

Chapter 17

**PERMITS/CERTIFICATIONS**

**SOUTH DAKOTA DRAINAGE MANUAL**

*October 2011*



**Table of Contents**

<b><u>Section</u></b>	<b><u>Page</u></b>
17.1 ENVIRONMENTAL DOCUMENTS.....	17-1
17.1.1 Environmental Classification .....	17-1
17.1.2 Wetland Finding .....	17-2
17.1.3 Storm Water Pollution Prevention Plan (SWPPP) .....	17-2
17.1.4 Dewatering Plan .....	17-2
17.1.5 Section 7 Biological Opinion.....	17-3
17.2 FHWA FLOODPLAIN EVALUATION AND FINDING	17-4
17.2.1 Review of Floodplain Impacts.....	17-4
17.2.2 Draft Environmental Assessment Document, Floodplain Impacts ..	17-4
17.2.3 Final Environmental Assessment Document, Floodplain Finding ...	17-5
17.2.4 Regulatory Floodway.....	17-5
17.2.5 Programmatic Floodplain Finding for Categorical Exclusions.....	17-5
17.2.6 Legal References .....	17-6
17.3 NATIONAL FLOOD INSURANCE PROGRAM (NFIP) .....	17-7
17.3.1 NFIP Background .....	17-7
17.3.2 NFIP Maps .....	17-8
17.3.3 Flood Insurance Study.....	17-8
17.3.4 NFIP Participation Phases.....	17-9
17.3.5 Regulated Floodplain Components .....	17-9
17.3.6 Projects Requiring Coordination with FEMA.....	17-10
17.3.7 Floodway Revisions and NFIP .....	17-11
17.3.8 Allowable Floodway Encroachment.....	17-11
17.3.8.1 General.....	17-11
17.3.8.2 Floodplain with a Detailed Study (FIRM) .....	17-12
17.3.8.3 Floodplain Indicated on a FHBM.....	17-12
17.3.8.4 Unidentified Floodplains .....	17-12
17.3.9 Replacing Existing Structures.....	17-13
17.3.10 Applicability of NFIP Criteria to SDDOT .....	17-13
17.3.11 FEMA/NFIP Map Revisions .....	17-14
17.3.12 Hydrologic Data for FEMA Map Revisions .....	17-16
17.3.13 NFIP Map Revision Request Procedure.....	17-18
17.3.14 Legal References .....	17-18

**Table of Contents**  
(Continued)

<b><u>Section</u></b>	<b><u>Page</u></b>
17.4 NATIONAL PERMITS/CERTIFICATIONS	17-20
17.4.1 Section 401 Water Quality Certification .....	17-20
17.4.1.1 Name .....	17-20
17.4.1.2 Purpose .....	17-20
17.4.1.3 Applicability.....	17-20
17.4.1.4 Responsible State Agency.....	17-20
17.4.1.5 Responsible SDDOT Unit .....	17-20
17.4.1.6 Legal References.....	17-21
17.4.2 US Army Corps of Engineers Section 404.....	17-21
17.4.2.1 Name .....	17-21
17.4.2.2 Purpose .....	17-21
17.4.2.3 Applicability.....	17-21
17.4.2.4 Responsible Federal Agency.....	17-22
17.4.2.5 Responsible SDDOT Unit .....	17-22
17.4.2.6 Documentation.....	17-22
17.4.2.7 Definitions.....	17-22
17.4.2.8 Types of Section 404 Permits .....	17-24
17.4.2.9 Nationwide Permits Mitigation Information.....	17-28
17.4.2.10 Application Procedure.....	17-29
17.4.2.11 Distribution of Permits.....	17-29
17.4.2.12 Legal References.....	17-29
17.4.3 Section 402 NPDES Permits .....	17-29
17.4.3.1 Name .....	17-29
17.4.3.2 Purpose .....	17-29
17.4.3.3 Applicability.....	17-30
17.4.3.4 Responsible State Agency.....	17-30
17.4.3.5 Responsible SDDOT Unit .....	17-30
17.4.3.6 Legal References.....	17-30
17.4.4 Section 10 Navigable Waterways .....	17-31
17.4.4.1 Name .....	17-31
17.4.4.2 Purpose .....	17-31
17.4.4.3 Applicability.....	17-31

**Table of Contents**

(Continued)

<b><u>Section</u></b>	<b><u>Page</u></b>
17.4.4.4 Responsible Federal Agency .....	17-31
17.4.4.5 Responsible SDDOT Unit .....	17-32
17.4.4.6 Legal References.....	17-32
17.4.5 US Coast Guard Section 9 Navigable Waterways.....	17-32
17.4.5.1 Name .....	17-32
17.4.5.2 Purpose .....	17-32
17.4.5.3 Applicability.....	17-32
17.4.5.4 Responsible Federal Agency .....	17-33
17.4.5.5 Responsible SDDOT Unit .....	17-33
17.4.5.6 Legal References.....	17-33
17.5 STATE/COUNTY/CITY PERMITS/CERTIFICATIONS	17-34
17.5.1 State .....	17-34
17.5.1.1 Water Rights .....	17-34
17.5.1.2 Dry Draw.....	17-34
17.5.1.3 Dam Safety.....	17-34
17.5.2 County/City.....	17-35
APPENDIX 17.A SECTION 404 APPLICATION PROCEDURE .....	17-36

**List of Figures**

<b><u>Figure</u></b>		<b><u>Page</u></b>
Figure 17.3-A	BASIC CONSTITUENTS OF FEMA-MAPPED FLOODPLAIN .....	17-9
Figure 17.3-B	CONDITIONAL LETTER OF MAP REVISION (CLOMR) INSTRUCTIONS FOR FEMA REGION 8 .....	17-15



## Chapter 17

# PERMITS/CERTIFICATIONS

Chapter 17 briefly documents the basic information for the water-related permits/certifications that may be required for a project. Many activities performed by the South Dakota Department of Transportation have environmental or navigational impacts and may affect public or private land. Depending upon the nature of the impact, the activity may require SDDOT to obtain a permit or certification. Some of these permits/certifications may be initiated during the planning phase of project development, and others may be initiated during the design or construction phase. Personnel involved in project development, design and construction should be aware of the requirements for these permits/certifications to ensure that the necessary authorizations and clearances are obtained in a timely manner to allow the work requiring the permit/certification to proceed as scheduled.

### 17.1 ENVIRONMENTAL DOCUMENTS

Early in the project development phase, there may be drainage-related inputs in the development of environmental documents. These documents identify the requirements for some water-related permitting actions, and they are inputs to the water-related permits for the project.

#### 17.1.1 Environmental Classification

Transportation project impacts can vary from very minor to very significant on the human environment. To account for the variability of project impacts, three basic “classes of action” are allowed, and the applicable class determines how compliance with the *National Environmental Policy Act* (NEPA) of 1969 is implemented and documented:

- Categorical Exclusion (CE). Issued to individual projects that do not involve significant effects on the environment. This process involves completing an *Environmental Checklist* that contains resource agency requirements for the proposed project.
  - + Categorical Exclusion (CE) – Batched. A quantity of projects with very minimal environmental impacts programmatically approved annually by FHWA. Batched CE projects are confined to the surface of the roadway or in the previously disturbed right-of-way, such as for overlays, rehabilitation or lighting projects where there is no soil disturbed.



- Environmental Assessment (EA). An EA is prepared for actions in which the significance of the environmental impact is not clearly established.

Should environmental analysis and resource agency review during the EA process find a project to have no significant impacts on the quality of the environment, a Finding of No Significant Impact (FONSI) is issued to conclude the EA process.

- Environmental Impact Statement (EIS). Prepared for projects where it is known that the action will have significant effect on the environment. A Record Of Decision (ROD) is the final step in the EIS process. The ROD specifies the environmentally preferable alternative and provides information on the adopted means to avoid, minimize and compensate for environmental impacts.

### **17.1.2 Wetland Finding**

Project impacts to wetlands must be avoided when practical and, if they cannot be avoided, they should be minimized to the greatest extent possible. When the objectives of a transportation project cannot be met without adverse impacts to wetlands adjacent to the project, a wetland mitigation plan is prepared detailing how lost wetland functions will be compensated. The impacts typically involve the placement of fill into the wetland or potential draining of the wetland. The identified wetlands also are included as part of the project Section 404 Permit application. See [Chapter 8 “Wetlands Creation and Restoration”](#) for more discussion on wetlands.

### **17.1.3 Storm Water Pollution Prevention Plan (SWPPP)**

A SWPPP is required under the industrial and construction storm water general permits. The purpose of a SWPPP is to identify possible pollutant sources to storm water and to identify Best Management Practices (BMPs) that, when implemented, will reduce or eliminate any possible water quality impacts. BMPs are physical, structural and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of storm water. The SWPPP is a living document and must reflect actual on-the-ground conditions at all times.

### **17.1.4 Dewatering Plan**

A dewatering plan is necessary any time water is to be transferred, or moved, from one place to another. This can include cofferdams, diversions, re-routing streams, work areas, etc. The plan should be submitted along with the Construction Permit’s Notice of Intent. It becomes part of the SWPPP. A draft plan showing options for each construction phase should be available on plans sets as an aid for the Contractor’s

compliance. The Contractor and project engineer should then revise the plan appropriately once construction is active.

#### **17.1.5 Section 7 Biological Opinion**

A programmatic Biological Opinion document provides guidance for the construction activities impacting Federally threatened or endangered species. Mandatory Terms and Conditions are given, which are to be implemented at stream crossing projects impacting the threatened or endangered species.

## 17.2 FHWA FLOODPLAIN EVALUATION AND FINDING

The following discussion has been adapted from [FHWA Technical Advisory, T 6640.8A](#), “Guidance for Preparing and Processing Environmental and Section 4(F) Documents,” dated October 30, 1987. The Technical Advisory usage of “encroach” means the same as “encroachment,” which is defined in 23 CFR 650, Subpart A. An encroachment is an action within the limits of the base (100-year) floodplain. An action is any highway construction, reconstruction, rehabilitation, repair or improvement undertaken with Federal or Federal-aid highway funds or FHWA approval.

### 17.2.1 Review of Floodplain Impacts

National Flood Insurance Program (NFIP) maps or, if NFIP maps are not available, information developed by SDDOT should be used to determine whether an alternative will encroach on the base (100-year) floodplain. The location hydraulic studies required by 23 CFR 650, Subpart A, should include a discussion on the following items as appropriate for the level of risk or environmental impact for each alternative that encroaches on base floodplains or would support base floodplain development:

- the flooding risks;
- the impacts on natural and beneficial floodplain values;
- the support of probable incompatible floodplain development (i.e., any development that is not consistent with a community’s floodplain development plan);
- the measures to minimize floodplain impacts; and
- the measures to restore and preserve the natural and beneficial floodplain values.

### 17.2.2 Draft Environmental Assessment Document, Floodplain Impacts

The draft environmental assessment document should briefly summarize the results of the hydraulic location studies. The summary should identify the number of encroachments and any support for incompatible floodplain developments and their potential impacts. Where an encroachment or support of incompatible floodplain development results in substantial impacts, the draft environmental assessment document should provide more detailed information on the location, impacts and appropriate mitigation measures. In addition, if any alternative results in a floodplain encroachment or supports incompatible floodplain development having significant impacts, or requires a commitment to a particular structure size or type, the draft environmental assessment document should include an evaluation and discussion of

practicable alternatives to the structure or to the significant encroachment. The draft environmental assessment document should include exhibits that display the alternatives, the base floodplains and, where applicable, the regulatory floodways.

### **17.2.3 Final Environmental Assessment Document, Floodplain Finding**

If the preferred alternative includes a floodplain encroachment having significant impacts, the final environmental assessment document should include a Finding that it is the only practicable alternative as required by 23 CFR 650, Subpart A. The Finding should refer to Executive Order 11988 and 23 CFR 650, Subpart A. It should be included in a separate subsection entitled “Only Practicable Alternative Finding” and should be supported by the following information:

- the reasons why the proposed action should be located in the floodplain;
- the alternatives considered and why they were not practicable; and
- a statement indicating whether the action conforms to applicable State or local floodplain protection standards.

### **17.2.4 Regulatory Floodway**

For each alternative encroaching on a designated or proposed regulatory floodway, the draft environmental assessment document should provide a preliminary indication of whether the encroachment would be consistent with or require a revision to the regulatory floodway. Engineering and environmental analyses should be undertaken, appropriate for the level of encroachment, to permit the consistency evaluation and identify impacts. Coordination with the Federal Emergency Management Agency (FEMA) and appropriate State and local government agencies should be undertaken for each floodway encroachment. If the preferred alternative encroaches on a regulatory floodway, the final environmental assessment document should discuss the consistency of the action with the regulatory floodway. If a floodway revision is necessary, the document should include evidence from FEMA and the local or State agency indicating that such revision will be acceptable (see [Section 17.3](#)).

### **17.2.5 Programmatic Floodplain Finding for Categorical Exclusions**

FHWA can issue a [Programmatic Floodplain Finding for Categorical Exclusions](#). See the link for an example.

**17.2.6 Legal References**

The following lists the legal references for the FHWA Floodplain Evaluation and Finding:

- Executive Order 11988;
- DOT Order 5650.1;
- 23 CFR 650, Subpart A; and
- 23 CFR 771.

### 17.3 NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

NFIP is administered by FEMA. Detailed information on FEMA programs and procedures can be found at the FEMA website. The Federal Highway Administration (FHWA) and FEMA have had a long-standing cooperative relationship, which is formalized in the [Procedures for Coordinating Highway Encroachments on Floodplains with Federal Emergency Management Agency \(FEMA\)](#). The material in Section 17.3 is based on these two sources.

#### 17.3.1 NFIP Background

The amended *National Flood Insurance Act* of 1968 (42 USC 4001 et seq.) established the NFIP, which requires communities (whether city, county or State) to adopt adequate land use and control measures to qualify for flood insurance in riverine flood-prone areas.

When the Administrator of the Federal Insurance Administration has identified the flood-prone area, the community should require that, until a floodway has been designated, no use be permitted within the floodplain area having special flood hazards for which base flood elevations have been provided. If it can be demonstrated that the cumulative effect of the proposed use, when combined with all other existing and reasonably anticipated uses of a similar nature, will not increase the water surface elevation of the 100-year flood by more than 1 ft at any point within the community, the proposed use can be permitted.

After the floodplain area has been identified and the water surface elevation for the 100-year flood and floodway data have been provided, the community may designate a floodway that will convey the 100-year flood without increasing the water surface elevation of the flood more than 1 ft at any point. Also, the community should prohibit, within the designated floodway, fill, encroachments, new construction and substantial improvements of existing structures that would result in any increase in flood heights within the community during the occurrence of the 100-year flood discharge.

The participating cities or counties agree to regulate new development in the designated floodplain and floodway through regulations adopted in a floodplain ordinance. The ordinance should require that development in the designated floodplain be consistent with the intent, standards and criteria set by NFIP. Failure on their behalf to enforce basic requirements can result in losing their status in the program.

The hydraulic designer should be familiar with FEMA/NFIP requirements because they may either control the design of a facility within a floodplain or, when encroachments (any physical object placed in a floodplain that hinders flow) are proposed, necessitate considerable analysis, coordination and expense to acquire FEMA approval of the project. FEMA rules and procedures must be considered early in the project planning stages.

Determining the status of a community's participation in NFIP and reviewing applicable NFIP maps and ordinances are essential first steps in conducting location hydraulic studies and preparing environmental documents. Information on community participation in NFIP is provided in the "National Flood Insurance Program Status of Participating Counties," published semi-annually for each State and available through the FEMA Headquarters Office. A list of participating counties and communities can be found at the [FEMA Community Status Book Report \(South Dakota\)](#).

### **17.3.2 NFIP Maps**

Where NFIP maps are available, their use is mandatory in determining whether a highway location alternative will include an encroachment on the base floodplain. The following three types of NFIP maps are published:

- Flood Hazard Boundary Map (FHBM). A FHBM does not generally originate from a detailed hydraulic study and, therefore, the floodplain boundaries shown are approximate.
- Flood Boundary and Floodway Map (FBFM). A FBFM generally originates from a detailed hydraulic study. These hydraulic data are available through the FEMA Regional Office and should provide reasonably accurate information. This study is normally in the form of computer data records or hand data for calculating water surface profiles.
- Flood Insurance Rate Map (FIRM). The FIRM identifies base flood elevations and rate zones for flood insurance and is generally produced at the same time as the FBFM using the same hydraulic model.

### **17.3.3 Flood Insurance Study**

A Flood Insurance Study (FIS) documents the methods and results of a detailed hydraulic study. The FIS Report includes the following information:

- name of community;
- hydrologic analysis methods;
- hydraulic analysis methods;
- floodway data including areas, widths, average velocities, base flood elevations and regulatory elevations; and
- water surface profile plots.

### 17.3.4 NFIP Participation Phases

A community can be in the emergency program or the regular program, in the process of converting from the emergency program to the regular program, or not participating in NFIP. The emergency program is intended to provide a “first layer” amount of insurance on an emergency basis on all insurable structures before a risk study can be performed. Approximate flood boundaries are shown on a FHBM. The regular program provides a “second layer” coverage, which is offered only after the Floodplain Administrator has completed a risk study for the community. The local community Floodplain Administrator is responsible for the administration and enforcement of the floodplain management ordinances of a community participating in the NFIP. The *NFIP Directory of Floodplain Administrators* lists the city and county officials designated as Floodplain Administrators and is available via email from the South Dakota Department of Public Safety Office of Emergency Management.

### 17.3.5 Regulated Floodplain Components

Figure 17.3-A illustrates the basic components of a FEMA-regulated floodplain. The floodplain is established by the base flood, which is the extent of inundation resulting from a flood flow having a 1% exceedance probability in any given year (100-year flood). The floodplain is divided into a floodway and floodway fringes.

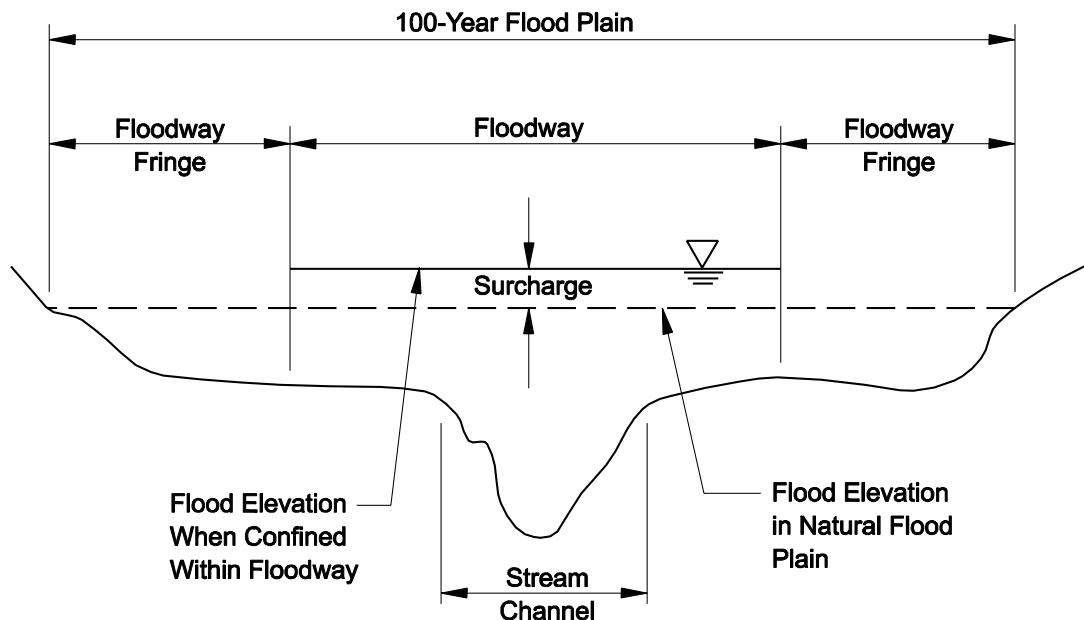


Figure 17.3-A — BASIC CONSTITUENTS OF FEMA-MAPPED FLOODPLAIN



The floodway is the main stream channel and any floodplain areas that should remain free of encroachment so that the base flood can be carried without a considerable increase in water surface elevations. The maximum increase above the base flood elevation (BFE) is usually 1 ft, but can be stricter and may be as low as zero rise. There may also be local regulations in place that may be stricter than FEMA regulations. Existing insurable buildings, the potential for hazardous velocities or other conditions may result in lower allowable increases.

The floodway fringe is the remaining area between the floodway and the floodplain boundary. Theoretically, the floodway fringe can be completely obstructed without increasing the water surface elevation of the base flood by more than 1 ft at any point along the length of the stream. The floodway becomes a regulatory or regulated floodway (RFW) when the mapped floodway is adopted by the community.

### **17.3.6 Projects Requiring Coordination with FEMA**

SDDOT coordinates with FEMA where administrative determinations are needed involving a regulatory floodway or where flood risks in NFIP communities are significantly impacted. The circumstances ordinarily requiring coordination with FEMA include the following:

- Where a proposed highway construction project encroaches on a regulatory floodway and, therefore, requires an amendment to the floodway map.
- Where a proposed highway construction project encroaches on a floodplain where a detailed study has been performed but no floodway is designated and the maximum 1-ft increase in the base flood elevation would be exceeded.
- Where a local community is expected to enter into the regular program and detailed floodplain studies are underway.
- Where a local community is participating in the emergency program and the base FEMA flood elevation in the vicinity of insurable buildings is increased by more than 1 ft. Where insurable buildings are not affected, simply notify FEMA of changes to base flood elevations as a result of highway construction.

In many situations, it is possible to design and construct cost-effective highways such that their components are excluded from the floodway. This is the simplest way to be consistent with the requirements and should be the initial alternative evaluated. If a project element encroaches on the floodway but has a minor effect on the floodway water surface elevation (such as piers in the floodway) and hydraulic conditions can be improved so that no water surface elevation increase is reflected in the analysis for the new conditions, then the project may normally be considered consistent with the requirements.

The draft environmental assessment document should indicate the NFIP status of affected communities, the encroachments anticipated and the need for floodway or floodplain ordinance amendments. The draft document shall be furnished to FEMA. Upon selection of an alternative, the preliminary site plan, water surface elevation information and technical data in support of a floodway revision request, as required, shall be furnished to FEMA. If a FEMA determination will influence the selection of an alternative, obtain a commitment from FEMA prior to preparing the final environmental assessment document. Otherwise, this later coordination may be postponed until the design phase.

### **17.3.7 Floodway Revisions and NFIP**

Where it is not cost-effective to design a highway crossing to avoid encroachment on an established floodway, consider modifying the floodway itself. Often, the community is willing to accept an alternative floodway configuration to accommodate a proposed crossing, provided that NFIP limitations on increases in the base flood elevation are not exceeded. In some cases, it may be possible to enlarge the floodway or otherwise increase conveyance in the floodway above and below the crossing to allow a greater encroachment. Such planning is best accomplished when the floodway is first established. However, where the community is willing to amend an established floodway to support this option, the floodway may be revised.

The responsibility for demonstrating that an alternative floodway configuration meets NFIP requirements rests with the community. However, this responsibility may be borne by the agency proposing to construct the highway crossing. FEMA prefers that floodway revisions be based on the hydraulic model used to develop the currently effective floodway but updated to reflect existing encroachment conditions. The update defines base flood elevation changes caused by encroachments since the original floodway was established. Alternative floodway configurations may then be analyzed. Reference changes in base flood elevations to the profile obtained for existing conditions when the floodway was first established.

### **17.3.8 Allowable Floodway Encroachment**

#### **17.3.8.1 General**

When it is inappropriate to design a highway crossing to avoid encroachment on the floodway and where the floodway cannot be modified to exclude the structure, FEMA will approve an alternative floodway with backwater in excess of the 1-ft maximum only when the following conditions have been met:

- A location hydraulic study has been performed in accordance with FHWA "Location and Hydraulic Design of Encroachments on Floodplains" (23 CFR 650,

Subpart A), and FHWA finds that the encroachment is the only practical alternative.

- SDDOT has made appropriate arrangements with affected property owners and the community to obtain flooding easements or otherwise compensate them for future flood losses due to the effects of backwater greater than 1 ft.
- SDDOT has made appropriate arrangements to ensure that the National Flood Insurance Program and Flood Insurance Fund will not incur any liability for additional future flood losses to existing structures that are insured under the program and grandfathered under the risk status existing prior to the construction of the structure.
- Prior to initiating construction, SDDOT provides FEMA with revised flood profiles, floodway and floodplain mapping, and background technical data necessary for FEMA to issue revised Flood Insurance Rate Maps and Flood Boundary and Floodway Maps for the affected area, upon completion of the structure.

#### **17.3.8.2 Floodplain with a Detailed Study (FIRM)**

In NFIP-participating communities where a detailed Flood Insurance Study has been performed but no regulatory floodway is designated, design the highway crossing to allow no more than a 1-ft increase in the base flood elevation based on technical data from the Flood Insurance Study. Submit technical data supporting the increased flood elevation to the local community and, through them, to FEMA for their files.

#### **17.3.8.3 Floodplain Indicated on a FHBM**

In NFIP-participating communities where detailed Flood Insurance Studies have not been performed, SDDOT should generate its own technical data to determine the base floodplain elevation and design encroachments in accordance with FHWA 23 CFR 650, Subpart A. Base floodplain elevations shall be furnished to the community and coordinated with FEMA as outlined previously where the increase in base flood elevations in the vicinity of insurable buildings exceeds 1 ft.

#### **17.3.8.4 Unidentified Floodplains**

Design encroachments outside of NFIP communities or NFIP-identified flood hazard areas in accordance with SDDOT guidance.

### **17.3.9 Replacing Existing Structures**

If an existing structure is replaced in a floodplain of a NFIP-participating community, the replacement structure is considered consistent with the NFIP criteria if it is hydraulically equal to or better than the one it replaces. That is, the replacement structure does not increase the base flood elevations. Generally, this applies directly to crossings in which either the roadway profile is lowered or the replacement structure is the same as or larger than the existing structure. In such cases, the hydraulic designer may base the design solely on typical SDDOT design procedures. However, many bridge replacements combine an increase in structure size with an increase in the roadway profile elevation or a deeper superstructure. If such changes constitute additional obstruction in the floodway, FEMA coordination is required.

### **17.3.10 Applicability of NFIP Criteria to SDDOT**

Consistency with NFIP criteria is mandated for all SDDOT projects involving encroachments in floodplains of communities participating in NFIP. Ensure that such projects that include scope of work from the following list are consistent with the requirements:

- Replacement of an existing bridge with a smaller opening area (e.g., shorter length, deeper superstructure, higher or less hydraulically efficient railing).
- Replacement of a bridge and approach roadway with an increase in the roadway profile.
- Safety project involving the addition of a safety barrier.
- Rehabilitation of a roadway resulting in a higher profile.
- Highway crossing at a new location.
- Longitudinal encroachment of a highway on floodplain (with or without crossing).
- Storage of materials in floodplain.
- SDDOT buildings in floodplain.

Some communities have adopted floodplain ordinances that are more restrictive than basic FEMA criteria. Examples include the following:

- No-increase ordinances that preclude any encroachment on the floodplain (i.e., no floodway).

- Design to accommodate ultimate watershed development.
- Roadway profiles to be set above 100-year flood elevation.

Generally, FEMA condones stricter ordinances, but it does not require them. In fact, FEMA regulations specifically state that existing watershed conditions are the basis for establishing flood insurance rate zones, not future conditions. The implication of an ordinance with stricter requirements is that highway crossings should span and clear the 100-year flood elevation. Neither FHWA nor FEMA requires States to comply with stricter ordinances. On Federal-aid projects, FHWA will fund costs in excess of those required for highways to meet basic FEMA criteria if the stricter criteria has been adopted by the State as a Statewide standard.

If the design will accommodate such ordinances, SDDOT requires that any cost in excess of what would be required to accommodate either FEMA basic criteria or SDDOT criteria be borne by the community enforcing such an ordinance, unless otherwise mandated by Federal or State law or policy. This rationale is consistent with both the hierarchical structure of government and the fact that SDDOT is responsible for ensuring the equitable use of highway funds.

#### **17.3.11 FEMA/NFIP Map Revisions**

Currently, FEMA publishes the following forms of map revision:

- Conditional Letter of Map Revision (CLOMR). This letter (see [Figure 17.3-B](#)) from FEMA Region 8 provides comments on a proposed project and the need for a revised FIRM if the project is constructed. It indicates whether or not the project meets NFIP criteria.
- Letter of Map Revision (LOMR). Issued by FEMA with an accompanying copy of an annotated FIRM, this acknowledges changes in the base flood elevation, floodplain boundary or floodway based on post-construction or revised conditions.
- Physical Map Revision. This reprint of the FIRM reflects changes to the base flood elevations, floodplain boundary or floodway based on revised conditions.

Normally, a SDDOT request for a CLOMR requires a follow-up request for a LOMR after construction is complete, unless the response to a request for a CLOMR indicates that a map revision is not required. FEMA determines the need for a physical map revision. Other map issues include:

- typical conditions requiring FEMA map revision,
- hydrologic data for FEMA map revisions,
- hydraulic analyses for FEMA map revisions,

### When is a Conditional Letter of Map Revision (CLOMR) required?

FEMA's review and comment on a project that is proposed within the Special Flood Hazard Area is referred to as a Conditional Letter of Map Revision (CLOMR). A CLOMR comments on whether the proposed project meets the minimum floodplain management criteria of the National Flood Insurance Program (NFIP) and, if so, what revisions will be made to the community's NFIP map if the project is completed as proposed. *FEMA works with the applicant to ensure the proposed project is compliant with the program. When all program requirements are met, the CLOMR can be issued. Although not required, FEMA encourages the local floodplain administrator to approve the floodplain permit after FEMA comments on the CLOMR. A copy of the comment by FEMA is sent to both the applicant and the local floodplain administrator.*

There are only two situations where NFIP regulations require a CLOMR to be obtained from FEMA before a project can be built.

The first is for a project on a stream or river that has been studied through detailed hydrologic and hydraulic analyses and for which base flood elevations (BFEs) have been specified, but a floodway has not been designated (44 CFR (c)(10)). If the community proposes to allow development that would result in more than a 1.0 foot increase in the base flood elevation, a CLOMR *with detailed analysis* should first be obtained.

The second situation requiring a CLOMR is for a project on a stream or river for which detailed analyses have been conducted and *both* base flood elevations (BFEs) and a floodway have been designated (44 CFR 60.3 (d)(4)). If the community proposes to allow development totally or partially within the floodway that would result in any (greater than 0.0 foot) increase in the base flood elevation, a CLOMR should be obtained. *If there are to be no proposed changes the applicant should still demonstrate through detailed analysis that the rise in the floodway is no more than 0.00 feet (44 CFR 60.3 (d)(3)).*

Although the two situations described above are the only requirements to obtain a CLOMR prior to permitting development, FEMA will review and comment and, if appropriate, issue a CLOMR for any proposed project when requested by a participating community. *Even in situations where a CLOMR is not mandatory, the community is encouraged to require a CLOMR from the applicant prior to approval of the permit if they are unsure of the program impact of the proposed work and to ensure the project is compliant with FEMA regulations. It should be noted for projects where a CLOMR is not required but a LOMR is submitted after construction is completed, there is a risk that the project was not in compliance with the program requirements and the LOMR cannot be issued, in addition to a potential violation for the community. For proposed work in an Approximate A zone and a LOMR will be submitted to remove the area from the FEMA floodplain, a CLOMR may be required. Situations such as these are evaluated on a case-by-case basis; contact the LOMR manager at Baker for details.*

All requests for CLOMRs should be supported by detailed flood hazard analyses prepared by a qualified professional engineer. The specific data and documentation requirements are contained in Part 65 of the NFIP regulations and in FEMA's application/certification forms (MT-2). To defray costs to NFIP policyholders, FEMA charges fees to recover review costs. Specific information on the fee schedule and exemption requirements is contained in the MT-2 forms.

*The CLOMR does not revise the effective Flood Insurance Rate Map (FIRM) nor change the insurance rating/requirements. Only the LOMR can do that.*

*Once a project is completed, within 6 months the community **MUST** request a revision to the FIRM through a LOMR to change the effective map (44 CFR 65.3). "As-built" certification and other data should be submitted to support the LOMR request.*

### Figure 17.3-B — CONDITIONAL LETTER OF MAP REVISION (CLOMR) INSTRUCTIONS FOR FEMA REGION 8

- NFIP map revision request procedure,
- FEMA response, and
- FEMA fees.

SDDOT may submit any proposed project with a request for a CLOMR. FEMA will then determine the need for a map revision. However, an application for a CLOMR is necessary when any of the following conditions are met:

- Proposed construction encroaches in the floodway, and there is any increase in the base flood elevation associated with the floodway encroachment.
- Construction in the floodplain (not just floodway) changes the base flood elevation by more than 1 ft.
- A floodway revision is desired to ensure that other development does not obstruct a proposed bridge opening.
- New hydrologic and hydraulic analyses demonstrate that the existing study is not accurate.

The same is true of LOMRs that apply to post-construction conditions. FEMA considers a LOMR to apply to any existing construction that may have occurred since the imposition of the floodway.

No map revisions are necessary under the following conditions:

- All proposed construction is outside the floodway boundary, and bridge low chords are above the regulatory floodway elevation.
- Construction occurs within the floodway (e.g., piers), but the base flood elevations are the same or lower due to compensatory excavation or other improvement measures within the floodway, and the floodway does not need to be revised.

### **17.3.12 Hydrologic Data for FEMA Map Revisions**

The hydrologic data used for the current NFIP maps should be used in the hydraulic models for checking FEMA compliance and requesting map revisions. The only exception is when SDDOT is contesting the validity of the existing hydrologic data. FEMA will only consider new hydrologic data if it can be demonstrated to be more accurate than the existing data. The following methods acceptable to FEMA are shown in order of preference:

- statistical analysis of peak annual gaged discharges;
- regional regression equations; and
- rainfall-runoff modeling (e.g., NRCS methods).

When a request for a CLOMR or LOMR is necessary, the hydraulic designer should develop the following computer models, with exceptions as noted. All models should tie into the effective Flood Insurance Study (FIS) profile upstream and downstream of the revised reach using sound hydraulic engineering practices to avoid discontinuities in the profile. The distance will vary depending on the magnitude of the requested floodway revision and the hydraulic characteristics of the stream:

1. Duplicate effective model of the natural and floodway conditions. Rerun the original study model using the same computer program used for the original study to ensure that the base line is accurate. If the effective model is not available, an alternative model should be developed. The model should be run confining the effective flow area to the currently established floodway and calibrated to reproduce, within 0.10 ft, the “with floodway” elevations provided in the Floodway Data Table for the current floodway. The alternative model should be based on floodplain geometry that existed when the original model was developed.
2. Corrected effective model of the natural and floodway conditions. Many original studies may have technical errors, inaccuracies associated with not having enough cross sections or inaccurate cross section data, or they did not include bridges or other structures that existed at the time of the original study. Also, an updated version of the computer program may provide more accurate bridge modeling. The newer version of the same computer program may be used to show how the results would have appeared at the time of the original study if newer technology had been used. With adequate justification, FEMA may consider this as the base line by which to compare the impacts of any changes that have occurred since the original model was developed. If the hydraulic designer considers no such changes to have occurred that may detrimentally affect the SDDOT design, this model will not be necessary. FEMA may accept an alternative computer model to the original one if the original model is unavailable or inappropriate, or the alternative model is justified as providing more accurate results.
3. Updated effective model reflecting changes in the floodplain that may have occurred since the original model was established. It is not SDDOT’s responsibility to provide studies for map revisions for changes other than those proposed by SDDOT. Often, either the community may not have requested map revisions or non-permitted activities may have changed base flood elevations. SDDOT is not responsible for such changes unless they were the result of SDDOT construction. However, these changes may either adversely affect the design of the SDDOT project or the SDDOT project will incur no additional increase in the base flood elevation when accounting for these changes. Therefore, the need for development and submission of a pre-project model is left to the discretion of the hydraulic designer.



4. Post-project model reflecting the changes to the floodplain and floodway conditions anticipated by the proposed construction. This determines the impact of the project. FEMA only requires the duplicate effective model and the post-project model. The additional models (corrected and pre-project models) may be necessary to prove to FEMA that the existing effective model is not accurate and a new model should be the basis for comparison.

### **17.3.13 NFIP Map Revision Request Procedure**

Generally, for SDDOT projects, an application for a CLOMR or LOMR should be prepared by the Bridge Hydraulic Engineer and submitted to FEMA by the participating community, SDDOT having provided supporting documentation. The procedural outline below assumes that a CLOMR or LOMR is needed:

1. Contact the FEMA coordinator for the participating community to discuss the need for a map revision, to identify any conflicts and to establish areas of cooperation. With the approval of the community, SDDOT will act as its agent for conducting the study and preparing the appropriate documentation.
2. Obtain detailed data for the FIS from FEMA. This will include the hydrologic and hydraulic analyses, current mapping and active CLOMRs and LOMRs. The community may have this information. However, the source for the most current data is FEMA's Technical Evaluation Contractor.
3. Acquire cross section survey data and establish existing field conditions in the floodplain at the proposed site.
4. Document the results of the hydraulic models.
5. Acquire and complete Form MT-2 "Application/Certification Forms for Conditional Letters of Map Revision, Letters of Map Revision, and Physical Map Revisions."
6. Provide the participating community with the application and supporting documentation. Send the application and supporting documentation to the participating community with a request to submit the package to FEMA. Request the community to confirm the submittal and notify SDDOT of FEMA's response.

FEMA's response is usually a request for additional data, issuance of a map revision or an indication that no map revision is required.

### **17.3.14 Legal References**

The following lists the regulations for the National Flood Insurance Program and for FHWA:

- 44 CFR 60.3, and
- 23 CFR 650.115(a) (5).

## 17.4 NATIONAL PERMITS/CERTIFICATIONS

The US Army Corp of Engineers Regulations, Administrative and Policy Materials are provided on the [Headquarters](#) web site. Similarly, the US Coast Guard procedures are provided at the [Bridge Administration Division](#) web site. Specific legal references are provided in the following sections for each permit.

### 17.4.1 Section 401 Water Quality Certification

#### 17.4.1.1 Name

The formal name is a Section 401 Water Quality Certification. The informal name is Section 401.

#### 17.4.1.2 Purpose

The purpose of the Section 401 Water Quality Certification is to restore and maintain the chemical, physical and biological integrity of the Nation's waters through the prevention, reduction and elimination of pollution. It is meant to ensure that South Dakota's surface water quality standards are met.

#### 17.4.1.3 Applicability

A Section 401 Certification is required in conjunction with all Section 404 permits, individual or nationwide, except Permit Nos. 3 and 13. For information on the Section 401 Water Quality Certification for Regional General Permits, see [Section 17.4.2.8.3](#).

#### 17.4.1.4 Responsible State Agency

Section 401 of the Federal *Clean Water Act* requires States to review projects and Federal permits to ensure that they will not impact the stream quality or violate Surface Water Standards. The South Dakota Department of Environment and Natural Resources (DENR) conducts this review in South Dakota and issues a Section 401 certification.

#### 17.4.1.5 Responsible SDDOT Unit

The SDDOT Environmental Section is responsible for securing Section 401 Certifications.

### 17.4.1.6 Legal References

The following lists the legal references for the Section 401 Certification:

- Section 401 of the Federal *Water Pollution Control Act* (1972), as amended by the *Clean Water Act* (1977 and 1987), 33 USC 1341;
- 33 CFR 320-332;
- 40 CFR 230 and 233;
- South Dakota Codified Law (SDCL) 34A-2-11, 34A-2-33, 34A-2-34, 34A-2-93;
- Administrative Rules of South Dakota (ARSD) 74:51:01:65; and
- Cross reference: State certification of activities requiring a Federal license or permit, 40 CFR 121 (July 1, 2008).

## 17.4.2 US Army Corps of Engineers Section 404

### 17.4.2.1 Name

The formal name is a Department of the Army Permit Section 404 of the Clean Water Act. The informal name is a Section 404 Permit, or a Fill and Dredge Permit.

### 17.4.2.2 Purpose

The purpose of the Section 404 program is to ensure that the physical, biological and chemical quality of our nation's water is protected from irresponsible and unregulated discharges of dredged or fill material that could permanently alter or destroy these valuable resources.

### 17.4.2.3 Applicability

Section 404 of the Federal *Clean Water Act* requires that anyone, including a government agency, political subdivision, landowner or developer who is proposing to conduct activities that involve the discharge of "dredged or fill material" into "waters of the United States," obtain a permit. The term "discharge of dredged material" includes "all mechanized land clearing, ditching, channelization and other excavation activities that would have the effect of degrading or destroying waters of the United States." The term "waters of the United States" includes all lakes, waterways, rivers, streams and jurisdictional wetlands (see [Section 17.4.2.7](#) for a definition of "Waters of the United States"). Waters of the United States includes essentially all surface waters such as all navigable waters and their tributaries, all interstate waters and their tributaries, all

wetlands adjacent to these waters, and all impoundments of these waters. The term “fill” means any material used that will replace an aquatic area with dry land or change the bottom elevation of a wetland (e.g., concrete, riprap, earth fill).

#### **17.4.2.4 Responsible Federal Agency**

For Section 404 Permits, the United States Army Corps of Engineers is the Federal agency with overall responsibility for administering the program, reviewing permit applications and issuing permits in South Dakota. Note that each Corps District has its own procedures and permit requirements. The regulatory office for South Dakota is located in Pierre.

#### **17.4.2.5 Responsible SDDOT Unit**

The SDDOT Bridge Hydraulic Engineer in the Office of Bridge Design is responsible for securing Section 404 Permits for State highway projects. Hydraulic designers are responsible for submitting to the Bridge Hydraulic Engineer all completed application forms and required details showing the location, nature and quantity of the fill into the waters of the United States. These sketches should be in accordance with the permit application instructions and should include a location map. The Office of Road Design or Region/Area designers are responsible for supplying information to the Bridge Hydraulic Engineer as requested.

The SDDOT local government engineers, in the Local Government Section of the Office of Local Transportation Programs, are responsible for securing Section 404 Permits for local government road and structure Federal-aid projects. Local government engineers are responsible for completing the application forms and assembling the required details, including a location map, and the nature and quantity of fill into the waters of the United States. These items shall be in accordance with the permit application instructions.

#### **17.4.2.6 Documentation**

[Section 6.4.3](#) presents the documentation that should be included in the Permit File for a Section 404 Permit for a typical SDDOT project.

#### **17.4.2.7 Definitions**

The following definitions are applicable to Section 404 Permits:

1. Headwaters of the United States. The point on a non-tidal stream above which the average annual flow is less than five cubic feet per second (cfs). The Corps

- of Engineers District Engineer may estimate this point from available data by using the mean annual area precipitation, area drainage basin maps, and the average runoff coefficient, or by similar means. For streams that are dry for long periods of the year, District Engineers may establish the headwaters as that point on the stream where a flow of 5 cfs is equaled or exceeded 50% of the time (33 CFR 330).
2. Ordinary High Water (OHW). The line showing on the shore that is established by fluctuations of water and is indicated by physical characteristics such as clear, natural lines impressed on the waterway bank, shelving, changes in the character of the soil, destruction of terrestrial plants, the presence of litter or debris, or other appropriate means that consider the characteristics of the surrounding area. In the absence of documented ordinary high water data, SDDOT has often used the computed  $Q_2$  flow depth as the ordinary high water depth for permit applications.
  3. Special Aquatic Sites. Mudflats, refuges, riffle and pool complexes, sanctuaries, vegetated shallows and wetlands.
  4. Waters of the United States. In general, for identification, the “Waters of the United States” include all jurisdictional wetlands and areas within a blue solid line or a blue dash line on the USGS quadrangle maps. Each river, stream, creek, intermittent tributary, pond, impoundment, lake or wetlands is considered part of the Waters of the United States. Irrigation ditches or channel modifications that intersect a blue line and intercept the flow may also be considered Waters of the United States.
  5. Jurisdictional Wetlands. Bogs, marshes, sloughs and swamps are other terms used to describe these areas. Floodplains, or areas where water stands on, at or near the groundline, may be considered suspected jurisdictional wetlands. Guidelines as established by the US Army Corps of Engineers’ [Wetland Delineation Manual](#) indicate that jurisdictional wetlands should have all of the following characteristics:
    - a majority of water-tolerant plants;
    - saturated soils; and
    - water on, at or near the surface of the ground during a specified portion of the growing season.

On January 9, 2001 the US Supreme Court issued a decision, *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* (521 US 159, 2001) (herein referred to as SWANCC) that limits the scope of the United States Army Corps of Engineers *Clean Water Act* (CWA) regulatory permitting program (Section 404) applied to isolated waters of the US. The

Supreme Court overturned the Corps' assertion of Federal jurisdiction over certain isolated wetlands based upon the presence of migratory birds.

The United States Supreme Court has ruled in *Rapanos v. US*, Nos. 04-1034 - 1384 (June 19, 2006) that not all wetlands are under the jurisdiction of the *Clean Water Act* (CWA). The requirement for a CWA permit to discharge dredged or fill material into "navigable waters" only applies to relatively permanent, standing or continuously flowing waters. It does not apply to channels through which water flows intermittently or ephemerally, or which periodically provide drainage for rainfall. Wetlands near ditches or man-made drains that empty into traditional navigable waters are not included.

### 17.4.2.8 Types of Section 404 Permits

The US Army Corps of Engineers issues individual permits, Nationwide and Regional General Permits. Each of these is discussed in the following sections.

#### 17.4.2.8.1 Individual Permits

These permits are the basic form of authorization under the US Army Corps of Engineers' permit program. Individual permits are required where a proposed project does not meet the terms and/or conditions of either a regional or nationwide general permit due either to the type of activity, size of project or when it is probable that the project will cause more than minimal impact to the aquatic environment. The following applies:

- Individual permits are issued following a full public interest review of an individual application for a Department of the Army permit. A public notice is distributed to all known interested persons. After evaluating all comments and information received, a final decision on the application is made.
- The permit decision is influenced by the outcome of a public interest balancing process where the benefits of the project are balanced against the detriments. A permit is often granted unless the proposal is found to be contrary to the public interest.
- Processing time usually takes 60 to 120 days unless a public hearing is required or an environmental impact statement is prepared.

#### 17.4.2.8.2 Nationwide Permits (NWP)

Nationwide general permits are issued to the general public every five years and are applicable anywhere (with some special limitations) in the United States. There are

currently 50 different categories of activities authorized under this permit program. Some of the activities require notification to the US Army Corps of Engineers prior to implementation, and some require submittal of wetland delineation if the project is proposed to be constructed within a wetland. All nationwide general permits have restrictions based on activity, project size, area impacted, construction method, etc. Some of the nationwide general permits currently in effect include approved categorical exclusions, maintenance, minor road crossings, bank stabilization, etc.

The most common types of these permits for transportation purposes are covered under Nationwide 404 Permit Nos. 3, 7, 13, 14, 23, 27, 41 and 43.

It is SDDOT policy to submit a Section 404 permit application for all projects that appear to qualify for a Nationwide Permit, plus those that will require an Individual 404 Permit. For Nationwide Permits requiring a preconstruction notification, the preconstruction notification requirement is satisfied by submitting the Section 404 Permit application.

NWP No. 3, paragraphs (a) and (c) do not require a preconstruction notification. NWP No. 3, paragraph (b) requires a preconstruction notification for activities falling under this portion of the Nationwide Permit. This permit is typically used for maintenance on a previously authorized structure. It allows repair, rehabilitation or, in some cases, replacement of a structure when the footprint is not being substantially changed. No channel changes, realignments or increasing fill slopes into areas of the floodplain are allowed. When this permit is implemented, the hydraulic designer should prepare a memorandum for the Hydraulic Project File stating the following: *This project qualifies for a NWP No. 3 and no formal application will be sent.*

*The following are NWPs applicable to South Dakota DOT projects that were reauthorized or newly authorized on March 19, 2007 for a period of five years at which time they will be subject to reauthorization. Please note the following:*

- *Information on Preconstruction Notification (PCN) procedures can be found in NWP General Condition No. 27 (Federal Register, 63 FR 36075-36076).*
  - *Mitigation includes activities that avoid, minimize and compensate for impacts (see NWP Mitigation Information in [Section 17.4.2.9](#)).*
  - *Some of the NWPs provide for temporary structures or fills that must be removed.*
1. NWP No. 3: Maintenance. This NWP authorizes the repair, rehabilitation or replacement of any previously authorized structure or fill. In addition, it can allow the removal of accumulated sediment and debris in the vicinity of existing structures, or permit temporary structures, fill and work to conduct the maintenance activity. All permitted work is to restore the facility back to original conditions. A preconstruction notification (PCN) is required for the sediment and debris removal activities.



2. NWP No. 7: Outfall Structures and Maintenance. None proposed.
3. NWP No. 13: Bank Stabilization. This NWP is for the placement of streambank stabilization for erosion prevention. This permit is limited to 500 linear ft and with material below ordinary high water being an average of less than one cubic yard per running foot. A preconstruction notification for fills is required in special aquatic sites in excess of 500 linear ft in length or involving the discharge of fill material greater than one cubic yard per running foot along the bank below the plane of the ordinary high water mark.
4. NWP No. 14: Linear Transportation Crossings. This NWP for public projects is limited to the loss of one half acre. The permittee must submit a preconstruction notification to the District Engineer prior to commencing the activity if (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands (Sections 10 and 404).
5. NWP No. 23: Approved Categorical Exclusions. This NWP is applicable to highway projects with at least partial Federal funding that have FHWA-approved categorical exclusions. This is the primary Nationwide Permit used for Department of Transportation projects that have been categorically approved by the FHWA.
6. NWP No. 27: Stream and Wetland Restoration Activities. The permittee must submit a preconstruction notification to the District Engineer prior to commencing the activity, except for the following:
  - a. activities conducted on non-Federal public lands and private lands in accordance with the terms and conditions of a binding wetland enhancement, restoration or establishment agreement between the landowner and the US FWS, NRCS, FSA, NMFS, NOS or their designated State cooperating agencies;
  - b. voluntary wetland restoration, enhancement or establishment actions documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or
  - c. the reclamation of surface coal mine lands in accordance with a SMCRA permit issued by the OSM or the applicable State agency. However, the permittee must submit a copy of the appropriate documentation (Sections 10 and 404).
7. NWP No. 41: Reshaping Existing Drainage Ditches. A Preconstruction Notification is required for projects that affect greater than 500 linear ft.
8. NWP No. 43: Stormwater Management Facilities. The discharge must not cause the loss of greater than one-half acre of non-tidal waters of the United

States, including the loss of no more than 300 lineal ft of stream bed unless, for intermittent and ephemeral stream beds, this 300 linear ft limit is waived in writing by the District Engineer. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters. This NWP does not authorize discharges of dredged or fill material for the construction of new stormwater management facilities in perennial streams.

Preconstruction Notification is required for the construction of new stormwater management facilities or the expansion of existing stormwater management facilities. The permittee must submit a Preconstruction Notification to the District Engineer prior to commencing the activity. Maintenance activities do not require Preconstruction Notification if they are limited to restoring the original design capacities of the stormwater management facility (Section 404).

#### 17.4.2.8.3 Regional General Permits (RGP)

The US Army Corps of Engineers is authorized to issue, after notice and opportunity for public hearing, general permits on a regional or statewide basis for any category of recurring activities that are similar in nature, similar in their impact on water quality and the aquatic environment, and cause only minimal adverse impact both individually and cumulatively. The purpose of the general permit is to allow certain minimal impact activities to occur with little, if any, delay or paperwork. These permits may be issued to a specific group, entity or agency or to the public in general. An example of a RGP for the SDDOT was the permit issued in 1997 to address the numerous flood repair sites on the State's highways.

The term "general permit" means a Department of the Army authorization that is issued on a nationwide or regional basis for a category or categories of activities when:

- those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or
- the general permit would result in avoiding unnecessary duplication of regulatory control exercised by another Federal, State or local agency provided that it has been determined that the environmental consequences of the action are individually and cumulatively minimal.

When a RGP is designated or implied, the hydraulic designer should prepare a memorandum for the Hydraulic Project File stating the following: *This project qualifies for a RGP in that (each eligibility criteria for the RGP should be listed and the level of adherence to that criteria noted).*

In addition, submit the RGP application form with an accompanying 8.5" × 11" or 11" × 17" copy of the USGS 7.5-minute series map to the SDDOT Bridge Hydraulic Engineer. Also, any wetlands mitigation plan package that is developed for the specific project

may be a required supporting document when wetland mitigation is necessary. As noted, this single packet will serve as an application/notice to the Army Corps of Engineers and South Dakota Department of Environment and Natural Resources.

#### 17.4.2.9 Nationwide Permits Mitigation Information

Mitigation includes measures that avoid, minimize or compensate for impacts to the aquatic ecosystem. Avoidance and minimization associated with NWP authorizations are limited to on-site measures. The following descriptions apply:

1. Avoid. Take all appropriate and practical measures to avoid adverse impacts to the aquatic ecosystem.
2. Minimize. Take all appropriate and practical measures to minimize adverse impacts to the aquatic ecosystem.
3. Compensate. The applicant may be required to implement appropriate and practical measures to compensate for adverse project impacts to the aquatic ecosystem that cannot reasonably be avoided or minimized. Compensatory mitigation can take many forms, some of which are the use of buffer zones adjacent to the stream corridors and wetland areas; stream restoration or “naturalization”; specific mitigation; mitigation banking; in-lieu fee-based mitigation; protection of areas by deed restrictions; or conservation easements.

Section 404 permittees are responsible for developing a mitigation plan (see [Section 17.1.2](#) and [Chapter 8 “Wetlands Creation and Restoration”](#)) and submitting it to the Corps. Include the following in the mitigation plan:

- A complete description of efforts made to avoid and minimize adverse project impacts to the aquatic ecosystem and a thorough description of the proposed compensatory mitigation.
- Wetland delineation (if appropriate), conducted in accordance with the Corps of Engineers [Wetlands Delineation Manual](#).
- A detailed description of the nature and location of all proposed ground-disturbing activities and structures associated with the compensatory mitigation project.
- For work that would create new aquatic resources or modify existing aquatic resources, provide a description of the proposed hydrology, a soil description and a planting plan.
- A proposal for monitoring the success of the proposed mitigation plan, including the name and telephone number of the responsible party, success criteria and a compliance reporting program. Continue monitoring for at least two years after

all mitigation activities have been completed and planting survival requirements have been achieved. Include all appropriate contingency plans and address provisions for long-term operations and maintenance.

#### **17.4.2.10 Application Procedure**

See [Appendix 17.A](#).

#### **17.4.2.11 Distribution of Permits**

Upon receipt of the Corps Section 404 Permit, the hydraulic designer will notify the Bid Letting Office of the receipt of the permit, the expiration date of the permit, the type of permit received and the locations permitted. Depending upon the project activities, other SDDOT Offices may be notified of the permit conditions.

At the time a project with a Section 404 Permit is advertised for letting by SDDOT, the hydraulic designer will forward the permit letter, the permit application, any application quantity attachments, and the wetland table to the Area Engineer responsible for the project construction for their use during construction.

#### **17.4.2.12 Legal References**

The following lists the legal references for Section 404 Permits:

- Section 404 of the *Federal Water Pollution Control Act* (1972), as amended by the *Clean Water Act* (1977 & 1987), 33 USC 1344; and
- 33 CFR 320-332.

### **17.4.3 Section 402 NPDES Permits**

#### **17.4.3.1 Name**

The formal name is the National Pollutant Discharge Elimination System (NPDES) Permit. The informal name is the NPDES Permit.

#### **17.4.3.2 Purpose**

The purpose of the NPDES Program is to restore and/or maintain the chemical, physical and biological integrity of the Nation's waters through the prevention, reduction and elimination of pollution.

### 17.4.3.3 Applicability

Section 402 NPDES Construction Permit(s) are required for all construction activities involving clearing, grading and excavation that disturb one acre or more of land area. In addition, all construction activities that are on or adjacent to waters of the State must require a construction permit regardless of land area disturbed. The NPDES Program in South Dakota consists of a Surface Water Discharge (SWD) permit and Storm Water Permits. The SWD permit controls discharges from point sources of pollution such as construction dewatering activities. The Storm Water Program regulates stormwater discharges from three potential sources — municipal separate storm sewer systems (MS4s), construction activities and industrial activities. Most stormwater discharges are considered point sources, and operators of these sources may be required to receive an NPDES permit before they can discharge. This permitting mechanism is designed to prevent stormwater runoff from washing harmful pollutants into local surface waters such as streams, rivers or lakes.

### 17.4.3.4 Responsible State Agency

The South Dakota Department of Environment and Natural Resources (DENR) administers the NPDES program in South Dakota, which includes enforcement, management and implementation of the permit program.

### 17.4.3.5 Responsible SDDOT Unit

The SDDOT Project Development Office, Environmental Office is responsible for the NPDES Program.

### 17.4.3.6 Legal References

The following lists the legal references for the NPDES Construction Permit:

- Section 402 of the *Federal Water Pollution Control Act* (1972), as amended by the *Clean Water Act* (1977 and 1987), 33 USC 1342;
- 40 CFR 122-136;
- SDCL 34A-2; and
- ARSD 74:52:01-74:52:11.

#### **17.4.4 Section 10 Navigable Waterways**

Section 10(b) of the *Rivers and Harbors Act* approved March 3, 1899 (33 USC 403) (hereinafter referred to as Section 10), prohibits the unauthorized obstruction or alteration of any navigable water of the United States. The construction of any structure in or over any navigable water of the United States, the excavating from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition or capacity of such waters is unlawful unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army. The instrument of authorization is designated a permit. The authority of the Secretary of the Army to prevent obstructions to navigation in navigable waters of the United States was extended to artificial islands, installations and other devices located on the seabed, to the seaward limit of the outer continental shelf, by Section 4(f) of the Outer Continental Shelf Lands Act of 1953 as amended (43 USC 1333(e)). See 33 CFR Part 322.

##### **17.4.4.1 Name**

The formal name is the Section 10 Navigable Waters Permit. The informal name is the Section 10 Permit.

##### **17.4.4.2 Purpose**

The purpose of the Section 10 Navigable Waters Permit is to protect and preserve the navigable waterways of the United States against any degradation in water quality.

##### **17.4.4.3 Applicability**

A Section 10 Navigable Waters Permit is required for structures or work (other than bridges or causeways) affecting a navigable waterway. Examples of work include dredging, channelization and filling.

##### **17.4.4.4 Responsible Federal Agency**

For Section 10 Navigable Waters Permits, the United States Army Corps of Engineers is the Federal agency with overall responsibility for reviewing permit applications and issuing permits. If a Section 9 permit is also required, the United States Coast Guard is the Federal agency with overall responsibility for reviewing permit applications and issuing permits.

#### 17.4.4.5 Responsible SDDOT Unit

The Bridge Hydraulic Engineer is responsible for the Section 10 Permit. Hydraulic designers are responsible for submitting to the Bridge Hydraulic Engineer all completed application forms, required sketches showing the project location, etc.

#### 17.4.4.6 Legal References

The following lists the legal references for Section 10 Permits:

- Section 10 of the *Rivers and Harbors Act* of 1899, 33 USC 403;
- 23 CFR Part 650, Subpart H; and
- 33 CFR 320-332.

### 17.4.5 US Coast Guard Section 9 Navigable Waterways

#### 17.4.5.1 Name

The formal name is the Section 9 Navigable Waters Permit. The informal name is the Section 9 Permit.

#### 17.4.5.2 Purpose

The purpose of the Section 9 Navigable Water Permit is to ensure that there will be no interference to navigation on the navigable waterways of the United States.

#### 17.4.5.3 Applicability

A Section 9 Navigable Waters Permit is required for the construction, modification, replacement or removal of any bridge or causeway over a navigable waterway. Coast Guard permits are *not required* for the following projects:

- Construction of Federal-aid bridges (23 CFR 650, Subpart H) crossing non-tidal waters NOT presently used as or susceptible to use as a means of transporting interstate or foreign commerce.
- Removal of an existing bridge that will not be replaced by another bridge.
- If SDDOT will retain the entire bridge or designated sections for purposes other than transporting people or physical matter across a navigable waterway (i.e., fishing pier), the Bridge Hydraulic Engineer should notify the US Army Corps of Engineers (USACE) District Office with jurisdiction over the bridge's geographic area. USACE will either approve or deny the request. If SDDOT receives

USACE approval, adhere to the USACE permit requirements, because USCG no longer has jurisdiction over the bridge. If USACE denies the request, USCG retains jurisdiction to prescribe removal conditions to protect navigation.

- Repair or replacement of worn or obsolete parts on an existing bridge.

If there are any questions on bridge permit requirements, contact the Chief of the Coast Guard, Bridge Administration District with jurisdiction over the bridge's geographic area.

#### **17.4.5.4 Responsible Federal Agency**

For Section 9 Navigable Waters permits, the United States Coast Guard is the Federal agency with overall responsibility for administering the program, reviewing permit applications and issuing permits. The USCG, Bridge Administration Division is responsible for issuing permits. Their procedures are provided in the [Bridge Permit Application Guide](#). South Dakota is covered by the Eighth District.

#### **17.4.5.5 Responsible SDDOT Unit**

The Bridge Hydraulic Engineer is responsible for the Section 9 Permit. Hydraulic designers are responsible for submitting to the Bridge Hydraulic Engineer all completed application forms, required sketches showing the project location, etc., as described in the publication *Bridge Permit Application Guide*.

#### **17.4.5.6 Legal References**

The following lists the legal references for Section 9 Permits:

- Section 9 of the *Rivers and Harbors Act* of 1899, 33 USC 401;
- 23 CFR part 650, Subpart H; and
- 33 CFR 114-118.



## 17.5 STATE/COUNTY/CITY PERMITS/CERTIFICATIONS

In addition to the various national permits that may be required for a construction project, projects may be subject to State, county and city permitting requirements.

### 17.5.1 State

The South Dakota Department of Environmental and Natural Resources (DENR) is responsible for issuing permits and location notices for Water Rights, Dry Draw and Dam Safety. This Section provides very basic guidelines for when a permit or location notice may be needed. Further information can be found at the [DENR website](#).

#### 17.5.1.1 Water Rights

In South Dakota, all surface water and ground water is the property of the people of the State. Whether a Water Rights Permit is needed depends on the type of proposed water use. This Permit is required for the following conditions:

- For domestic use, exceeding 25,920 gal/day or exceeding a peak pump rate of 25 gal/min.
- For water distribution systems, exceeding 18 gal/min.
- Water use from a private water supply for commercial, industrial, institutional, irrigation, municipal, rural water system, suburban housing development, recreation, and fish and wildlife propagation.

#### 17.5.1.2 Dry Draw

A Dry Draw Location Notice is needed for any proposed dam/dugout impounding 25 acre-feet of water or less at the primary spillway elevation with water stored for in-place uses only. Any dam on a navigable stream requires obtaining a permit to appropriate water.

#### 17.5.1.3 Dam Safety

A Location Notice must be filed for a proposed dam meeting all of the following conditions:

- the proposed dam will impound 25 acre-feet of water or less at the primary spillway elevation;

- water impounded in the dam will be used for in-place uses such as stock watering or fish and wildlife habitat; and
- the dam is constructed on either a dry draw or non-navigable stream but not on a navigable stream.

A Water Rights Permit is needed if the proposed dam meets any of the following conditions:

- the proposed dam will impound more than 25 acre-feet of water at the primary spillway elevation;
- regardless of the amount of water impounded, diversions will be made from the dam to serve some use other than reasonable domestic use; or
- the proposed dam is being constructed on a navigable stream.

### **17.5.2 County/City**

Hydraulic designers should be aware that many county and city government entities may have drainage ordinances or other permitting requirements. Contact the local NFIP coordinator for details.

## **Appendix 17.A**

### **SECTION 404**

### **APPLICATION PROCEDURE**

The Section 404 application should be prepared and submitted to the Corps of Engineers at least 90 days prior to the letting date to allow the Corps of Engineers sufficient time to process the application and issue a permit prior to preparation of the bid documents and FHWA review. The Corps criterion is 30 days for processing NWP's. If it is known that a permit may be an individual permit, the lead time should be increased to six months prior to letting as the individual permit requires the Corps of Engineers to advertise with a public notice for up to 30 days, and sufficient time is needed to address any public comments.

The typical application package includes the Section 404 application form, optional fill quantity sheet, an environmental document (Environmental Classification (EC)), batched environmental or an Environmental Assessment (EA), a location map (the project plans title sheet and a copy of the USGS quadrangle map for the project area), and appropriate project plan sheets to define the proposed work activity.

In addition to the permanent construction activity, the application package should address anticipated temporary fill activities associated with the project construction such as traffic diversions, stream diversions, cofferdams, contractor work platforms, falsework piling, haul road crossings, etc.

The permit application packet shall be on 8½" × 11" sheets, or 11" × 17" plan sheets, defining all impacts to "Waters of the United States," such as bridge and culvert crossing locations or fill placement into jurisdictional wetlands locations. Bridge location drawings require a plan and elevation view, and wetlands impact details should be shown on a plan view with a cross section through the fill area. Indicate the acres of the wetlands filled on the drawing.

The level of detail required in the permit application packet is as follows:

1. Vicinity Map (taken from USGS quad map):
  - location of activity or wetland mitigation site (if applicable);
  - name of waterbody;
  - names or numbers of highways/roads;
  - north arrow; and
  - scale.

2. Plan View Sketch:
  - name of waterbody and all highways/roads,
  - area showing the limits of the fill placement,
  - location of all wetlands,
  - north arrow, and
  - scale.
3. Elevation View (or typical cross section):
  - OHW elevation,
  - other water elevations,
  - riprap, and
  - other fill material.
4. Other Documentation:
  - hydrogeomorphic classification (HGM document),
  - wetlands delineation/documentation, and
  - wetland mitigation plan.

On major road projects that are expected to require individual Section 404 Permits, the Army Corps of Engineers has deemed it necessary to include a detail showing the plan view and a longitudinal cross section of each 36-in diameter or greater culvert falling in naturally occurring waterways. An overall project map shall be included with the permit application to show the location of each such culvert and the locations of the wetlands impacts throughout the project. In this case, the Corps of Engineers interprets the definition of “Waters of the United States” to include all naturally occurring draws.

Include the quantities of the various fill materials and show both the total cubic yards and the cubic yards placed below the Ordinary High Water elevation in the permit application. In addition, provide the total area in square feet or acres of the fill material placed below OHW. Any wetland mitigation plans required should also be submitted with the permit application.

The hydraulic designer should review constructability issues at project sites where temporary work causeways and cofferdams will be required. Construction activities such as bridge pier construction, storm drain outfalls in rivers and earth haul roads across streams may all require temporary filling of the “Waters of the United States.” Designers should submit detailed sketches of temporary causeways, etc., with the applications. All construction activities that impact the “Waters of the United States” (either permanent or temporary) should be included in the permit application.

Projects that have both road construction and bridge construction shall have one combined Section 404 Permit application. Multiple projects in the same contiguous section of roadway will also usually be submitted in one combined application.

Projects that consist of several individual sites in one project but on several waterways, highway routes or counties may require separate applications by waterway, highway or county to aid the Corps of Engineers in processing the application.