# Appendix 3A-1 Definitions and Abbreviations

Abbreviations:

FEMA Federal Emergency Management Agency

# Appendix 3B-1

## Documentation Data Sheet for Hydrologic and Hydraulic Computations

SUBMITTAL:	FIELD INSPECTION	SUBMITTAL DATE:	10/21/01
Project:	Route 33 West Point	Scheduled Advertisement:	May 2002
	Bridges over Pamunkey	Revised:	May 2003
	and Mattaponi Rivers		-
D : (N	0000 000 100 BE 101	B : M IB ::	0/00
Project Nos.	0033-333-102, PE-101 0033-333-103, PE-101	Drainage Manual Revision:	6/86
	0033-333-103, FE-101		
		Agreement Date:	10/23/99
		Earliest Date of Calculations:	11/99
Location:	New Kent County		
	King William County Town of West Point		
	King and Queen County		
From:	New Kent County	Scheduled / actual milestones	
		Preliminary Field Review:	
To:	King William County	Field Inspection:	
		5 15 11 . 5	
Other Info:		Public Hearing Plans:	
Other mio.		Public Hearing:	
Submitted	Company/Agency	i ublic Healing.	
By:	address	Right-of-Way	
		,	
Submitted	VDOT C.O.	Pre-Final:	
To:	Richmond, VA		
0.1		Final:	
Submitted		Construction Completion	
To:		Construction Completion:	
Submitted			
To:			
Design			
Assignments			
	Project Manager	Hydraulics Task Leader	

Note: Sheet to be filled out and included in H&H Report. Blank sheet provided on next page.

## Appendix 3B-1 Documentation Data Sheet for Hydrologic and Hydraulic Computations

SUBMITTAL:	FIELD INSPECTION	SUBMITTAL DATE:	
Project:		Scheduled Advertisement: Revised:	
Project Nos.		Drainage Manual Revision:	
		Agreement Date:	
Lasation		Earliest Date of Calculations:	
Location:			
From:		Scheduled / actual milestones	
		Preliminary Field Review:	
		-	
To:		Field Inspection:	
		Public Hearing Plans:	
Other Info:			
_		Public Hearing:	
Submitted		5	
By:		Right-of-Way	
Submitted		Pre-Final:	
To:			
		Final:	
Submitted			
To:		Construction Completion:	
Submitted			
To:			
Design			
Assignments			
	Project Manager	Hydraulics Task Leader	

Note: This sheet to be filled out and included in H&H Report.

# Appendix 3B-2 Suggested Outline for VDOT Hydrologic and Hydraulic Analysis Reports

#### Cover for H&HA Report describing project, submittal, and schedule

### Section I - Hydrology

- A. Criteria
- B. Methodology
- C. Peak Discharge Computations and Summary Table
- D. FEMA Flood Maps
- E. Previous Studies
- F. Data Gathering

#### **Section II - Open Channel Hydraulics**

- A. Criteria
- B. Methodology
- C. Typical Roadway Ditch Sections
- D. Roadway Ditch Computations and Summary Table
- E. Existing Stream Inventory
- F. Data Gathering

#### **Section III - Culverts Hydraulics**

- A. Criteria
- B. Methodology
- C. Culvert Computations and Summary Table
- D. Data Gathering

#### **Section IV - Storm Sewer Hydraulics**

- A. Criteria
- B. Methodology
- C. Spread Computations
- D. Storm Sewer and Hydraulic Grade Line Computations
- E. Data Gathering

#### **Section V - Stormwater Management**

- A. Criteria
- B. Methodology
- C. Stormwater Management Plan Summary
- D. Detention Pond Computations
- E. Data Gathering

#### Section VI - Erosion and Sediment Control

- A. Criteria
- B. Methodology
- C. Sediment Basin Plan Summary
- D. Phase I Narrative
- E. Phase II Narrative
- F. Data Gathering

Note: This a suggested format and does not attempt to identify all the elements necessary for adequate analysis or documentation

# Appendix 3B-3 Field Engineer's Hydraulic Report

				Survey by		
Hydraulic Report  A separate form should be submitted for each appropriate site on this project.  Hydrologic History of Site (District Drainage Engineer)  State any unusual hydrologic occurrences of which you have or can acquire knowledge.  Hydraulic History of Site (District Bridge & Drainage Engrs.)  Comment of the relative importance and/or value of private or public property adjacent to this second contents.	ntior					
Hydrologic History of Site (District Drainage Engineer)  State any unusual hydrologic occurrences of which you have or can acquire knowledge.  Hydraulic History of Site (District Bridge & Drainage Engrs.)  Comment of the relative importance and/or value of private or public property adjacent to this second contents.	ect					
State any unusual hydrologic occurrences of which you have or can acquire knowledge.  Hydraulic History of Site (District Bridge & Drainage Engrs.)  Comment of the relative importance and/or value of private or public property adjacent to this second contents.	,	separate form should be submitted for each appropriate site on this project.				
Hydraulic History of Site (District Bridge & Drainage Engrs.)  Comment of the relative importance and/or value of private or public property adjacent to this s	ļ	Hydrologic History of Site (District Drainage Engineer)				
Comment of the relative importance and/or value of private or public property adjacent to this s	:	State any unusual hydrologic occurrences of	f which you have or	can acquire knowledge.		
Comment of the relative importance and/or value of private or public property adjacent to this s (up and downstream) and the general affect of floods thereon. (Dist. Drainage Engr.)	-    -	Hydraulic History of Site (District Bridge & D	Prainage Engrs.)			
	-	Comment of the relative importance and/or v	value of private or pu	ublic property adjacent to this site (Dist. Drainage Engr.)		
	-					
	-					

# Appendix 3B-3 Field Engineer's Hydraulic Report

State rip i recomme	rap and/or scour protection recommendations and justification for these ndations. (Dist. Bridge Engr.).
	basic assessment of the environmental, ecological, historical and econo tions, which may exert an influence on this site. (District Drainage Engir
Make note	e of any flood plain zoning and/or flood plain studies in existence or emin
proposed	. (Dist. Drainage Engr.)
Other Spe	ecial Considerations and Remarks (District Bridge and Drainage Enginee