cannot be incurred after construction contract award

Construction presentation later today describes in more detail the scope of CE services

Sections #13, #14 & #27
Step #4 – Public Interest Findings

Why?

- Competitive bidding is the principal means to award Federal-aid contracts (other than QBS)
- Sometimes it is in the public’s best interest to deviate from competitive bidding
- Public Interest Findings (PIF’s) are used to document and approve deviations from competitive bidding

Section #24
Public Interest Findings

Example actions needing PIF’s:

- **Experimental Items** – Specifying a new/innovative product from a sole source

- **Proprietary Items** – Specifying a specific traffic signal controller to match existing traffic controller system
Public Interest Findings

More examples:

- **Local Agency Forces** – Using City staff to provide labor, equipment and material to install pavement markings

- **Local Agency Material** – Using Local Agency drainage pipe from Town stockpile to be installed by a low bid contractor
Public Interest Findings

PIFs must document:

- The **circumstances why** the Sponsor wants to use non-competitive procurement
- The **cost savings realized** by using non-competitive procurement
- That the **resulting product or service will meet all requirements and be of similar quality** as a competitively bid process

Section #24
Public Interest Findings

Use PIF Form

FHWA “Request for Approval of Public Interest Finding (PIF) Form”

See handout for sample form

Section #24
PIF approval process:

- LPA develops PIF request and submits to NHDOT Project Manager
- Most PIF’s can be reviewed and approved by NHDOT
- Some PIF’s go to FHWA (depending on the type of PIF and the type of project) based on our Stewardship and Oversight Agreement.

See LPA Manual Section #24 for more info and examples
Step #5 – Develop Final Design

Final Design includes:

- Detailed Plans
- Accurate Item Quantities
- Bid Proposal with Specifications
- Accurate Cost Estimate

Consultant shall review material prior to submitting to NHDOT
Develop Final Design

Incorporate comments from:

- Preliminary Design Review
- Public Input Process
- ROW / Abutter Agreements
- NEPA Process

Section #15
Post NEPA approval:

- Apply for permits
- Acquire ROW
- Minimize Unavoidable Impacts
- Design and Build Mitigation
- Follow thru on commitments
Final Design Plans should:

- Include existing information (survey, ROW, resources, etc....)
- Include proposed design
- Use plan views, profiles, cross-sections and details
- Agree with quantities in cost estimate
Develop Final Design

Sample Final Design Plan

Section #15
Develop Final Design

Cost Estimates need to:

- Include flagging/police items
- Use **NHDOT 2016** standard item nomenclature
- Avoid miscellaneous items
- Use average weighted costs
- Include Non-Participating costs
- Not contain contingencies

Section #15
FD
#5

Proposition includes:

- Prosecution of work (description)
- Intermediate and final completion dates
- Environmental commitments
- Copies of permits
- Liquidated damages clause
- No retainage clauses
Proposal includes:

- Traffic Control information
- Concurrent construction information
- Utility company contact information and relocation schedule
- Holidays & special Town event info

Section #15
Proposal includes:

- Special Right-of-Way items
- Areas to avoid (historic, protected)
- Office of Federal Compliance documents relative to Federal-Aid
- Davis Bacon wage rates, etc...
- See OFC website for “Contract Document Package”
- Required!
Think about bid alternatives early

- Additional items to be bid
- Used for variety of reasons
- Must be “Add” alternatives (not subtract)
- Listed in order of priority/preference
- No partial alternatives awarded

Section #15 & #26
Step #6 - Submit Final Design for Review

Submission requirements:

- Sponsor Letterhead
- 11”x17” Plan Sheets
- Proposal with Specifications
- Engineer’s Cost Estimate
- Verify number of copies with NHDOT Project Manager

Section #15
Submit Final Design for Review

- The NHDOT is hoping the Final Design package submitted is at 95% to 100% complete.

- The Final Design package becomes the **PS&E** set with “Design Approval” from the NHDOT.
Step #7 - Submit PS&E with Certifications

What does PS&E really mean?

P = Plans stamped by Licensed Engineer

S = Specifications (Proposal) including Labor Compliance documents, and

E = Final Engineer’s Cost Estimate including Construction Engineering (CE)
FD #7

Submit PS&E with Certifications

Also submit Certifications in addition to PS&E

- “NEPA Complete” memo
- Right-of-Way Certificate
- Utility & RR Certificate
- Labor Compliance Training Certificates
- ITS Certificate (not currently applicable)

Section #25
Submit PS&E with Certifications

“NEPA Complete” Memo

During Preliminary Design NHDOT’s Bureau of Environment issues a memo at the conclusion of the NEPA process.

This memo should be included in the PS&E package sent to NHDOT Project Manager.

Section #25
Submit PS&E with Certifications

ROW Certificate

- Found in Appendix 11 of the LPA Manual
- Signed by LPA Sponsor/Representative
- Certifies that all ROW has been acquired in accordance with State regulations and the Uniform Act
- Include copies of any easements

See handout for example

ROW Certificate

Section #19
Submit PS&E with Certifications

Utility & RR Certificate

- Found in Appendix #14 of the LPA Manual
- Signed by LPA Sponsor/Representative
- Certifies that all utility and railroad work has been or will be completed as required for proper coordination with the project

See handout for Utility & RR Certificate example

Section #20
Submit PS&E with Certifications

Provide copies of Labor Compliance Training Certificates for:

- Sponsor’s Person in Responsible Charge
- PE Engineer of Record
- CE Engineer of Record
- Resident Engineer and
- Resident Engineer’s Designees

Section #20
Submit PS&E with Certifications

PS&E request from NHDOT

- NHDOT uploads the submitted PS&E information with certificates into our financial system
- We then request authorization of Federal Construction funds from FHWA
- This process takes approximately 2 to 3 weeks

Section #25
Submit PS&E with Certifications

If all goes well...

- **FHWA** authorizes construction funding and **notifies** NHDOT
- **NHDOT** notifies LPA in writing that construction funding is authorized and that **project may solicit bids**
- Then on to Bid Phase services...

Section #25
7 Final Design Steps

Re-Cap:

1) Acquire needed Right-of-Way

2) Attend NHDOT’s Office of Federal Compliance training: “*Labor Compliance for Federally Funded Projects*”

3) Select engineer for Construction Engineering (CE) services – QBS
7 Final Design Steps

Re-Cap:

4) Submit Public Interest Findings (PIFs)
5) Develop Final Design (plans, quantities, specifications and cost estimates)
6) Submit Final Design for NHDOT review and approval
7) Submit PS&E with Certifications
End of Final Design

Project Status

- Project Agreement ✓
- Consultant Selection (QBS) ✓
- Scope and Fee ✓
- Engineering Study ✓
- NEPA Complete Memo ✓
- Preliminary Design ✓
- Final Design ✓
- PS&E Plans & Certifications ✓
- Construction Engineer ✓
- Received letter from NHDOT to solicit bids ✓
Final Design

Questions?

Next Up:
Bid Phase