

VDOT

Local Partnership Team Consultant Management Workshop

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- Created by the 2005 General Assembly
- Primary Responsibilities:
 - Technical assistance
 - Training opportunities
 - Focused on federally funded projects
- Focus on Policy Development and Communication

- A replacement for regular interaction with your:
 - District Staff
 - Residency Administrator/Urban Program Manager
 - Project Coordinator

- Focus on effective use of consultants to deliver transportation projects and programs
 - Federal & State Requirements
 - Good Professional Practice
- Step through requirements specific to project phases or types of work
- Ask questions and discuss experiences
 - Panel Discussion – Q & A
- Provide resources for future use

- Introductions
 - Name
 - Locality
 - Takeaway from today's workshop

QUESTIONS???

Making the Decision to Utilize Consultant Services

Barton A. Thrasher

Program Manager – Policies, Procedures, and Quality

VDOT – Location and Design Division

- VDOT requires outside services to augment its professional staff in order to carry out the Department's goals and responsibilities
- Projects may require an expertise that is not possessed internally while others may require manpower that is not available

Virginia Public Procurement Act Section 2.2-4301 – Code of Virginia

- Defines “Professional Services”
- What is Professional Engineering?
- What qualifies as the “practice of engineering?”

Examples of when a locality may wish to retain Professional Services

- Project needs to be expedited
- Unusual character of project
- Specialized technical expertise required
- Manpower

What is a Scope of Work?

When do you develop a Scope of Work?

What goes into a Scope of Work?

Who is involved in a Scope of Work?

Why is it important to have an independent, concise and detailed estimate prior to RFP?

Who are the parties involved in preparing this estimate?

How will the estimate be used?

QUESTIONS???

Procurement and Contracting of Consultant Services

Shailendra G. Patel, P.E.
Assistant Director, IPD Division

- Objective
- Federal Requirements
- State Requirements
- Procurement Process
- Types of Contracts
- Types of Compensation

The objective of the total consultant acquisition process is the selection of a well-qualified firm at a fee which is fair, competitive, and reasonable to both the agency and the consultant.

- Brooks Act (Qualification Based Selection)
- Title VI requirements
- Disadvantage Business Enterprise (DBE) Program
- Federal Immigration Reform and Control Act of 1986
- Internal control system satisfying Federal requirements for accounting (Pre-Award Audit)

- Competitive Negotiations (VPPA)
- Debarment Certification
- eVA registration – *VDOT policy*
- Critical Infrastructure Information/Sensitive Security Information – *if applicable*
- Small, Woman-owned and Minority owned business initiative – *if using state funds only*

- Issuance of a written RFP
- Public notice of the RFP
- Short list
- Presentations
- Rank firms
- Negotiate with first rank firm
- Contract Award

- Scope of services
- Selection & evaluation criteria
 - Firm/Team's experience in similar type of services
 - Personnel's experience in similar type of services
 - Qualification of Project Manager
 - Organizational Capability
 - Planned DBE/SWAM involvement
- Written proposal
- Oral presentation and interview

- Man-hours to perform each task and subtask identified in the Scope of Work
- Distribution of the man-hours to the various employee classification required for the project
- Direct expenses required for the project
- Services provided by subconsultants or vendors
- Number of alternate designs or locations to be evaluated

- Level of detail required
- Numbers and types of meetings to be attended (citizen information meeting, public hearing, public workshop, elected officials, local staff, etc.)
- Numbers of reports and/or presentations required
- Schedule for project services

- Scope of services to be performed
- Work effort required (both quantity and level of personnel required)
- Distribution of work among levels of personnel
- Delineation of work to be provided by consultant, subconsultants and the locality/owner
- Cost of services

- Wage rates, overtime, etc. (or billing rates for some services)
- Overhead costs
- Direct expenses and subconsultant costs
- Net fee
- Method of compensation/type of contract

- Project Specific Contracts – Preferred contract type for most of the projects
- Multiphase Contracts – Suitable for projects requiring design services to be completed in phases; must be noted in the RFP

- On-call/Term/Retainer Contracts
 - Similar types of services on various projects
 - Limited scope
 - Compressed schedule
 - Small projects
 - Emergency
- On-call contracts are not a substitute for poor planning

Lump Sum - This method of payment is appropriate only if the extent, scope, complexity, character and duration of the work to be required can be established to a degree that just compensation can be determined and evaluated by all parties at the time of negotiations.

- Well defined scope of work
- Short time frame/schedule
- Risk?

- Cost Plus a Net Fee - By this method, the consultant is reimbursed for his actual costs up to maximum compensation payable and receives in addition a predetermined fixed amount as a net fee
- When the extent, scope, complexity, character and duration is not clearly defined
 - When owner does not have significant experience or knowledge to permit an evaluation of the consultant's proposal as required to support a lump sum amount

Specific Rates of Compensation (Fixed Billable Rates) - By this method, the consultant is paid at an agreed and supported specific fixed hourly or daily rate for each class of employee directly engaged in the work. Such rates of pay include the consultant's estimated costs, overhead and net fee.

- This method is applicable to limited services term contracts.

- Types of Contracts
- Types of Compensation
- Develop estimate prior to advertisement
- Non-binding estimate (*not recommended*)
- Performance evaluations

VDOT procurement manual is
approved by FHWA

<http://www.virginiadot.org/business/gmps.asp>

QUESTIONS???

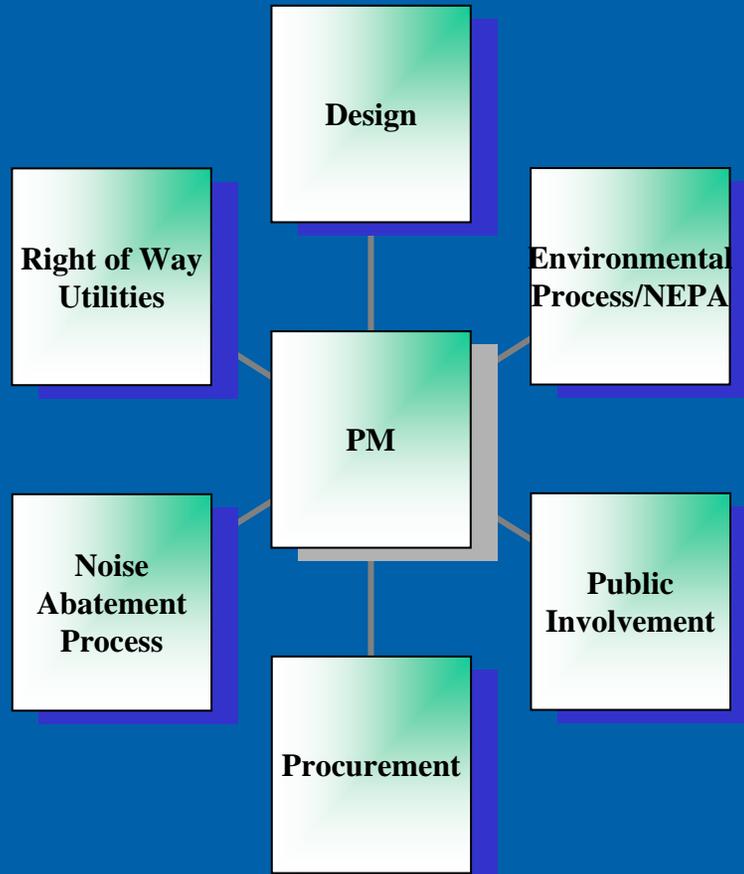
Effective Consultant Management

Ian Johnston, P.E.

Design Project Manager
Hampton Roads District

- Importance of Good Project Management & Understanding the State/Federal Process
- Scope/Schedule/Fee Proposal & Negotiation
- Consultant Contract Administration & Oversight

Locality Project Manager should strive to become a “Jack of All Trades”



Design Knowledge

- Roadway Design
- Hydraulics
- Geotechnical
- Traffic Engineering
- Structures/Bridges
- Utilities

Public Involvement

- Public Hearings
- CIM's
- Brochures, advertisements

Environmental/NEPA

- Permitting Requirements
- SERP
- NEPA documents
 - PCE/CE/EA/EIS
 - Logical Termini

Procurement

- Virginia PPA
- DBE requirements

Noise Abatement

- Noise barriers
- Noise analysis
- Reasonable / Feasible

Right-of-Way/Utilities

- Acquisition process
- Property owner rights
- Private utility requirements
- Advance acquisition req.

Project Scoping with Consultant

- Scoping is an extremely important phase of project development and negotiation
- Consultant will play a major role in scoping effort
- Take your time to ensure proper scoping
- If you are unsure whether or not an activity will be required during project development, identify item as an optional service up front to avoid change order delays.

Project Scoping with Consultant

Identify all State/Federal milestones and activities

1. Value Engineering (if construction cost over 5mil)
2. Public Hearing Transcript
3. Right-of-Way plan submittal (RW-301/EQ-201 forms)
4. Submission of signed and sealed mylar title sheet with VDOT tabulation block
5. Right-of-Way Data Sheet – even if you are developing acquisition plats.
6. .Tiff plan submission to VDOT at major milestone submittals (30% PFI, 60% PH/RW, 100% Ad)
7. Engineer of Record – will design services be needed to resolve design issues in the construction phase

Develop a realistic and achievable schedule during scoping

Incorporate VDOT/Federal milestones in schedule – they will take time

Examples:

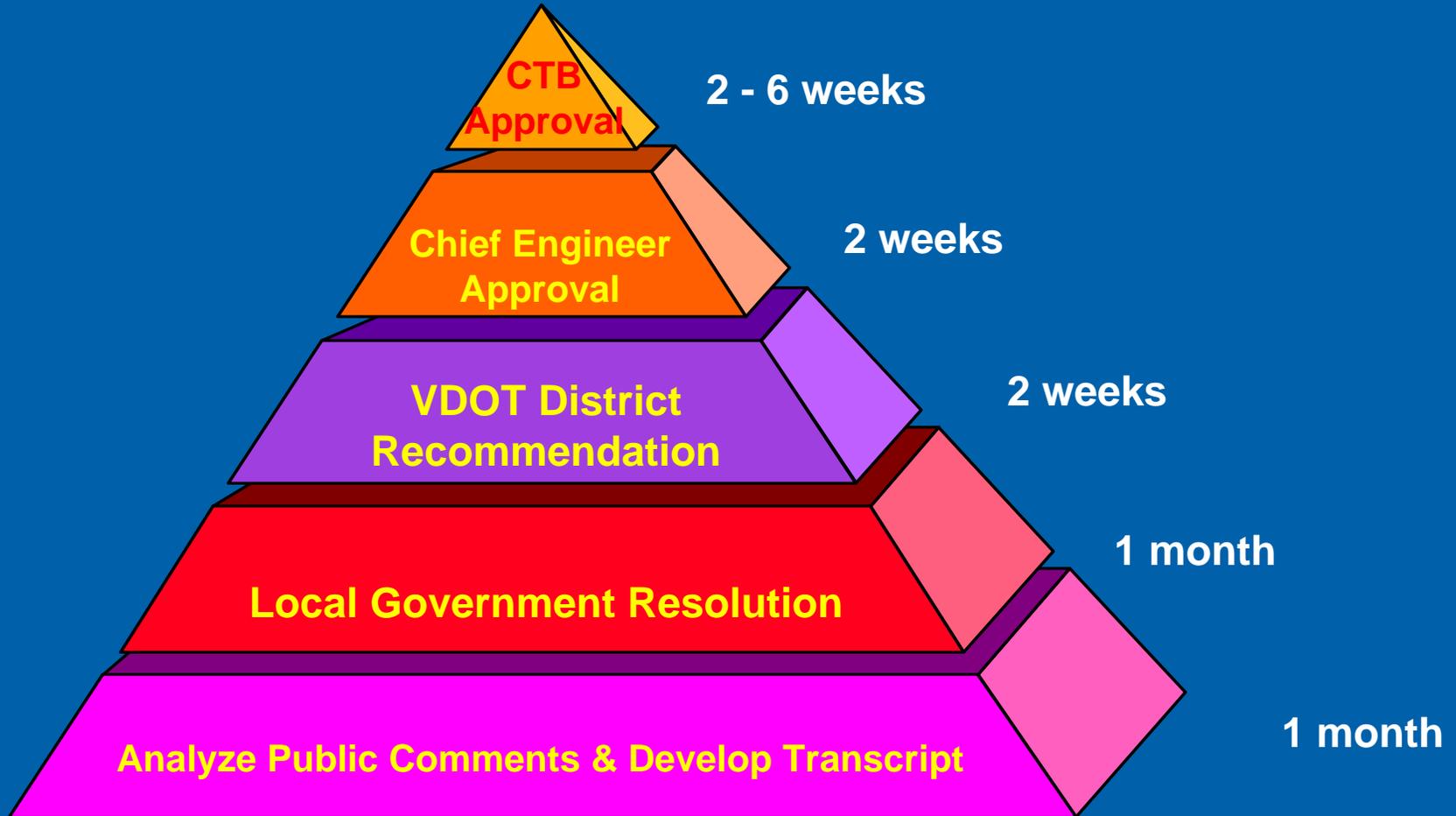
- 30 day average VDOT review process on plan submissions

- 60 day average time length between R/W plan submission and Federal R/W authorization

Understand project type

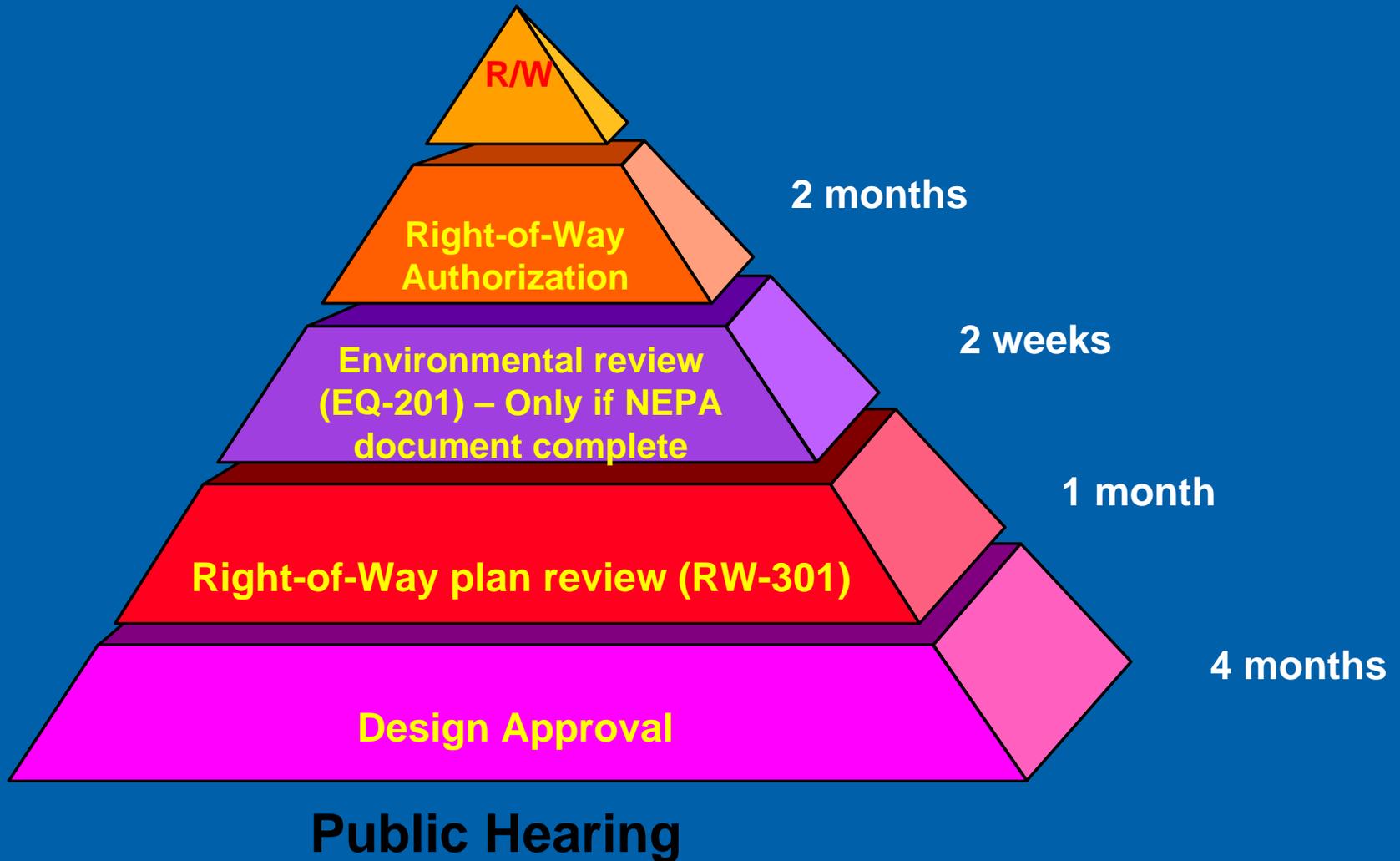
- One Hearing Project
 - Design Public Hearing
 - Combined Location and Design Public Hearing
- Two Hearing Project
 - Location Hearing
 - Design Hearing
- No Hearing/Post Willingness

Average Design Approval Schedule for One Hearing Project



Public Hearing

Average Right-of-Way Authorization Time length



After scoping & schedule has been completed locality will receive fee from consultant

1. Submitted fee should be detailed and identify all scoped tasks. Fee will also identify direct and indirect expenses (human labor elements vs. plans/mileage, etc.)
2. Fee proposal will also include sub-consultant information.
3. Fee should include breakdown of man-hours for each task by personnel types. Avoid lump-sum costs for tasks and “top heavy” personnel loading on tasks.

Fee Evaluation

1. Compare fee to similar type work that your locality has completed, or if unsure, consult with VDOT Project Coordinator for advice.
2. Compare fee to developed schedule – does the fee make sense for design length period i.e. – will they need to work 10 hours, 7 days a week for the next 2 years?
3. If the fee appears exorbitant or too low then perhaps there's a misunderstanding on scope.
4. Project Management man-hours should be less than 10% of total proposed man-hours.
5. Make sure pre-award audit comments are incorporated into fee proposal.

Fee Negotiation with Consultant

1. Very rarely will the owner's fee estimate match the consultant's estimate.
2. Don't rush the negotiation process.
3. Government does have the responsibility to support business. The consultant should make a fair fee.
4. Consultants will often provide a high estimate if they know they will be "chipped down", regardless of offered price.
5. Consultant will discuss reducing scope if there is not an agreement on price. Consider the potential for using internal services.
6. Don't be afraid to use the power of "Limited Authority"

Good consultant contract administration is about good communication

1. You should not need to “baby sit” your consultant; however, you should be apprised of project status at all times. This will eliminate potential surprises.
2. Conduct regular status meetings.
3. May want to consider using scheduled consultant evaluations as a method to rate and control consultant performance.
4. Always make consultant agree to advance notification of out of scope work before execution.

Consultant contract administration continued...

1. Insist that the consultant invoices you regularly. VDOT guidelines require monthly invoicing. FHWA requires reimbursement requests to be submitted at least once every 90 days for the project to be considered “active”.
2. Invoices should also include progress reports that discuss what has been completed since last invoice submittal and overall completion level of project.
3. Do not allow consultant to invoice beyond current completion level for project. Consultant may be trying to rectify internal cash flow issues with your project!
4. Comparable completion levels for each phase of the Concurrent Engineering Process are:

PFI – 30%	PH – 50%	FI – 60%
Pre-ad – 90%	Adv – 100%	

QUESTIONS???

Panel Discussion

Procuring Environmental Services

Jeff Rodgers

VDOT Environmental Division

804-371-6785

Environmental Services

Complying with many environmental regulations may be new to localities. Some applicable regulations include:

- National Environmental Policy Act (NEPA)
- Clean Water Act
- Clean Air Act
- Threaten and Endangered Species Act

All together there are over 65 different state and federal laws, regulations and Executive Orders.

Environmental Services

Environmental analyses often require specialized services. Some examples of these services include:

- Archaeology
- Architectural History
- Wetland Science
- Biology
- Geology
- Hydrogeology

Environmental Services

“Guide” provides for VDOT review of qualifications & scope / fee proposals

VDOT assistance ensures services are needed & at appropriate levels of effort

Right of Way & Utilities Consultant Contracting

Vicki Campbell

Consultant Contracting Manager

VDOT – Right of Way and Utilities

- Prequalification Procedures
 - Fee Appraisers
 - Right of Way Acquisition Consultants
- Resources available

- Submit 3 sample appraisals
 - Complexity + experience = entry level to panel (appraiser, senior appraiser)
- Appraisal application
- Title VI Form
- Copy of license

- Prequalification package submitted
 - Project Manager has 5 years of RW management experience
 - Relocation agent & negotiation agent have 2 years of relevant experience
- Prequalification package reviewed by appointed panel
- Firm interviewed
- Panel recommendation
- Title VI and FAR Audit approved

- List of prequalified consultants
 - Fee Appraisers
 - Right of Way Acquisition Firms
- Guidelines on hours/tasks for negotiation and relocation disciplines
- Documentation of Past Performance of Consultants

List of VDOT prequalified fee appraisers and right of way acquisition consultants available

Vicki Campbell

– Vicki.campbell@vdot.virginia.gov

Construction Phase Consulting Requirements

Mark A. Cole, P.E.
Area Construction Engineer
Richmond District – Northern Region

Will Vary Depending On
Number/Expertise of Locality Staff

Will Vary Depending on Scope and
Complexity of Project

GOAL – Resource project to meet all
VDOT & FHWA Requirements

- Contract Administration
- Construction Engineering & Inspection (CEI)
- Materials Engineering
- Design Engineering During Construction

- Project Constructed in Accordance with Contract Documents
- Project Documentation
- Certifications & Payment Vouchers
- Materials Testing
- Environmental Permits

- Coordinate Plan Revisions
- Process Work Orders
- Civil Rights Requirements
- Right-of-Way Agreements
- Project Close Out
- Claim Settlement

- Inspection
- Equal Employment (EEO)
- Scheduling and Claim Analysis
- Review and Approval of shop drawings

Required Inspection Certifications

- Hydraulic Cement Concrete Field
- Soils and Aggregate Compaction
- Asphalt Concrete Field
- Pavement Marking
- Nuclear Testing and Transportation
- Flagger
- Erosion and Sediment Control

- On site sampling/testing (see certifications above)
- Plant testing and inspection
 - Aggregate
 - Asphalt
 - Pre-cast Concrete Units
 - Structural steel

- Recommend retaining project designer on “on-call” basis to help resolve design issues during construction

- Include language in agreement regarding turnaround times for “on-call” services
- Included provisions for reviewing consultant performance

- **VDOT Construction Website -**
<http://www.virginiadot.org/business/const/default.asp>
 - 2005 Construction Manual
 - Inspection Manual
 - Virginia Work Area Protection Manual
 - Post Construction Manual
 - Construction Directive Memorandum
 - Other helpful information/guidelines
- **VDOT Materials Division Manual of Instructions**
- <http://www.virginiadot.org/business/materials-download-docs.asp>
 - Details sampling/testing/certification requirements
 - Approved Materials Lists

Consulting for Non-Traditional Projects

Pamela Liston

Enhancement/Scenic Byway Program Manager

VDOT – Local Assistance Division

Not your traditional highway projects;
many of which are managed by non-profit
and citizen groups

- Off-road pedestrian facilities
- Interpretation and pull-offs
- Rehabilitation of historic structures
- Welcome and visitor centers

- The same processes and regulations apply to federally funded, non-traditional projects as traditional highway projects
- Construction plans must have the same level of detail
- Plans must meet ADA and AASHTO design standards
- The Secretary of Interior Standards apply (inside and out) when restoring historic structures
- Hazardous materials including lead paint and asbestos

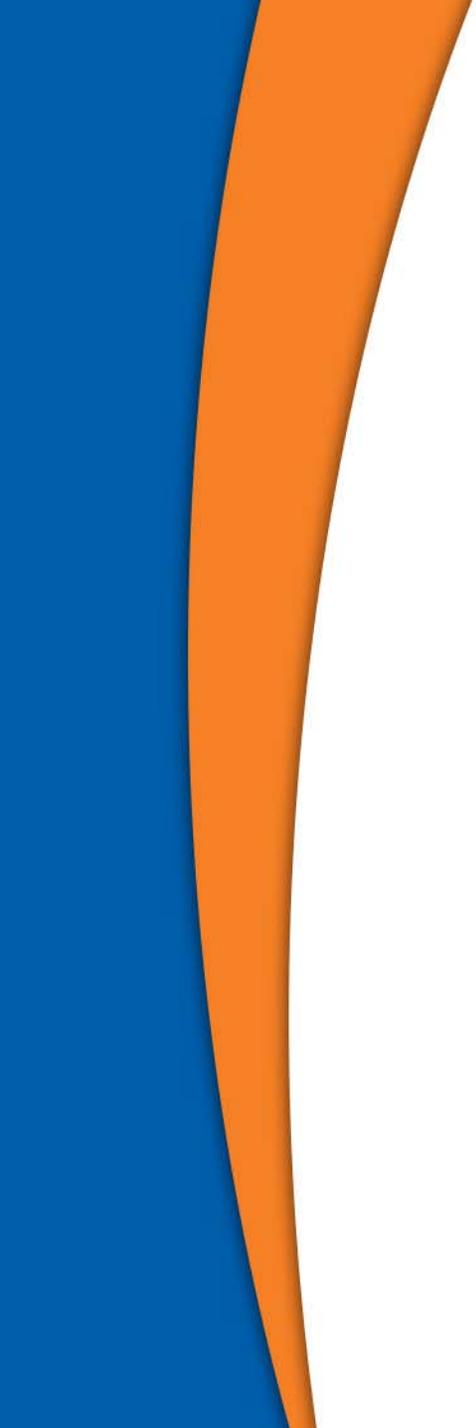
Educate Yourself...

Know what critical experience, knowledge, and specialty skill sets are needed for your project:

- One size fits all, doesn't work – look for the specific expertise needed on your project – utilities, civil engineering, historic preservation, architectural design
- Look for firms knowledgeable of state and federal requirements including procurement, design, and environmental regulations
- Be very clear on the scope of services to be provided by the consultant – does it include environmental, R/W, plan revisions / re-advertisement, construction management, inspection

Panel Discussion

- Your feedback is critical to the evaluation of this team's mission and performance
 - Please fill out evaluation form
 - Please contact me with suggestions or ideas for future workshops
- Thank you for your participation!



vDDOT