

# Network for Success

# Local Programs Workshop



**Session Name: Design / Submission Requirements**  
**Breakout Session # 2D**  
**Track: Project Delivery**

**George T. Rogerson, Jr**

Policies & Procedures Section Manager

Central Office Location and Design Division

October 24, 2012

# Speaker Introductions / Outline

**George Rogerson - Moderator**

**Design / Submission Requirements**

**Design Exceptions**

**Design Waivers**

**Plan Submission**

**ADA Requirements**

**Al Bryan – Landscape Architect – VDOT Location & Design Division**

**Bicycle and Pedestrian Accommodations / ADA**

**Heather Ham – Pennoni Engineering**

**Relationship between VDOT the Localities and Consultants**

# Design / Submission Requirements

## General Design Requirements :

See Part 2 Chapter 12 (Project Development) of the LAP Manual.

## Design Exceptions:

When design features as outlined in IIM-LD-227 do not meet AASHTO minimums, a Design Exception is required and approval shall be requested from the State Location and Design Engineer by completing form LD-440.

## Design Waivers:

When design features as outlined in IIM-LD-227 do not meet VDOT minimums, but exceed AASHTO minimums, a Design Waiver is required and shall be requested from the District Location and Design Engineer by completing the form LD-448

Design waivers are not required on projects that will be maintained by the locality.

# Design / Submission Requirements

## Plan Submission:

**All Right of Way and Advertisements Plans are to be submitted electronically to the VDOT Project Coordinator to be placed in the Falcon in the Central Office Plan File Library.**

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# Design / Submission Requirements

**ADA**

It is NOT a Choice, it is the LAW!

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# Speaker Introductions

**Al Bryan – Landscape Architect – VDOT Location & Design Division  
Bicycle and Pedestrian Accommodations / ADA**

**Heather Ham – Pennoni Engineering  
Relationship between VDOT the Localities and Consultants**

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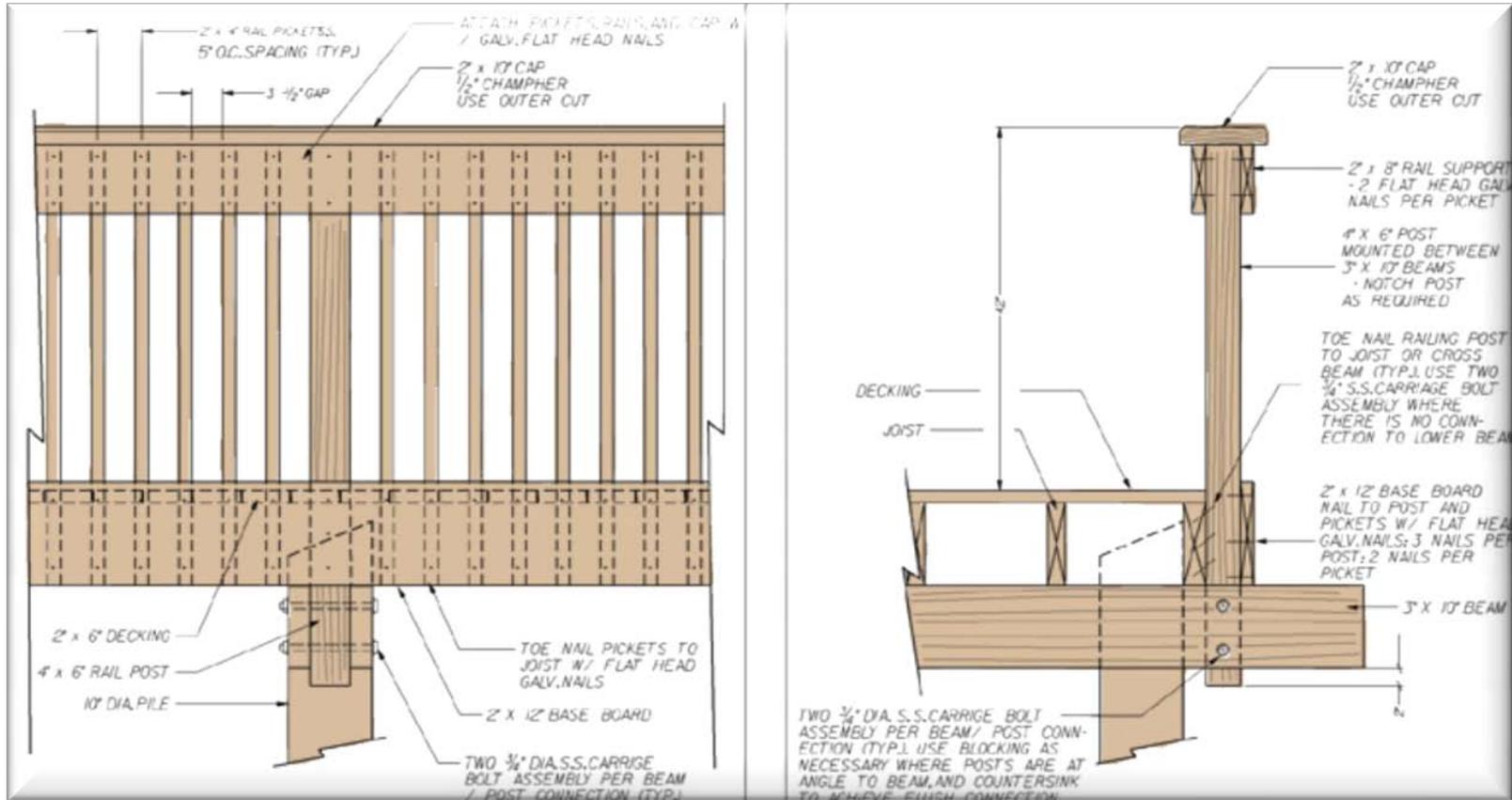
## Design Requirements and Compliance with ADAAG Breakout Session # 2D Track: Project Delivery

**Al Bryan**

East Region Landscape Architect,  
Virginia Department of Transportation

October 24<sup>th</sup>, 2012

# Design Resources

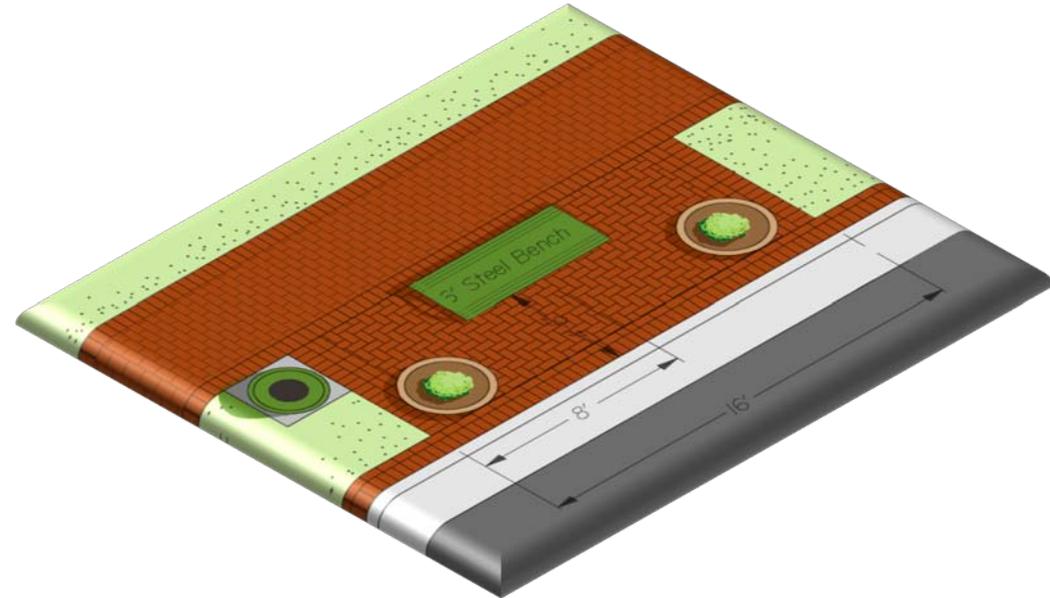


- Please include Non-Std' Site Details

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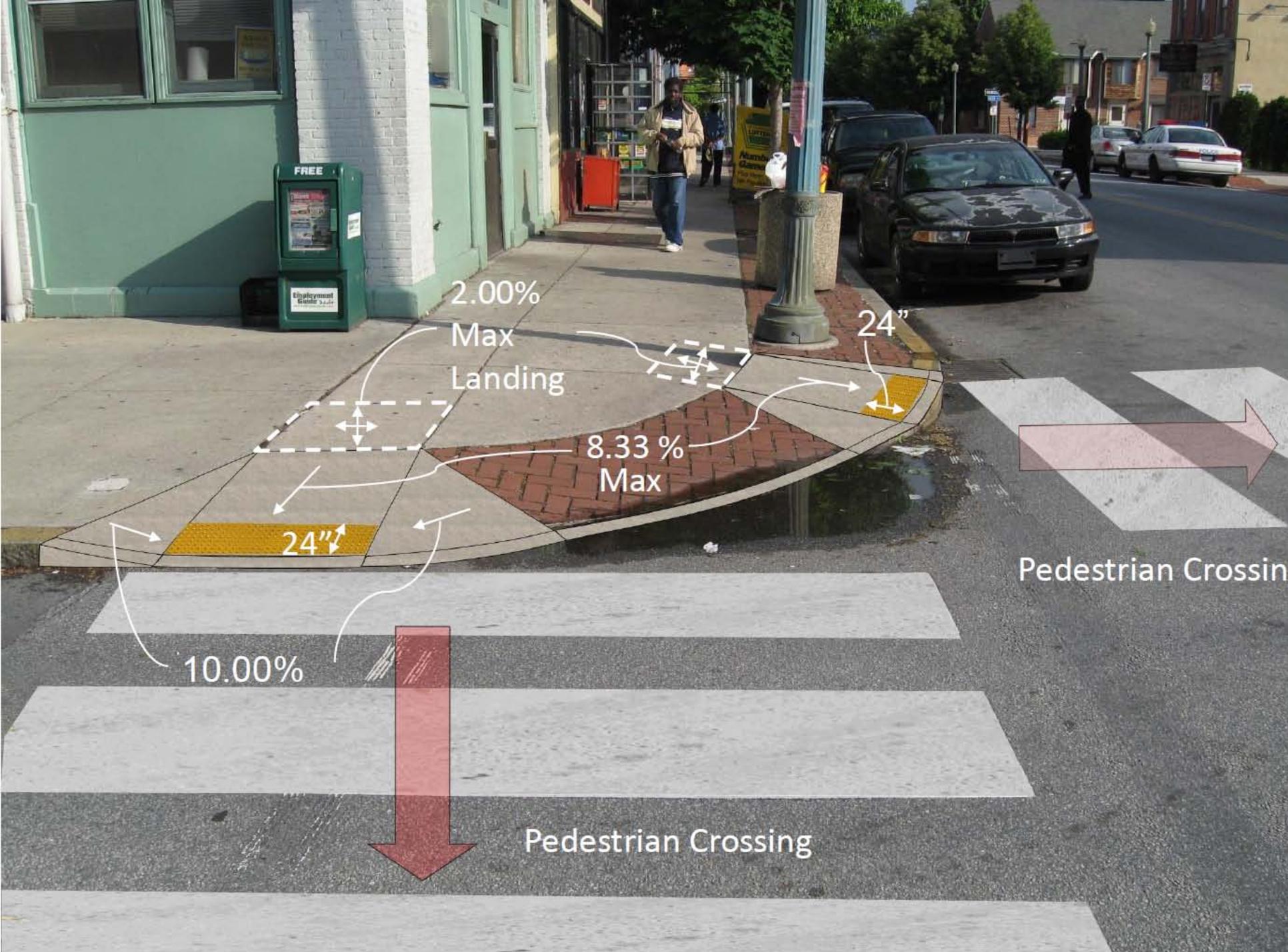


# Engineering Design Standards - Sidewalks -



- 5' minimum width Sidewalk with Buffer Strip
- 4' width Buffer Strip / 6' minimum width with Trees
- 4' width for clear accessible route
- 8' minimum width from BOC with on-street parking





FREE  
Employment Guide

2.00%  
Max  
Landing

24"

8.33%  
Max

24"

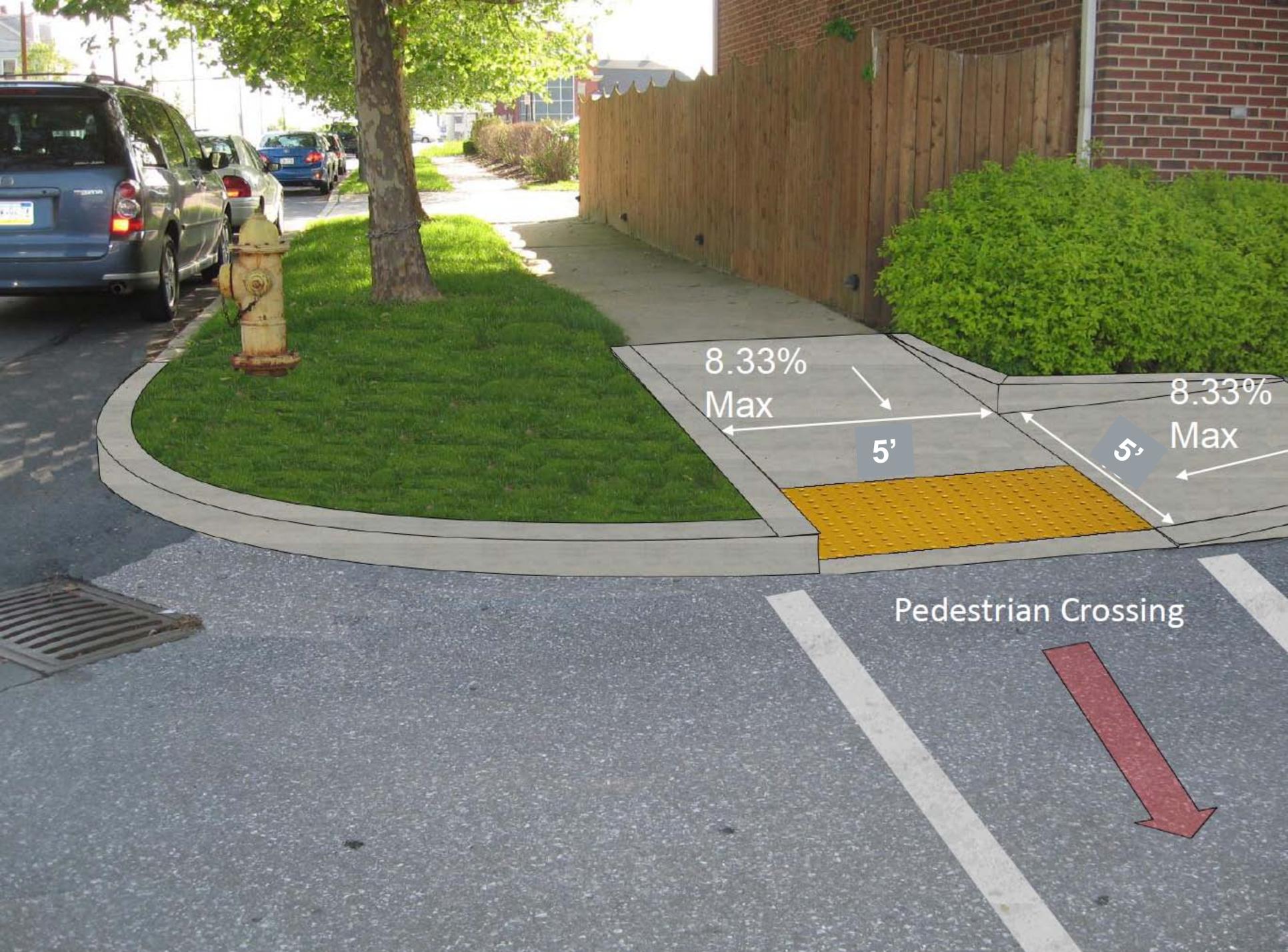
10.00%



Pedestrian Crossing



Pedestrian Crossing



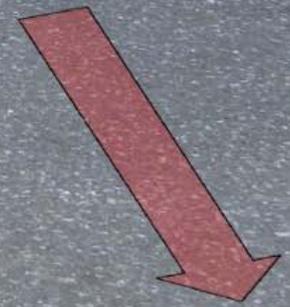
8.33%  
Max

5'

8.33%  
Max

5'

Pedestrian Crossing



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# Engineering Design Standards - Shared Use Paths -



- 10' minimum width, 2' shoulder, 3' clear zone,
- 5% grade, 2% cross slope

# Engineering Design Standards - Shared Use Paths -

5 to 6%	For up to 800 feet
7%	For up to 400 feet
8%	For up to 300 feet
9%	For up to 200 feet
10%	For up to 100 feet
11+%	For up to 50 feet

Source: AASHTO – Guide For The Development Of Bicycle Facilities.\*

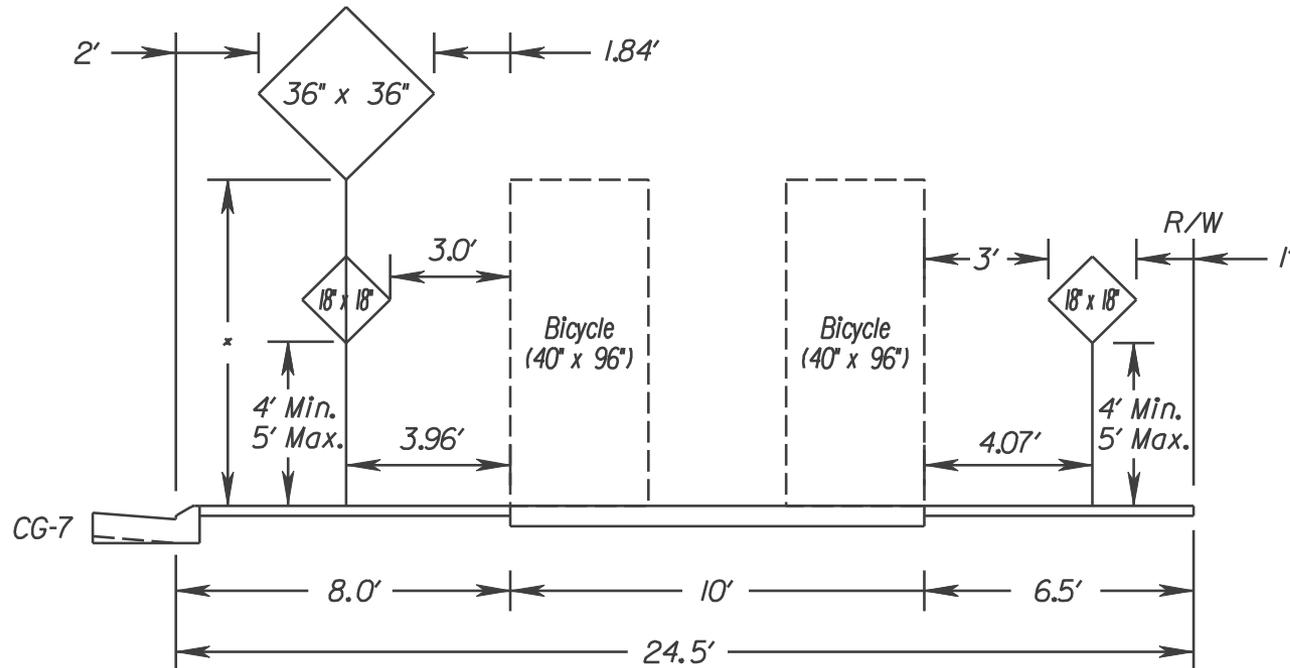
**TABLE A-5-8**

## **MAXIMUM GRADE LENGTHS**

- Exceptions to Slope as noted in Road Design Manual, Appendix A
- Plus trail adjacent to roadway may parallel the roadway slope

# Engineering Design Standards - Shared Use Paths -

*Typical section with roadway sign and trail sign.*



- VDOT is maintaining the 3' Clear Zone requirement despite AASHTO's reduction to 2' as indicated in the 2012 Bicycle Facilities Guide.





# Engineering Design Standards - Shared Use Paths -

## *Suggested Alternative Construction Materials to Asphalt Paving:*

### **Crushed Aggregate Surface**

4" of base course No. 21A's,  
topped with 2" of finely crushed  
limestone aggregate using  
3/8" minus crushed fines  
or "VDOT No. 10's"



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- **Don't be afraid to ask questions!**

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## Effectively Managing a VDOT Project Team

### Breakout Session # 2D

### Track: Project Delivery

**Heather M. Ham, PE, DBIA**

Office Director

Pennoni Associates Inc.

October 24, 2012

# Agenda

- Strategies for effective management of a VDOT Design project
- What are the localities responsibilities
- What should the locality expect from their consultant

# Strategies for effectively managing a VDOT design project

- Communication Plan
- Scope/Schedule/Budget
- Federal Strategy

# Communication Plan

- The most important component to a successful project
- Clearly identify a chain of communication for the locality and consultant to follow
- Establish an open and courteous platform for information to be distributed

## Scope/Schedule/Budget

- Scope should be reasonable, clear and concise
- Schedule should be realistic and identify all commitments
- Distribute all information to the team in the beginning
- Identify any pitfalls or problems as soon as possible to allow adequate time for resolution
- Budget must be reasonable

## Federal Strategy

- Clearly identify milestones and commitments the project must meet
- Work closely with your VDOT counterparts to insure compliance with the Federal Strategy
- Make sure your consultant is aware of your commitments



# Localities Responsibilities

- Coordination w/ VDOT
- Timely response to comments and questions
- Internal QA

## Coordination with VDOT

- Locality is the glue that binds the project
- Locality is the critical keeper of all the project information
- Frequent meetings based on project complexity and volume

## Timely Information Distribution

- Address issues as soon as practicable
- Relay information to all team members
- Suggestions
  - Project email group
  - Project meetings
  - Progress emails
  - Review meetings

## Internal QA process

- Verify scope requirements
- Insure compliance with VDOT/FHWA design standards and specifications
- Clearly identify any design exceptions and obtain approval
- Coordinate with operation and maintenance divisions

## Consultant Responsibilities

- Design
- Plan submittals
- Timely response to localities needs

## Design Requirements

- Comply with VDOT/FHWA standards and specifications
- Comply with locality standards and specifications
- Identify design exceptions early
- Insure design is compatible with scope of work
- Sustainable design

## Plan Submittals

- Verify the submittal is complete with respect to VDOT checklist for applicable level
- Do your own QA of the plans
- Know the commitments your client has for the project and work with them to meet those dates.

## Successful Project Delivery

- Truly a “Team” effort
- Days of the 10 Year VDOT project are long gone
- Now an age of accountability
- Projects must be efficient and financially constrained
- Communication is the key

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# Questions