

**WEST VIRGINIA DIVISION OF HIGHWAYS
DESIGN REPORT FIELD REVIEW SUBMISSION CERTIFICATION**

State Project No. _____
Federal Project No. _____
Project Name _____
County _____

Consultant _____
Project Manager _____
Submission Date _____

General Plan Requirements

_____ Project Numbers Shown
_____ Line Weights Legible
_____ Contours Screened and Legible
_____ Adequate Spot Elevations
 Shown

Plan and Profile Sheets

_____ Alignment, Curve Data, and Superelevation Rate
 Shown for Mainline and all Sideroads
_____ Stationing Shown for Mainline
 and all Sideroads
_____ Prel. Grades and Vertical Curve Data,
 Including K-Value, Shown for
 Mainline and all Sideroads
_____ Proposed Construction Limits Shown
_____ Property Lines from Tax Maps Shown
_____ Disposition of all Crossroads,
 Railroads, and Streams or Rivers
_____ Channel Change Requirements Incorporating
 Natural Channel Design Features Shown
_____ Major Drainage Requirements,
 Shown (DD-706)
_____ Proposed and Existing R/W
 Limits Shown (DD-301)
_____ Existing & Private Major Utilities, Including
 Gas Fields, Sewer, and Water
 Facilities Shown

Typical Sections

_____ Mainline Typical
_____ Sideroad Typical

Cross Sections

_____ Mainline Sections at 500 foot
 Spacing and at Critical Locations
_____ Sideroad Sections at 500 foot
 Spacing and at Critical Locations
_____ Existing Topography, Including R/W,
 Streams, Roads, Utilities, etc., Shown

Miscellaneous Sheets

_____ Title Sheet with Proposed Sheet Index
 (DD-701)
_____ Mass Diagram
_____ Traffic Sketch Map (DD-802)
_____ Conceptual Maintenance of
 Traffic Scheme, Including Detours
_____ Ownership Index (May be submitted as a
 separate report on large projects
 involving a significant number of parcels)

Field Review Report

_____ Design Criteria Listing for Mainline
 and all Sideroads
_____ Listing of Proposed Design
 Exceptions
_____ Listing of Advantages and Disadvantages
 of Each Alignment Under Study
_____ Table of Physical Characteristics
 (curvature, grades, construction costs,
 right-of-way costs, displacements,
 length, etc.) of Each Alignment
_____ Access Point Analysis Including
 type, location, etc.
_____ Access Point Cost Analysis (DD-307)
_____ Geotechnical Overview

Miscellaneous Reports

_____ Major Drainage Calculations
 (Two Separately Bound Sets)
_____ Total Project Construction Cost Estimate
 of Each Alignment Under Study

Notes: 1- All Lines to be initialed by Office Manager
 or responsible management level
 above the Project Manager
 2- Use "NA" for any item not applicable to the
 project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
DESIGN REPORT OFFICE REVIEW SUBMISSION CERTIFICATION**

State Project No. _____
Federal Project No. _____
Project Name _____
County _____

Consultant _____
Project Manager _____
Submission Date _____

General Plan Requirements

_____ Project Numbers Shown
_____ Line Weights Legible
_____ Contours Screened and Legible
_____ Adequate Spot Elevations
 Shown

Plan and Profile Sheets

_____ Alignment, Curve Data, and Superelevation Rate
 Shown for Mainline and all Sideroads
_____ Stationing Shown for Mainline
 and all Sideroads
_____ Prel. Grades and Vertical Curve Data,
 Including K-Value, Shown for
 Mainline and all Sideroads
_____ Proposed Construction Limits Shown
_____ Property Lines from Tax Maps Shown
_____ Disposition of all Crossroads,
 Railroads, and Streams or Rivers
_____ Channel Change Requirements Incorporating
 Natural Channel Design Features Shown
_____ Major Drainage Requirements,
 Shown (DD-706)
_____ Proposed and Existing R/W
 Limits Shown (DD-301)
_____ Existing & Private Major Utilities, Including
 Gas Fields, Sewer, and Water
 Facilities Shown

Typical Sections

_____ Mainline Typicals
_____ Sideroad Typicals

Cross Sections

_____ Mainline Sections at 500 foot
 Spacing and at Critical Locations
_____ Sideroad Sections at 500 foot
 Spacing and at Critical Locations
_____ Existing Topography, Including R/W,
 Streams, Roads, Utilities, etc., Shown

Miscellaneous Sheets

_____ Title Sheet with Proposed Sheet Index
 (DD-701)
_____ Mass Diagram
_____ Traffic Sketch Map (DD-802)
_____ Conceptual Maintenance of
 Traffic Scheme, Including Detours
 (If Required)
_____ Ownership Index (May be submitted as a
 separate report on large projects
 involving a significant number of parcels)

Office Review Report

_____ Design Criteria Listing for Mainline
 and all Sideroads
_____ Listing of Proposed Design
 Exceptions
_____ Listing of Advantages and Disadvantages
 of Each Alignment Under Study
_____ Table of Physical Characteristics
 (curvature, grades, construction costs,
 right-of-way costs, displacements,
 length, etc.) of Each Alignment
_____ Access Point Analysis Including
 type, location, etc.
_____ Access Point Cost Analysis (DD-307)
_____ Geotechnical Overview
_____ Listing of Design Report Field Review
 Comments and Action Taken on Each
 Comment

Miscellaneous Reports

_____ Major Drainage Calculations
 (Two Separately Bound Sets)
_____ Total Project Construction Cost Estimate
 of Each Alignment Under Study

Notes: 1- All Lines to be initialed by Office Manager
 or responsible management level
 above the Project Manager
 2- Use "NA" for any item not applicable to the
 project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
PRELIMINARY FIELD REVIEW SUBMISSION CERTIFICATION**

State Project No. _____
Federal Project No. _____
Project Name _____
County _____

Consultant _____
Project Manager _____
Submission Date _____

General Plan Requirements

_____ Construction Project Numbers Shown
_____ Line Weights Legible
_____ Contours Screened and Legible
_____ Adequate Spot Elevations Shown

Field Review Preparation

_____ Mainline Centerline Flagged at Sufficient Intervals for Field Review
_____ RW-1 Plans or RW-1 & RW-2 Combined Plans Submitted (DD-301)
_____ Value Engineering Review Required (DD-816)

Plan and Profile Sheets

_____ Alignment, Curve Data, and Superlevation Shown for Mainline and all Sideroads
_____ Stationing Shown for Mainline and all Sideroads
_____ Prel. Grades and Vertical Curve Data, Including K-Value, Shown for Mainline and all Sideroads
_____ Proposed Construction Limits Shown
_____ Property Lines Shown
_____ Disposition of all Crossroads, Railroads, and Streams or Rivers
_____ Channel Change Requirements Incorporating Natural Channel Design Features Shown
_____ Major Drainage Requirements, Including Pipe Profiles, Shown (DD-706)
_____ Major Erosion and Sediment Control Features on Plans and Cross Sections
_____ Proposed and Existing R/W Limits Shown
_____ Existing Public & Private Utilities, Including Gas, Water, Septic, and Leach Fields for Residences, Shown (DD-303)

Typical Sections

_____ Mainline Typical
_____ Sideroad Typical
_____ Temporary Detour Typical

Cross Sections

_____ Mainline Sections at 200 foot Spacing and at Critical Locations
_____ Sideroad Sections at 200 foot Spacing and at Critical Locations
_____ Earthwork Based on Assumed Slopes
_____ Existing Topography, Including R/W, Utilities, Bldg.'s, etc., Shown

Environmental Requirements

_____ Type of 404 Permit Documented (Individual or Nationwide)
_____ Certification of Familiarity with Environmental Documents
_____ List of Required Environmental Mitigations (DD-206)
_____ Listing and Explanation of Deviations to Design Report and Env. Documents

Miscellaneous Sheets

_____ Title Sheet with Proposed Sheet Index (DD-701)
_____ Mass Diagram
_____ Interchange Geometric Layout
_____ Traffic Sketch Map (DD-802)
_____ Conceptual Maintenance of Traffic Scheme, Including Detours (DD-681)
_____ Traffic Routing Contingency Plan for Bridge/Structure Projects
_____ Property Maps, Ownership and Utility Index from R/W-1 Plans (DD-301)

Boring Layout and Documents

_____ Boring Layout Shown on a Set of Topographic Plans
_____ Boring Bid Documents (Submitted after Preliminary Field Review) (DD-401)
_____ Boring Tabulation Showing all Pertinent Information (Submitted after Preliminary Field Review)

Preliminary Field Review Report

_____ Design Criteria Listing for Mainline and all Sideroads
_____ Access Point Cost Analysis (DD-307)
_____ Draft of required Design Exceptions

Miscellaneous Reports

_____ Major Drainage Calculations (Two Separately Bound Sets)
_____ Geometric Calculations (Two Separately Bound Sets)
_____ Total Project Construction Cost Estimate

Notes: 1- All Lines to be initialed by Office Manager or responsible management level above the Project Manager
2- Use "NA" for any item not applicable to the project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
SLOPE REVIEW SUBMISSION CERTIFICATION**

State Project No. _____
Federal Project No. _____
Project Name _____
County _____

Consultant _____
Project Manager _____
Submission Date _____

General Plan Requirements

_____ Construction Project Numbers Shown
_____ Line Weights Legible
_____ Contours Screened and Legible
_____ Adequate Spot Elevations
 Shown

Plan and Profile Sheets

_____ Alignment, Curve Data, and Superlevation
 Shown for Mainline and all Sideroads
_____ Stationing Shown for Mainline
 and all Sideroads
_____ Prel. Grades and Vertical Curve Data,
 Including K-Value, Shown for
 Mainline and all Sideroads
_____ Proposed Construction Limits Shown
_____ Property Lines Shown
_____ Disposition of all Crossroads,
 Railroads, and Streams or Rivers
_____ Channel Change Requirements Incorporating
 Natural Channel Design Features Shown
_____ Major Drainage Requirements,
 Including Pipe Profiles, Shown (DD-706)
_____ Proposed and Existing R/W
 Limits Shown
_____ Existing Public & Private Utilities, Including
 Gas, Water, Septic, and Leach Fields
 for Residences, Shown (DD-303)
_____ Boring Layout Plotted on All
 Plan Sheets
_____ Borings Plotted on Profile
 Sheets
_____ Preliminary Layout of all Structures,
 Including Bridges, Culverts, and Walls

Typical Sections

_____ Mainline Typicals
_____ Sideroad Typicals
_____ Temporary Detour Typicals

Cross Sections

_____ Cross Sections with Recommended Cut
 Slopes, Fill Slopes and Associated
 Fill Benches, and Select Embankment
 Placement
_____ Earthwork Based on Assumed Slopes
 and Recommended Shrink and Swell
 Factors
_____ Borings Plotted on all Applicable Sections

Miscellaneous Sheets

_____ Title Sheet for Boring Logs Showing
 Geologic Symbols (DD-402)
_____ Mass Diagram

Geotechnical Report

_____ Discussion of Recommended
 Slopes
_____ Discussion of Recommended Culverts
 and Retaining Walls
_____ Discussion of Project Soils and
 Geologic Conditions, Including
 Subsurface Conditions (DD-402)
_____ Discussion and Justification
 for Recommended Shrink and
 Swell Factors (DD-406)
_____ Laboratory Testing & Soil/Rock
 Analysis
_____ Engineer's Written Field Boring Logs
_____ Total Project Construction Cost Estimate

Notes: 1- All Lines to be initialed by Office Manager
 or responsible management level
 above the Project Manager
 2- Use "NA" for any item not applicable to the
 project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
FINAL FIELD REVIEW SUBMISSION CERTIFICATION**

State Project No. _____

Consultant _____

Federal Project No. _____

Project Manager _____

Project Name _____

Submission Date _____

County _____

General Plan Requirements

_____ Construction Project Numbers Shown

_____ Line Weights Legible

_____ Contours Screened and Legible

_____ Adequate Spot Elevations
Shown

_____ All Phases of Work Included in a
Bid Item

Plan and Profile Sheets

_____ Alignment, Curve Data, and Superlevation
Shown for Mainline and all Sideroads

_____ Stationing Shown for Mainline
and all Sideroads

_____ Grades and Vertical Curve Data,
Including K-Value, Shown for
Mainline and all Sideroads

_____ Construction Limits Shown

_____ Property Lines Shown

_____ Disposition of all Crossroads,
Railroads, and Streams or Rivers

_____ Channel Change Requirements Incorporating
Natural Channel Design Features Shown

_____ All Drainage Requirements Including Pipes, Pipe
Profiles, Ditches, and Underdrains Shown
(DD-706)

_____ Major Erosion and Sediment Control Features
on Plans and Cross Sections

_____ Proposed and Existing R/W Limits Shown

_____ Utility Dispositions Shown (If Available)

_____ Existing Public & Private Utilities, Including
Gas, Water, Septic, and Leach Fields
for Residences, Shown (DD-303)

_____ Pavement/Surface Limits for All Roads

_____ Site Plans for All Structures

Typical Sections

_____ Mainline Typical

_____ Sideroad Typical

_____ Pavement Edge/Shoulder Details

_____ Pavement Design with Legend
Including all Related Details

_____ Temporary Detour Typical

Miscellaneous Sheets

_____ Title Sheet with Proposed Sheet Index
(DD-701)

_____ Summary of Quantities Showing List of
Items Separated by Categories with
Alternates at the End of Each Category
(BAMS Format) (DD-705)

_____ General Note Sheets (DD-704)

_____ Quantity Tables without Quantities
except Earthwork (DD-705)

_____ Mass Diagram

_____ Reference Point Sheet

_____ Geometric Layout Sheet with Coordinates

_____ Benchmarks Shown on Ref. Pt. Sheet,
Geometric Layout Sheet, or Profile Sheet
Superelevation Shown for all Curves
(DD-603)

_____ Interchange Geometrics Shown

_____ Intersection Layout Including Joint Layout

_____ Complete Maintenance of Traffic Scheme
Including Sequence of Construction
(DD-681)

_____ Traffic Routing Contingency Plan
for Bridge/Structure Projects

_____ Prel. Pavement Marking Layout (DD-682)

_____ Preliminary Sign Layout (DD-683)

_____ Preliminary Signal Layout

_____ Preliminary Lighting Layout (DD-684)

_____ All Required Ret. Wall and Culvert
Details Shown

_____ Any Required Special Detail Sheets

_____ Property Maps, Ownership and Utility
Index from R/W-2 Plans (DD-301)

_____ Completed Set of Soil Plans and Profiles
Including Title Sheet (DD-402)

Cross Sections

_____ Complete Set of Mainline Cross
Sections Showing Templates,
Earthwork, Borings, R/W Limits.
Guardrail & Barriers

_____ Complete Set of Sideroad Cross
Sections Showing Templates,
Earthwork, Borings, R/W Limits.
Guardrail & Barriers

_____ All Drainage Features Shown

_____ Quantity Tables Completed

**WEST VIRGINIA DIVISION OF HIGHWAYS
FINAL FIELD REVIEW SUBMISSION CERTIFICATION**

State Project No. _____

Consultant _____

Federal Project No. _____

Project Manager _____

Project Name _____

Submission Date _____

County _____

Final Field Review Report

- _____ Listing of Preliminary Field Review and Slope Review Comments and Action Taken on Each Comment
- _____ Preliminary Calculations for Turning Lane Lengths and Tapers, Intersection Sight Distances, Interchange Ramp Lengths
- _____ Completed Design Exception Reports
- _____ Discussion of Construction Sequence Utilized in Plan Development
- _____ Listing of Proposed Project Specific Special Provisions
- _____ Discussion of Need for Incentive/Disincentive Contract Provisions (DD-708)

Miscellaneous Reports

- _____ Complete Drainage Calculations (Two Separately Bound Sets) (Three Sets if FHWA Involved)
- _____ Geometric Calculations (Two Separately Bound Sets) (Three Sets if FHWA Involved)
- _____ Geotechnical Report (Draft)
- _____ Total Project Construction Cost Estimate

Final Field Review Preparation

- _____ RW-2 Plans Submitted (DD-301)

Environmental Requirements

- _____ Type of 404 Permit Documented (Individual or Nationwide)
- _____ List of Required Environmental Mitigations (DD-206)
- _____ Certification and Listing of Adherence to Environmental Documents
- _____ Listing and Explanation of Deviations to Design Report and Env. Documents
- _____ Completed NPDES Registration Form

Value Engineering Report (If Applicable)

- _____ Listing of Comments From Value Engineering Review (DD-816)
- _____ Discussion of Actions Taken on Each Comment

- Notes:**
- 1- All Lines to be initialed by Office Manager or responsible management level above the Project Manager
 - 2- Use "NA" for any item not applicable to the project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
FINAL OFFICE REVIEW SUBMISSION CERTIFICATION**

State Project No. _____

Consultant _____

Federal Project No. _____

Project Manager _____

Project Name _____

Submission Date _____

County _____

General Plan Requirements

- _____ Construction Project Numbers Shown
- _____ Line Weights Legible
- _____ Contours Screened and Legible
- _____ Adequate Spot Elevations Shown
- _____ All Phases of Work Included in a Bid Item

Plan and Profile Sheets

- _____ Alignment, Curve Data, and Superlevation Shown for Mainline and all Sideroads
- _____ Stationing Shown for Mainline and all Sideroads
- _____ Grades and Vertical Curve Data, Including K-Value, Shown for Mainline and all Sideroads
- _____ Construction Limits Shown
- _____ Property Lines Shown
- _____ Disposition of all Crossroads, Railroads, and Streams or Rivers
- _____ Channel Change Requirements Incorporating Natural Channel Design Features Shown
- _____ All Drainage Requirements Including Pipes, Pipe Profiles, Ditches, and Underdrains Shown (DD-706)
- _____ Major Erosion and Sediment Control Features on Plans and Cross Sections
- _____ Drainage and Guardrail Limits/Data Noted on Plan and Profile Sheets
- _____ Proposed and Existing R/W Limits Shown
- _____ Utility Dispositions Shown for all affected Utilities (If Available)
- _____ Existing Public & Private Utilities, Including Gas, Water, Septic, and Leach Fields for Residences, Shown (DD-303)
- _____ Pavement/Surface Limits for All Roads
- _____ Site Plans for All Structures

Typical Sections

- _____ Mainline Typicals
- _____ Sideroad Typicals
- _____ Pavement Edge/Shoulder Details
- _____ Pavement Design with Legend Including all Related Details
- _____ Temporary Detour Typicals

Miscellaneous Sheets

- _____ Title Sheet with Proposed Sheet Index (DD-701)
- _____ Summary of Quantities Showing List of Items Separated by Categories with Alternates at the End of Each Category (BAMS Format) (DD-705)
- _____ General Note Sheets (DD-704)
- _____ Quantity Tables with all Quantities Completed (DD-705)
- _____ Mass Diagram
- _____ Reference Point Sheet
- _____ Geometric Layout Sheet with Coordinates
- _____ Benchmarks Shown on Ref. Pt. Sheet, Geometric Layout Sheet, or Profile Sheet
- _____ Superelevation Tables and Diagrams Completed for all Curves (DD-603)
- _____ Interchange Geometrics Shown
- _____ Intersection Layout Including Joint Layout
- _____ Complete Maintenance of Traffic Scheme Including Sequence of Construction (DD-681)
- _____ Traffic Routing Contingency Plan for Bridge/Structure Projects
- _____ Pavement Marking Layout (DD-682)
- _____ Sign Layout (DD-683)
- _____ Signal Layout
- _____ Lighting Layout (DD-684)
- _____ All Required Ret. Wall and Culvert Details Shown
- _____ Any Required Special Detail Sheets
- _____ Property Maps, Ownership and Utility Index from R/W-3 Plans
- _____ Completed Set of Soil Plans and Profiles Including Title Sheet (DD-402)

Cross Sections

- _____ Complete Set of Mainline Cross Sections Showing Templates, Earthwork, Borings, R/W Limits, Guardrail & Barriers
- _____ Complete Set of Sideroad Cross Sections Showing Templates, Earthwork, Borings, R/W Limits, Guardrail & Barriers
- _____ All Drainage Features Shown
- _____ Quantity Tables Completed

**WEST VIRGINIA DIVISION OF HIGHWAYS
FINAL OFFICE REVIEW SUBMISSION CERTIFICATION**

State Project No. _____
Federal Project No. _____
Project Name _____
County _____

Consultant _____
Project Manager _____
Submission Date _____

Final Office Review Report

_____ Listing of Final Field Review Comments
and Action Taken on Each Comment
_____ Final Calculations for Turning Lane
Lengths and Tapers, Intersection
Sight Distances, Interchange Ramp
Lengths
_____ Approved Design Exception Reports
_____ Discussion of Construction Sequence
Utilized in Plan Development
_____ Completed Copies of All Project Specific
Special Provisions (Word Format)
(DD-105, DD-820)
_____ Complete Incentive/Disincentive Provisions
_____ Letters Approving Proposed Relocations From
Utility Companies

Environmental Requirements

_____ List of Required Environmental
Mitigations (DD-206)
_____ Certification and Listing of Adherence
to Environmental Documents
_____ Listing and Explanation of Deviations
to Design Report and Env. Documents
_____ Copy of Transmittal Letter From DDT
Submitting NPDES Registration to DEP
_____ Completed NPDES Registration Form
with all Attachments sent to DEP

Miscellaneous Reports

_____ Complete Drainage Calculations
(Two Separately Bound Sets)
(Three Sets if FHWA Involved)
_____ Computations Including Horizontal/Vertical
Geometry and Quantity Calculations
(Two Separately Bound Sets)
(Three Sets if FHWA Involved)
_____ Final Geotechnical Report (DD-402)

Corps of Engineers Permit Requirements

_____ Plan View of all Project Areas
Requiring a 404 Permit
_____ Profile View of all Project Areas
Requiring a 404 Permit
_____ Cross Section View of all Project Areas
Requiring a 404 Permit
_____ Quantity of Material to be Placed
Below "Ordinary High Water" Shown
on Appropriate Sheets
_____ Temporary Fills, Causeways, Bridges,
Pipes, etc. Shown For Proposed
Construction Scheme
_____ Copy of Section 106 "Historical Clearance
Document" Included
_____ Copy of "Rare, Threatened, and Endangered
Species Clearance Letter" Included
_____ Copy of Letter Submitting Plans to Resource
Agencies for Review
_____ Copy of All Comments Received from
Resource Agencies
_____ Copy of FEMA Clearance Letter
(If Applicable)
_____ Two Copies of Completed 404 Permit
Application Package Included

Supplemental Contract Informator

_____ Estimated Contract Time Chart
(DD-803)
_____ Total Project Construction Cost Estimate

Notes: 1- All Lines to be initialed by Office Manager
or responsible management level
above the Project Manager
2- Use "NA" for any item not applicable to the
project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
SPAN ARRANGEMENT SUBMISSION CERTIFICATION**

State Project No. _____
 Federal Project No. _____
 Project Name _____
 County _____

Consultant _____
 Project Manager _____
 Submission Date _____
 Struc. No. or Wall Sta. _____

General Plan Requirements

_____ Construction Project Numbers Shown
 _____ Line Weights Legible
 _____ Contours Screened and Legible
 _____ Adequate Spot Elevations Shown
 _____ Bridge Number Shown on All Applicable Documents and Plan Sheets

Plan and Profile Sheets

_____ Plan and Profile Sheet for Each Span Arrangement Studied
 _____ Proposed Grading for Each Alternative Shown
 _____ Alignment and Curve Data Shown for Each Alternative
 _____ Prel. Grades and Vertical Curve Data Shown for Each Alternative
 _____ Stationing Shown for Each Alternative
 _____ Boring Locations Shown for Each Span Arrangement
 _____ Hydraulic Data Plotted on Profile
 _____ Clearance Envelope for Any Railroads, Highways, or Associated Structures Proposed and Existing R/W Limits Shown
 _____ Traffic Data Shown on Plan Sheets
 _____ Profile of All Crossroads or Intersecting Features Shown
 _____ Existing Public & Private Utilities, Including Gas, Water, Septic, and Leach Fields for Residences, Shown (DD-303)
 _____ Schematic Profile of Underpassing Railroad or Roadway

Typical Sections

_____ Roadway Typical
 _____ Bridge Typical
 _____ Staging Requirements
 _____ Temporary Detour Typical

Miscellaneous Sheets

_____ Conceptual Maintenance of Traffic Scheme
 _____ Traffic Routing Contingency Plan for Bridge/Structure Projects
 _____ Location and Elevation of Existing Structure Showing Clearances, Waterway Opening, and Appropriate Storm Frequency Elevations

Boring Layout and Documents

_____ Boring Layout
 _____ Boring Bid Documents (Submitted after Span Arrangement Review) (DD-401)
 _____ Boring Tabulation Showing all Pertinent Information (Submitted after Span Arrangement Review)

Span Arrangement Report

_____ Alignment, Grades, Typical Sections, and Superelevation of Bridge Matches Those used in the Prel. Field Review and are Documented in the Report
 _____ Preliminary Hydraulic Study Submitted (Three Separately Bound Sets) (Four Sets if FHWA Involved)
 _____ Freeboard Documented
 _____ Navigational Clearance Requirements Documented
 _____ Roadway or Railroad Clearance Requirements Documented (DD-303)
 _____ Maintenance of Traffic Requirements Documented
 _____ Constructability and Staging Requirements Discussed and Accounted for in Proposed Layout
 _____ Description of Proposed Superstructure Depth, Type, and Span Length for Each Alternate
 _____ Listing of Proposed Computer Software
 _____ Listing of Deck Drainage Requirements
 _____ Listing of Joint and/or Bearing Requirements
 _____ Listing of Environmental, Aesthetic, and Utility Requirements
 _____ Description of Assumed Foundation Type
 _____ Preliminary Total Structure Cost for Each Span Arrangement, Listed by Item and Separated by Super and Sub Structure
 _____ Recommended Layouts for TS&L
 _____ Copy of Minutes from Pre-Span Arr. Meeting
 _____ Total Project Construction Cost Estimate

Notes: 1- All Lines to be initialed by Office Manager or responsible management level above the Project Manager
 2- Use "NA" for any item not applicable to the project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
COMBINED TS&L SUBMISSION CERTIFICATION**

State Project No. _____
 Federal Project No. _____
 Project Name _____
 County _____

Consultant _____
 Project Manager _____
 Submission Date _____
 Struc. No. or Wall Sta. _____

General Plan Requirements

_____ Construction Project Numbers Shown
 _____ Line Weights Legible
 _____ Contours Screened and Legible
 _____ Adequate Spot Elevations Shown
 _____ Bridge Number Shown on All Applicable Documents and Plan Sheets

Plan and Profile Sheets

_____ Plan and Profile Sheet for Each Alternative Studied
 _____ Proposed Grading for Each Alternative Shown
 _____ Alignment and Curve Data Shown for Each Alternative
 _____ Grades and Vertical Curve Data Shown for Each Alternative
 _____ Stationing Shown for Each Alternative
 _____ Boring Locations Shown for Each Alternative
 _____ Hydraulic Data Plotted on Profile
 _____ Clearance Envelope for Any Railroads, Highways, or Associated Structures
 _____ Proposed and Existing R/W Limits Shown
 _____ Existing Public & Private Utilities, Including Gas, Water, Septic, and Leach Fields for Residences, Shown (DD-303)
 _____ Schematic Profile of Underpassing Railroad or Roadway

Boring Layout and Documents

_____ Completed Geotechnical Report (Five copies)
 _____ Bearing Capacities Documented
 _____ Foundation Depth Shown
 _____ Scour Depths Shown
 _____ External Stability Calculations of MSE Walls Included

Typical Sections

_____ Roadway Typical
 _____ Bridge Typical
 _____ Staging Requirements
 _____ Temporary Detour Typical (If Applicable)

Combined TS&L Report

_____ Alignment, Grades, Typical Sections, and Superelevation of Bridge Matches those Currently Approved and are Documented in the Report
 _____ Final Hydraulic Study Submitted (Three Separately Bound Sets) (Four Sets if FHWA Involved)
 _____ Scour Analysis Including Completed DS-34 Freeboard Documented
 _____ Navigational Clearance Requirements Documented
 _____ Roadway or Railroad Clearance Requirements Documented (DD-303)
 _____ Maintenance of Traffic Requirements Documented
 _____ Constructability and Staging Requirements Discussed and Accounted for in Proposed Layout
 _____ Conceptual Deck Drainage Design for Each Alternate
 _____ Conceptual Design of Joint and/or Bearing Requirements
 _____ Listing of Environmental, Aesthetic, and Utility Requirements
 _____ Lighting and Signing Requirements Documented
 _____ Inspection Access Requirements Documented
 _____ Description of Superstructure Types Considered
 _____ Description of Substructure and Foundation Types Considered
 _____ Detailed Discussion of the Advantages and Disadvantages of each Type and a Recommended Superstructure/ Substructure Combination
 _____ Total Structure Cost for each Appropriate Superstr./Substr. Combination Listed by Item and Separated between Superstructure and Substructure
 _____ Total Project Construction Cost Estimate
 _____ Listing of all Project Specific Special Provisions
 _____ Listing of Span Arr. Review Comments and Action Taken on Each Comment

**WEST VIRGINIA DIVISION OF HIGHWAYS
COMBINED TS&L SUBMISSION CERTIFICATION**

State Project No. _____	Consultant _____
Federal Project No. _____	Project Manager _____
Project Name _____	Submission Date _____
County _____	Struc. No. or Wall Sta. _____

Miscellaneous Sheets

- _____ Title Sheet with Proposed Sheet Index
- _____ Conceptual Maintenance of Traffic Scheme
- _____ Traffic Routing Contingency Plan for Bridge/Structure Projects
- _____ Location and Elevation of Existing Structure Showing Clearances, Waterway Opening, and Appropriate Storm Frequency Elevations
- _____ Proposed Framing Plan of All Alternates
- _____ Outline Drawings of All Alternate Substructure Units Showing Major Dimensions
- _____ Jacking Point Concepts Shown
- _____ Proposed Architectural Treatments Shown
- _____ Deck Drainage Requirements Shown
- _____ Proposed Expansion Dams Shown
- _____ Proposed Bridge Bearings Shown

Coast Guard Permit Requirements

- _____ Coast Guard Sketches for Recommended Alternate Included
- _____ List of Adjoining Property Owners
- _____ Quantity of Material to be Removed and Replaced Below the 100 Year Flood Level. Separated by Excavation, Backfill, and Concrete for Each Substructure Unit

Corps of Engineers Permit Requirements

- _____ Plan View of all Areas Requiring a 404 Permit
- _____ Profile View of all Areas Requiring a 404 Permit
- _____ Cross Section View of all Areas Requiring a 404 Permit
- _____ Quantity of Material to be Placed Below "Ordinary High Water" Shown on Appropriate Sheets
- _____ Temporary Fills, Causeways, Bridges, Pipes, etc. Shown For Proposed Construction Scheme
- _____ Copy of Section 106 "Historical Clearance Document" Included
- _____ Copy of "Rare, Threatened, and Endangered Species Clearance Letter" Included
- _____ Copy of FEMA Clearance Letter (If Applicable)
- _____ Two Copies of Completed 404 Permit Application Package Included

- Notes:** 1- All Lines to be initialed by Office Manager or responsible management level above the Project Manager
 2- Use "NA" for any item not applicable to the project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
BRIDGE RATING SUBMISSION CERTIFICATION**

State Project No. _____
 Federal Project No. _____
 Project Name _____
 County _____

Consultant _____
 Project Manager _____
 Submission Date _____

General Requirements - Rating by District Bridge Eng.

_____ Title Sheet with Proposed Sheet Index
(DD-701)
 _____ Complete Set of Superstructure Plans with
All Dimensions, Thicknesses, and
Material Specifications Shown
 _____ Complete Set of Substructure Plans with
All Dimensions, Thicknesses, and
Material Specifications Shown
 _____ Horizontal Roadway Alignment
Including Curve Data Shown
 _____ Vertical Roadway Grade Shown
 _____ Bridge Layout Dimensions Shown
 _____ Foundation Elev. And Low Bearing
Elevation Shown
 _____ Plan View of Deck Showing All
Dimensions, Including Span Lengths
Widths, Skew Angles, etc.
 _____ Typical Sections Showing Deck Width,
Overhang, Parapet Location, Deck
Thickness, Overlay Thickness (If
applicable), Reinforcing, and Reinforcing
Clearances
 _____ Complete Set of Bridge Superstructure
Calculations

General Requirements - Rating by Design Engineer

_____ Title Sheet with Proposed Sheet Index
(DD-701)
 _____ Complete Set of Superstructure Plans with
All Dimensions, Thicknesses, and
Material Specifications Shown
 _____ Complete Set of Substructure Plans with
All Dimensions, Thicknesses, and
Material Specifications Shown
 _____ Horizontal Roadway Alignment
Including Curve Data Shown
 _____ Vertical Roadway Grade Shown
 _____ Bridge Layout Dimensions Shown
 _____ Foundation Elev. And Low Bearing
Elevation Shown
 _____ Plan View of Deck Showing All
Dimensions, Including Span Lengths
Widths, Skew Angles, etc.
 _____ Typical Sections Showing Deck Width,
Overhang, Parapet Location, Deck
Thickness, Overlay Thickness (If
applicable), Reinforcing, and Reinforcing
Clearances
 _____ Complete Set of Bridge Rating Calculations
with All Members Rated by the "Manual
for Condition Evaluation of Bridges",
Latest Edition, Published by AASHTO
and the "Standard Specifications for
Highway Bridges", Sixteenth Edition,
Published by AASHTO
 _____ Completed WVDOH DS-25 "Bridge Safe
Load Capacity-Analysis and
Justification Report"
 _____ Completed WVDOH DS-34 "Scour
Evaluation Summary"

Notes: 1- All Lines to be initialed by Office Manager
or responsible management level
above the Project Manager
 2- Use "NA" for any item not applicable to the
project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
FINAL DETAIL BRIDGE PLAN SUBMISSION CERTIFICATION**

State Project No. _____
 Federal Project No. _____
 Project Name _____
 County _____

Consultant _____
 Project Manager _____
 Submission Date _____
 Struc. No. or Wall Sta. _____

General Plan Requirements

_____ Construction Project Numbers Shown
 _____ Line Weights Legible
 _____ Contours Screened and Legible
 _____ Adequate Spot Elevations Shown
 _____ North Arrow Shown on all Layout Sheets
 _____ Bridge Number Shown on All Applicable Documents and Plan Sheets
 _____ AASHTO Material Designations Utilized
 _____ Designer and Checker Have Initialed All Sheets
 _____ Index to Bridge Sheets Included
 _____ Index to Abbreviations Included

Notes and Quantity Sheets

_____ Governing Specification Note
 _____ Design Criteria and Methodology Note Included
 _____ Material Notes Including Concrete, Reinforcing Steel, Prestressing Strands, Structural Steel, Piling, Drilled Shafts, etc.
 _____ Maintenance of Traffic
 _____ Temporary Structure Requirements Shown
 _____ Dismantling Structure Requirements Shown
 _____ Erection Notes
 _____ Charpy V-Notch Note Included
 _____ Piling Notes Included
 _____ Minimum Reinforcing Lap Note Included
 _____ Minimum Reinforcing Cover Note Included
 _____ Scour Protection Material Size Noted
 _____ Lead Paint Notes if Paint Removal or Dismantling Structure Required
 _____ Containment Criteria Shown for Cleaning & Painting
 _____ Railroad Requirements Shown (DD-303)
 _____ Miscellaneous Required Notes to Describe Nonstandard Items of Work
 _____ Quantity Table Identifying Pay Items with Quantities, Units, and Totals Shown (BAMS Format)
 _____ Table for Lump Sum Items Showing Breakdown of Material Included
 _____ All Work Included in an Appropriate Pay Item
 _____ Quantities Split per Corporation Limits or Border State Agreements
 _____ Columnar Breakdown of Quantities per Substructure Unit and Superstructure Included

Substructure Units

_____ Elevation, Plan, and Sections of Substructure Unit Shown
 _____ North Arrow and Orientation Shown
 _____ Workpoint and Centerline Bearing Shown
 _____ Skew of Substructure Unit Shown
 _____ Dimensions of All Components of Each Unit Shown
 _____ Bridge Seat and Foundation Elevations Shown
 _____ Anchor Bolt Layout Shown in Plan and Section
 _____ Limits of Select Material for Backfilling Shown
 _____ Limits of Structure Excavation and/or Wet Excavation Shown
 _____ Paving Notch Shown as Appropriate
 _____ Underdrains Shown
 _____ Weep Holes for Abutments and Wingwalls
 _____ Reinforcing Steel with Bar Marks Shown
 _____ Existing and Finished Grade Shown on Each Substructure Unit
 _____ Allowable and Actual Foundation Stresses/ Loads Shown
 _____ Quantity Table for Substructure Unit Shown

Miscellaneous Sheets

_____ Foundation Layout Sheet with Workpoints and Adequate Dimensions for Overall Layout Included
 _____ Table of Deck Elevations Showing Deflections for Construction Phases
 _____ Reinforcing Bar Sheet Included
 _____ Railing Details Shown
 _____ Fencing or Screening Details Shown
 _____ Deck Drainage Details Shown, Including Scuppers, Deck Inlets, Piping System, and Location and Details of Discharge Points
 _____ Approach Slabs Completely Detailed with Quantity Table Showing Items Included in Approach Slab Pay Item
 _____ Utility Accommodation Details Shown
 _____ Lighting Details Shown
 _____ Navigational Lighting Details Shown
 _____ Architectural Treatment Details Shown
 _____ Parapet Transition Details Shown
 _____ Drilled Shaft Details Shown
 _____ Existing Bridge Plans Included (If Required by the Project Manager)

**WEST VIRGINIA DIVISION OF HIGHWAYS
FINAL DETAIL BRIDGE PLAN SUBMISSION CERTIFICATION**

State Project No. _____
 Federal Project No. _____
 Project Name _____
 County _____

Consultant _____
 Project Manager _____
 Submission Date _____
 Struc. No. or Wall Sta. _____

Plan and Profile Sheets

_____ Horizontal Roadway Alignment
 Including Curve Data Shown
 _____ Vertical Roadway Grade Shown
 _____ Stationing Shown and Matching Roadway Plans
 _____ Centerline Bearing Station Shown
 on All Substructure Units
 _____ Bridge Length Shown (paving notch
 to paving notch)
 _____ Skew Angles and Span Lengths Shown
 _____ Bridge Layout Dimensions Shown
 _____ Foundation Elev. And Low Bearing Elev. Shown
 _____ Station and Elevation of All Berms Shown
 _____ Limits/Thickness of Slope Protection Shown
 _____ Stream Flow Direction Shown
 _____ Low Water Surface Elevation Shown
 _____ Hydraulic Data Plotted on Profile
 _____ Scour Depths Shown for 100 Year
 Flood Level
 _____ Clearance Envelope for Any Railroads
 Highways, or Associated Structures
 _____ Schematic Profile of Underpassing
 Railroad or Roadway
 _____ Bearing Type Shown (i.e. fixed, expansion,
 integral, semi-integral, etc.)

Deck Slab

_____ Plan View of Deck Showing All
 Dimensions, Including Span Lengths
 Widths, Skew Angles, etc.
 _____ Typical Sections Showing Deck Width,
 Overhang, Parapet Location, Deck
 Thickness, Overlay Thickness (If
 applicable), Reinforcing, and Reinforcing
 Clearances
 _____ Deck Pour Sequence Shown with
 Allowable Options Indicated
 _____ Reinforcing Steel with Bar Marks Shown
 _____ Deck Construction Joint Locations
 and Details Shown
 _____ Drip Goove Detail Shown
 _____ Haunch Detail Shown and Noted
 _____ End Diaphragm Details for Semi-Integral
 Abutments Shown
 _____ Deck Drain Locations Shown
 _____ Sidewalk Details Shown
 (If applicable)
 _____ Railing and/or Screening Attachment
 Location and Details Shown

Framing Plans and Details

_____ Plan View Showing Location of All
 Structural Framing
 _____ Elevation of All Girders Showing Flange
 Sizes, Flange Transition Points, Splices
 Bearing Stiffeners, and Web Size
 _____ Size, Location, Type, and Details
 of All Stiffeners Shown
 _____ Detail and Location of All Bolted
 and Welded Splices Shown
 _____ Number, Location, and Spacing of
 Shear Studs Shown
 _____ Stiffener to Girder Welds Detailed
 _____ Tension and Stress Reversal Areas
 Noted
 _____ Prestressing Details and Notes Shown
 (If applicable)
 _____ Post-Tensioning Details Shown
 (If applicable)
 _____ Strand Debonding Areas Shown
 _____ Camber Diagram Provided
 _____ Dead Load Deflection Table Included
 _____ Diaphragm/Cross-Frame Details Shown
 _____ Bearing Details Shown
 _____ Anchor Bolt Details Shown
 _____ Expansion Dam Details Shown
 _____ Inspection Access Details Shown
 _____ Materials Utilized in Girder and
 Various Components Clearly
 Shown in Details
 _____ Future Jacking Points Shown

Situation Plan

_____ Contours Showing Required Grading
 Shown
 _____ Plan and Elevation View of New
 Bridge Shown
 _____ Right-of-Way Limits Shown
 _____ Utilities and Their Disposition Shown
 _____ Hydraulic Data Shown
 _____ Temporary Detour Shown
 (If applicable)
 _____ Existing Bridge Shown
 _____ Core Boring Locations Shown and
 Core Boring Table Provided
 _____ Bridge Length and Span Lengths Shown
 _____ Bottom of Pile Tips and Foundations
 Shown
 _____ Fill Slopes Shown

**WEST VIRGINIA DIVISION OF HIGHWAYS
FINAL DETAIL BRIDGE PLAN SUBMISSION CERTIFICATION**

State Project No. _____
 Federal Project No. _____
 Project Name _____
 County _____

Consultant _____
 Project Manager _____
 Submission Date _____
 Struc. No. or Wall Sta. _____

Core Boring Logs

_____ Boring Logs Plotted with Legend and
 Complete Geologic Descriptions of Each
 Soil and Rock Layer Encountered
 Using DOH Standard Symbology
 _____ Station and Offset for Each Boring
 Shown
 _____ Elevation of Top of Boring Shown
 _____ All Soil Test Parameters for Each
 Layer Shown on the Boring
 Logs, Including RQD, Per-Cent
 Recovery, Bearing Pressure, etc.
 _____ Bottom of Foundation Plotted on Borings
 _____ Pile Tip Elevations Shown On Borings
 _____ Drilled Shaft Elevations Shown on
 Borings, Including Top of Competent
 Rock and Bottom of Shaft

Supplemental Contract Informator

_____ Listing of Comb. TS&L Review Comments
 and Action Taken on Each Comment
 _____ Completed Project Specific Special
 Provisions (Word Format)
 _____ Estimated Contract Time Chart
 (DD-803)
 _____ Total Project Construction Cost Estimate
 _____ Shop Drawing and Construction Services
 Proposal Submitted to Consultant
 Services (If applicable)

Notes: 1- All Lines to be initialed by Office Manager
 or responsible management level
 above the Project Manager
 2- Use "NA" for any item not applicable to the
 project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
PS&E SUBMISSION CERTIFICATION
(To Be Submitted With Half-Size PS&E Plans)**

State Project No. _____	Consultant _____
Federal Project No. _____	Project Manager _____
Project Name _____	Submission Date _____
County _____	

General Requirements

- _____ Title Sheet (Full-Size Mylar) Signed and Sealed by the Responsible Professional Engineer Registered in the State of West Virginia (DD-701)
- _____ Title Sheet (Half-Size Plan) Signed and Sealed by the Responsible Professional Engineer Registered in the State of West Virginia (DD-701)
- _____ Proposed and Existing Right-of Way Limits Shown on the Construction Plans Match Those Limits Shown on the Latest RW-3 Plans
- _____ Listing of Final Office Review Comments and Final Detail Bridge Plan Comments and Action Taken on Each Comment
- _____ Approved Design Exception Reports
- _____ Final Completed Project Specific Special Provisions (Word Format)
- _____ Final Completed Estimated Contract Time Chart (DD-803)
- _____ Final Total Project Construction Cost Estimate

- Notes:**
- 1- All Lines to be initialed by Office Manager or responsible management level above the Project Manager
 - 2- Use "NA" for any item not applicable to the project. Do not leave any items blank.

**WEST VIRGINIA DIVISION OF HIGHWAYS
TRACING SUBMISSION CERTIFICATION
(To Be Submitted Following Award of Project or as Directed by Project Manager)**

State Project No.	_____	Consultant	_____
Federal Project No.	_____	Project Manager	_____
Project Name	_____	Submission Date	_____
County	_____		

General Requirements

_____ Complete Set of Reproducible Full-Size Mylars of Contract Plans with all Appropriate Revisions
Shown and Noted

_____ Final Completed Geometric, Drainage, and Quantity Calculatiions

_____ Final Completed Bridge and Structure Computations (Two Sets)

_____ CD of Contract Plans (When Required by Project Scope)

_____ Survey and Project Control Data Including Aerial Photography Control

- Notes:** 1- All Lines to be initialed by Office Manager
or responsible management level
above the Project Manager
- 2- Use "NA" for any item not applicable to the
project. Do not leave any items blank.