# Submittal/Approval Letter

To:			Date:
District or Turnpike Design Engir	ieer		
Financial Project ID:Federal Aid Number:		RRR	Other
Project Name:			
State Road Number: Begin Project MP:			
FHWA Project of Division Interest: Yes	No 🗌		
Request for: Design Exception	Design Variation	Design Var	iation Memorandum
Community Aesthetic F	eature: Conceptual	Final	
Re-submittal: Yes	No Original Ref#		
Requested for the following element(s):			
Design Speed  Design Loading Structural Capacity	Lane Width  Vertical Clearance	Shoulder Width	<u> </u>
Superelevation	Horizontal Curve Radius		
Recommended by:			
-	to.		
Name:	le		
Responsible Professional Engineer or La	ndscape Architect (Landsca	ape-Only Projects)	
Approvals:			
Date	·	Name:	Date
District or Turnpike Design Engineer		District Structures I	Design Engineer
	?	Name	Date
Name: State Roadway Design Engineer		Name: State Structures De	esign Engineer
			-
Date	<b>;</b>		Date
Name:		Name:	
Chief Engineer of Production		FHWA Division Adı	mmsuatOf

railings and roadway barriers in an attempt to improve safety during an extreme event, (e.g. a vehicle fire).

FDOT-owned fire suppression systems are not allowed on bridges, retaining walls or limited access facilities unless they are approved by the Chief Engineer of Production due to special circumstances. Commonly occurring traffic related incidents will not be considered as special circumstances or as justification for the installation of any fire suppression system. If an FDOT fire suppression system is approved, agreements must be executed with a local agency to bear all installation costs, repair costs and maintenance functions.

Any fire suppression system that is not owned by FDOT is defined by **Section 337.401**, **(F.S.)** as a utility and is not to be issued a utility permit unless approved by the Chief Engineer of Production in accordance with **Rule 14-46.001**, **Florida Administrative Code** and the Utility Accommodation Manual.

### 110.5.9 Trees, Landscape, and Landscape Irrigation Systems

Consistent with Department policy, determine how the project can be designed to accommodate existing desirable trees and proposed trees. Determine if commitments have been made to preserve or provide trees, landscape, or landscape irrigation systems. Determine if a landscape project is programmed or proposed as a component or standalone by the Department or a local agency.

The District Landscape Architect will determine the level of preservation, tree relocation, or invasive species eradication involved. Projects that impact desirable trees typically require Selective Clearing and Grubbing plans (see *FDM 229* and *924*).

Coordinate with the District Landscape Architect to determine the following:

- Whether design alternatives could reduce impacts to existing vegetation.
- Whether existing trees will be saved or relocated (if avoidance is not an option). This will determine the prioritization of the level of required funding.

# 110.5.10 Projects Involving Trails

For projects involving trails (e.g., Florida National Scenic Trail, SUN Trail, bike routes, etc.) intersecting or along the right-of-way, coordinate with the trail owner to ensure the use of the trail is not interrupted during construction.

## 121 Bridge Project Development

#### 121.1 General

Structural designs for new construction are developed under the direction of the Structures Design Office (SDO) and the District Structures Design Offices (DSDO).

Designs are to be developed in accordance with:

- This manual
- The Structures Manual (Topic No. 625-020-018)
- The Standard Plans (Topic No. 625-010-003)
- The AASHTO-LRFD Bridge Design Specifications as referenced in the Structures Manual
- Applicable FHWA Directives
- Other criteria as specified by the Department

Structural designs for repair or rehabilitation of bridges are generally developed under the direction of the District Structures Maintenance Engineer (DSME) and may not include all the submittal types discussed in this chapter.

Modification for Non-Conventional Projects:

Delete the above paragraph.

Structure designs for other agencies or authorities such as the Jacksonville Transportation Authority or various Expressway Authorities may meet the Department's criteria or additional criteria as specified by the authority.

For projects involving bridges over navigable water, notify the DSME a minimum of 90 days prior to engaging in any action in, on, or around the bridge. Refer to *FDM 110.5.3* for further information.

## 121.2 Organization

The SDO is a subdivision of the Office of Design under the direction of the Chief Engineer of Production and the Assistant Secretary for Engineering and Operations. The SDO is under the direction of the State Structures Design Engineer (SSDE). Each District,

The default condition for new steel bridges is uncoated weathering steel where site conditions permit (See *Structures Design Guidelines 1.3.2*). Use an inorganic zinc coating system where site conditions preclude uncoated weathering steel and may be used elsewhere with approval of the Chief Engineer of Production. Use of a high-performance coating system to any extent for steel bridges requires written approval from the Chief Engineer of Production.

#### 121.9.4 Construction and Maintenance Considerations

Evaluate all viable structure concepts for constructability. Consider items such as member sizes, handling, fabricating, and transporting members as well as maintenance of traffic, construction staging, equipment access, and equipment requirements. Perform a special evaluation to insure against potential problems that may occur in obtaining permits and equipment to transport long and heavy members from point of manufacture to the project site. Contact the Department's Road Use Permits Office for questions concerning the feasibility of transporting long and heavy structural components. Also, take into account considerations for future maintenance inspection in the structure's design. Include those considerations described in *FDM 121.15* and the requirements of the *Structures Manual*. All special construction and maintenance requirements should be identified and appropriately considered in any concepts recommended for design. A design is able to be inspected properly when it permits safe inspector access to all portions of the structure using equipment available to District Structures Maintenance personnel.

## 121.9.5 Historical Significance Considerations

When an older bridge is considered for rehabilitation or replacement, the Environmental Management Office will evaluate the historical significance of the structure. A structure may be historically significant due to some of the following characteristics:

- (1) The structure may be an historic example in the development of engineering.
- (2) The crossing may be historically significant.
- (3) The bridge may be associated with an historical property or area.
- (4) The bridge may be associated with significant events or circumstances.
- (5) National Register of Historic Places or on a state or local historical register. If it is determined that the structure is historically significant, then the project should be developed to preserve the historic character of the structure.

### 122.7 Design Approval Request

#### 122.7.1 Submittal Package

The submittal package for a Design Exception or a Design Variation will include the same items. However, the required documentation and necessary level of detail will vary depending on the design element being evaluated (as described in **FDM 122.4**). The Design Exception or Design Variation submittal package is to include the following items:

- (1) Submittal/Approval Letter (cover letter): *Form 122-A* (see *FDM 103*).
- (2) Signed and Sealed Report: The signed and sealed documents including all required documentation and justification (see *FDM 122.4* for documentation requirements). Multiple design elements and signed and sealed reports may be included in one submittal package.
- (3) Appendices (as needed): Include any support documentation to facilitate an understanding of the report. Supplemental documents do not alter the sealed analysis or design.

Sign and seal the report in accordance with *FDM 130*. A Submittal/Approval Letter (*Form 122–A*, see *FDM 103*) is to be attached to the signed and sealed report and submitted to the District or Turnpike Design Engineer using the Design Approval Requests Module within Project Suite Enterprise Edition (PSEE). The District or Turnpike Design Engineer then approves or denies the request and notifies the Responsible Engineer. When further approvals are required, the District or Turnpike Design Engineer will forward the Submittal/Approval Letter and the signed and sealed report to the State Roadway Design Office.

# 122.7.2 Design Exception Approval

The request will be reviewed by the State Roadway Design Engineer and may be forwarded for approval to the Chief Engineer of Production, the State Structures Design Engineer, the Planning Office, and FHWA, as appropriate.

Each request will be reviewed on a case-by-case basis and approved on its merits. When approval is obtained, the State Roadway Design Office will email the disposition to the District or Turnpike Design Engineer along with the signed Submittal/Approval Letter. The State Roadway Design Office will keep an electronic copy filed under the assigned reference number.

When a request is denied, the State Roadway Design Office will notify the District or Turnpike Design Engineer of the disposition. Denied requests can be resubmitted when all deficiencies noted in the denial notification have been addressed. This may require only a new Submittal/Approval Letter if the Sealed Report does not need to be amended; however, if the Sealed Report requires revision, a new Sealed Report and Submittal/Approval Letter must be submitted.

Documentation requirements for Design Exceptions are in *FDM 122.4*.

#### 122.7.3 Design Variation Approval

Design Variations are typically approved at the District level; however, there are specific elements requiring Central Office approval noted in *FDM 122.7.4* (see *Table 122.7.1*). Design Variations requiring Central Office approval must follow the processes in *FDM 122.7.2*.

Design Variations approved at the District level may be submitted as either a Formal Design Variation or a Design Variation Memorandum for approval by the District or Turnpike Design Engineer.

Documentation requirements for Design Variations (both Formal and Memorandums) are in *FDM 122.4*.

# 122.7.4 Signature Requirements

Obtain all required approvals as described in this section. Approvals from multiple individuals may be required for certain issues. The Director of Design must resolve any approval authority issues if conflicting objectives arise. Approval signatures are required by the following Department and FHWA personnel as specified:

#### **Chief Engineer of Production:**

- (1) Design Exceptions for Design Speed on SIS facilities, following review by the Chief Planner.
- (2) Design Variations for Design Speed on SIS facilities, following review by the Chief Planner.
- (3) Design Variations for omission of Emergency Shoulder Use (ESU) evacuation requirements for any phase of construction.
- (4) Design Variations for Shared Use Paths in LA R/W not meeting the criteria in **FDM 224.1.1**, following review by the Chief Planner.

Table 122.7.1 Central Office Approvals

Design Element	State Roadway Design Engineer	State Structures Design Engineer	Chief Planner	Chief Engineer <u>of</u> <u>Production</u>
	Approval	Approval	Review	Approval
Design Speed Exception	X			
Design Speed Exception-SIS	X		X	Х
Design Speed Variation-SIS			X	Х
Design Variation: ESU Omission during Construction				Х
Design Variation: Shared Use Path in LA R/W			Х	Х
Design Variation: Non-Standard Shoulder Use				Х
Design Variations to not install an RDE				Х
Lane Width Exception	Х			
Shoulder Width Exception	Х			
Paved Shoulder Width Exception (Interstate and Turnpike)	Х			Х
Maximum Grade Exception	Х			
Cross Slope Exception	X			
Superelevation Rate Exception	X			
Horizontal Curve Radius Exception	Х			
Stopping Sight Distance Exception	Х			
Design Variation: Traffic Railing (Category 1 and 2 Structures)		Х		
Design Variation: Fencing on Traffic Railing between pedestrians and travel lanes on LA Facilities		Х		
Design Variation: Crossovers on Limited Access Facilities	Х			
Design Variation: Patterned Pavement Technical Special Provisions	Х			
Design Variation: Use of fencing around stormwater management facilities	Х			

Table 122.7.1 Central Office Approvals (Cont.)

		<u> </u>		
Design Element	State Roadway Design Engineer	State Structures Design Engineer	Chief Planner	Chief Engineer of Production
	Approval	Approval	Review	Approval
Design Loading Structural Capacity				
-Design Exception for Bridges		X		
-Design Variation: Category 2 Structures		X		
-Design Variation: Deficient Load Ratings (Category 1 and 2 Structures)		X		
-Design Variation:  Noise walls on bridges and retaining walls		X		
Vertical Clearance Exception				
- Non-Bridge Items	Х			
- Bridge Structures (Category 1 and 2)	Х	Х		
-RR-South Fla Rail Corridor	X	X		Х
Vertical Clearance Variation				
-Category 2 Structures		Х		
-RR-South Fla Rail Corridor	Х	Х		Х
Lateral Offset Variation				
-Category 1 and 2 Structures	х			
-RR-South Fla Rail Corridor	X	X		Х

# **126 Lane Repurposing Projects**

Modification for Non-Conventional Projects:

Delete **FDM 126**.

#### 126.1 General

Lane repurposing projects (a.k.a., "road diets", "lane elimination", or "lane reduction") are intended to reduce the number of travel lanes to achieve systemic improvements. Generally, the purpose of these projects is to reconfigure the existing cross section to enhance other uses and travel modes. Lane repurposing projects typically contribute to the economic development, livability, and vitality of a community. The recovered travelled way can be used to accommodate other uses such as separated bicycle lanes, buffered bicycle lanes, improving existing sidewalks, adding sidewalks, landscaping, on-street parking, bulb-outs, traffic calming, transit, and pedestrian refuge islands marked with crosswalks. Guidance on the development and review processes for repurposing lanes on the State Highway System (SHS) is provided in the Department's <u>FDOT Lane</u> <u>Repurposing Guidebook</u>. Lane repurposing projects will not be considered on the Strategic Intermodal System (SIS).

A local government entity (e.g., municipality, county) or the Department can submit a request for the repurposing of travel lanes on the SHS. A private entity may only submit a request through a local government entity. Proposed lane repurposing projects may be part of a larger community vision. With sufficient advanced planning and analysis, lane repurposing projects are often delivered in conjunction with Resurfacing, Restoration and Rehabilitation (RRR) projects. Identify and analyze lane repurposing projects in advance of RRR projects through a planning exercise such as a district area wide multimodal mobility plan, community vision plan, or downtown redevelopment plan. Obtain approval for the lane repurposing project from the Chief Engineer of Production prior to incorporating into a RRR project.

If the project has a PD&E phase, the requirements of this chapter are followed during the PD&E study prior to the selection of a preferred alternative. See **Part 1, Chapter 2** of the **PD&E Manual** for additional information.

- (c) Lane Repurposing Initial Notice to Central Office form, with concurrence from the District Planning and Environmental Administrator, District Design Engineer and District Traffic Operations Engineer.
- (6) The Central Office Systems Management Administrator will review and approve or deny the proposed traffic analysis methodology.

#### 126.3.2 District Preliminary Review

The District Preliminary Review is as follows:

- (1) The applicant will submit a draft concept report containing a proposed typical section to the District Lane Repurposing Coordinator for review.
- (2) The District Lane Repurposing Coordinator will coordinate the review of the project and concept report with the District Review Team.

After the District reviewer's acceptance, a Final Concept Report must be signed at the District level and submitted along with the Lane Repurposing Final Approval form to CO for review. The District Lane Repurposing Coordinator will work closely with CO staff during this review phase.

## 126.3.3 Central Office Final Review and Approval

The Final Review and Approval process is to obtain the Chief Engineer of Production's final approval or disapproval. Follow the process found in the Lane Repurposing Guidebook.

The Final Review and Approval process is as follows:

- (1) The District Lane Repurposing Coordinator submits the Lane Repurposing Final Approval Final Approval form to the Central Office Systems Implementation Office, signed by the District Planning and Environmental Administrator, the District Design Engineer, and the District Traffic Operations Engineer, along with the Final Concept Report.
- (2) The Systems Implementation Office coordinates the review of the lane repurposing request with the different offices in Central Office (e.g., Design, Traffic Engineering and Operations) and obtains concurrence from the Chief Planner.
- (3) The Systems Implementation Office submits the lane repurposing request for obtaining the final approval or denial to the Chief Engineer of Production. The Chief Engineer of Production has the final authority to approve, deny or object (with comments) to the lane repurposing request.

- (4) The Systems Implementation Office submits notification to the District Lane Repurposing Coordinator of the Chief Engineer of Production's decision.
  - (a) Approved: application process is complete.
  - (b) Denied: includes an explanation for the denial.
  - (c) Objection with comments: the applicant may resubmit the lane repurposing proposal to the District once the comments have been addressed. The resubmittal must include an updated concept report and signed Lane Repurposing Final Review and Approval form.
- (5) Use the Lane Repurposing Withdrawal Notice form to withdraw projects that have been previously approved.

#### 131.5.2 After Advertisement

For letting date changes from the <u>D</u>district, the letting date in the embedded transmittal form will update automatically when <u>Work Program changes the letting date in PSEEthe updated letting date is reflected in the Financial Management (FM) System.</u>

For letting date changes under a new Specification Workbook and new Standard Plans publication, the project deliverables must be brought up to date with these new standards. This will require a Plans Revision and an updated Specifications Package. The updated Specifications Package must be listed jon the revision memo. Pay items should be checked and updated as necessary for validity with the new date.

Withdrawing or moving the <u>of a project</u> to a later letting, <u>-after advertisement</u>, requires approval from by <u>both</u> the District Secretary and the Chief Engineer <u>of Production</u>.

#### 132.5 Revision Memo

Process revision packages using the PS&E Module within Project Suite Enterprise Edition (PSEE). All revisions to the PS&E Package require a completed Revision Memo providing a Revision Number and describing modifications. Record the revision date for each revised sheet, using the date shown in the revision block on the sheet.

When the revision package is complete and ready for submission, control of the PS&E Module will be transferred to the appropriate office (see *FDM 131.2.1*). The receiving office will check the revisions for completeness.

If information on the Transmittal Memo changes due to Project updates, the Transmittal Memo must be updated within the PS&E Module whether it is a formal Revision or not.

#### 132.5.1 Required Approvals

Several approvals are required to process a revision:

- (1) Obtain concurrence from the District Director of Transportation Development (or designee). Concurrence may be in the form of an email that includes a summary of the revision or a signed Revision Memo.
- (2) In accordance with the Stewardship and Oversight Agreement or the project-specific Project of Division Interest (PoDI), obtain an email concurrence from FHWA prior to making revisions or requesting access to the AASHTOWare Project Preconstruction™. Include the name of the FHWA contact and the concurrence date on the Revision Memo. Major changes to plans or specifications on PoDI Projects made during the advertising period will require the FHWA Division Administrator's approval prior to issuing addenda. Major changes increase the project cost (>\$500,000), alter project termini, change the character of the project, or modify the scope of the work.
- (3) Approval from the District Secretary is required on the Revision Memo if the revision is submitted within 15 working days of the letting. Approval can be documented by uploading an email approval to the PS&E Module "Supporting Documentation Section".
- (4) Approval from the Director of the Office of Design is required if the revision is submitted within five working days of the letting. Since there is no assurance that all prospective contractors will get these documents on time to be considered in their bids, approval for a revision within five working days of the letting is uncommon. If approval is not granted, the project will either be let as is, or be withdrawn from letting. Withdrawing or moving the project to a later letting after advertisement requires approval by the District Secretary and the Chief Engineer of Production.

crossovers on Interstate facilities require approval by the State Roadway Design Engineer and Federal Highway Administration (FHWA) to remain.

(3) Crossover locations that meet the **AASHTO Green Book** criteria, but do not meet additional FDOT criteria, require approval by the District Design Engineer to remain.

#### 211.3.3 Managed Lanes Separation

Managed lanes are always separated from the general use lanes. Median openings and crossovers are prohibited within managed lanes.

There are four types of managed lanes separation treatments:

- (1) Barrier separation; see *Figure 211.3.1*
- (2) Contiguous separation with tubular markers; see *Figure 211.3.2*
- (3) Wide buffer separation; see *Figure 211.3.3*
- (4) Grade separation; see *Figure 211.3.4*

Managed lane separation type and width must be approved by the District Design Engineer. The maximum width for the contiguous separation is 3 feet. In developing the contiguous separation width, consideration should be given to transitions between new and adjacent roadway segment treatments and should be done in consultation with the DTOE. Install tubular markers per the *TEM*, Chapter 4. Use barrier separation or grade separation when implementing a reversible managed lane system. See the *Managed Lanes Guidebook* for factors to consider in determining separation type.

The maximum spacing and placement of tubular markers is provided in the **TEM**. If, based on operational and safety analysis, the EOR or the district wishes to increase the maximum allowable spacing, a Design Variation must be approved by the Chief Engineer of Production.

When a wide buffer separation is selected, the buffer may include a grassed median or pavement. Paved wide buffers should be no more than 12 feet wide.

Do not place turning movement lane-use pavement markings on the upstream approach between the railroad crossing pavement message and the tracks.

Where intersections occur between the W10-1 sign shown in *Exhibits 220-1* through **220-4** and the tracks, place an additional W10-1 sign between the intersection and the railroad gate.

Include Railroad Dynamic Envelope (RDE) pavement markings at Active and Passive Grade Crossings on:

- State Roads,
- State-owned rails, and
- State-owned property.

Design Variations to not install an RDE are to be approved by the Chief Engineer of Production.

The determination of slightly or significantly skewed railroad crossing is at the discretion of the EOR.

Detail RDE pavement markings in the plans in accordance with <u>Standard Plans</u>, **Index 711-001** and the details shown in **Exhibits 220-1** through **220-4**. Ensure the details in the plans include the following:

- (1) Orient RDE pavement markings:
  - (a) In the direction of the travel lanes at all approaches upstream of the crossing (i.e., transverse to the travel lanes).
    - i. For slightly-skewed railroads, extend the RDE markings transverse across all lanes, as shown in *Exhibits 220-2* and *220-3*.
    - ii. For significantly-skewed railroads, step the RDE markings transverse across each lane, as shown in *Exhibit 220-4*.
  - (b) Along the railroad (i.e., parallel to the railroad tracks) for areas between tracks and downstream of the crossing.
  - (c) To maximize the visibility of the RDE pattern for both the upstream and downstream sides of the track. Locate markings in a manner to ensure the "X" pattern is identifiable to the motorists and bicyclists and centered in the lanes to the extent practicable.
- (2) Place RDE markings through the foul area as shown in *Exhibits 220-3* and *220-4*. If the railroad owner will not allow the RDE markings through the foul area, or the substrate material will not provide an appropriate bonding surface for the

- (e) Amenities
- (3) At-grade crossings are permitted only at interchange ramp terminals and signalized crosswalks.
- (4) A proposed overpass crossing (i.e., bridge structure spanning LA R/W) must not be within two miles of an existing or proposed shared use path crossing of the same LA Facility. A proposed overpass must:
- (5) Accommodate future widening of the LA Facility,
- (6) Span the LA R/W with minimal piers, and
- (7) Provide abutments outside of the clear zone.
- (8) A proposed underpass crossing (i.e., shared use path adjacent to roadway or waterway under LA Facility bridge) must meet minimum vertical clearance as defined in *FDM 224.8*. A proposed underpass must remain free from standing water up to and including the 10-year storm event.

Design Variations for the above criteria must be approved by the Chief Engineer of Production, following a review by the Chief Planner.

## 224.1.2 Public Transit Loading Zones

See **FDM 225** for information on public transportation facilities. Provide a minimum 5-foot-wide sidewalk connecting transit stops to shared use paths.

Coordination with the following may be required to determine the optimum location of boarding and alighting areas, transit shelters, and bus bays:

- (1) District Pedestrian/Bicycle Coordinator
- (2) District Modal Development Office Coordinator
- (3) District ADA Coordinator
- (4) District Public Transportation staff
- (5) Local public transit provider(s)

## 224.1.3 At-grade Railroad Crossings

See **FDM 222.2.4** for information on at-grade railroad crossings.

Table 233.11.1 DMS Characters

DM	IS Туре	Minimum Character Size (inches)	Minimum Number of Characters Per Line	Maximum Resolution (millimeter pixel pitch)	
Lava Status	LA Facility	18	40		
Lane Status	Arterial	12	18	20	
Tall Amount	LA Facility	18	7	20	
Toll Amount	Arterial	12	,		

## 233.11.2 Highway Advisory Radio (HAR)

A highway advisory radio (HAR) system is an advisory tool that informs the public of traffic- and safety-related issues. HAR systems may be installed or upgraded with the approval from the Chief Engineer of Production. See Engineering and Operations Memorandum 16-03.

Include the equipment necessary for the operator to record verbal messages from onsite or remote locations, and to continually broadcast live, prerecorded, or synthesized messages from roadside transmission sites. Also, include highway signs with remotely operated flashing beacons to notify motorists of HAR broadcasts.

Refer to FCC regulations <u>Title 47 CFR, Part 90.242</u> for additional design requirements on travelers' information stations. Additional information on licensing issues, frequency allocation, and other specifics may be obtained by contacting the State Traffic Engineering and Operations Office's ITS Communications division.

Determine placement of a HAR installation based on specific project needs, as well as the following requirements:

- Transmission of message that can be received by motorists traveling through the broadcast zone.
- Placement on Interstate and Freeway facilities prior to interchanges that offer alternate routes.
- Placement in advance of high crash locations and traffic bottlenecks.
- Placement that accommodates access for service and maintenance.
- Placement along key commuter or evacuation corridors.

#### (9) <u>Traffic Analysis Handbook</u>

#### 240.1.2 TMP Components

A TMP consists of strategies to manage the work zone impacts of a project. The scope, content, and degree of detail will vary based upon the expected work zone impacts of the project. A TMP may include the following three components:

- Temporary Traffic Control Plan
- Transportation Operations Plan
- Public Information Plan

#### 240.2 Temporary Traffic Control Plan

A Temporary Traffic Control Plan (TTCP) is required for all work zones within or adjacent to highways, roads and streets as specified by Florida Statute and Federal regulations. Typical applications of some commonly encountered situations are shown in the *MUTCD*. Some of these typical applications have been modified by the *Standard Plans*, 102 *Series*. Most work zones will require further development of the typical applications to address project-specific conditions.

#### 240.2.1 TTCP Details

# 240.2.1.1 Emergency Shoulder Use

The requirements for Emergency Shoulder Use (ESU) outlined in *FDM 211.4.6* must be maintained during all phases of construction. A Design Variation to omit ESU evacuation requirements for any phase of construction must be approved by the Chief Engineer of Production.

The Design Variation must include all the following:

- Documentation of concurrence with the ESU omission from the District Traffic Operations Engineer, District Construction Engineer, and District Maintenance Engineer
- A statement on how the ESU closure will occur outside of Hurricane Season (June 1 – November 30) to the extent practical
- A time estimate for how long it would take to implement an ESU in the event of an emergency evacuation

## 907.3 RFP Concept Plans Development

**Table 907.3.1** provides the minimum information that is to be shown on each sheet of the RFP Concept Plans. Written approval is required from the District Construction Engineer and the Chief Engineer of Production when deviating from the minimum information set forth in **Table 907.3.1**.

Consider exceeding the minimum level of completion for higher risk elements.