



Final Statewide Umbrella Mitigation Banking Agreement

February 2016

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ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
FR	Federal Register
GSA	geographic service area
HUC	hydrologic unit code
IRT	Interagency Review Team
NDOR	Nebraska Department of Roads
NGPC	Nebraska Game and Parks Commission
NRCS	Natural Resources Conservation Service
RGL	Regulatory Guidance Letter
SMG	Stream Mitigation Guidance
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

FINAL UMBRELLA MITIGATION BANKING AGREEMENT

Project Number ST07(5099)
Control Number 00703

1.0 INTRODUCTION

This Umbrella Banking Agreement (Agreement) pertains to the establishment, operation, and maintenance of the Nebraska Department of Roads (NDOR) mitigation banks. NDOR, the sponsor of the Agreement, proposes that the Agreement will consist of multiple wetland and/or stream mitigation bank sites (Sites) under this Agreement, as described herein. These Sites will be added to the Agreement as developed and approved by the U.S. Army Corps of Engineers (USACE) with input from the Interagency Review Team (IRT) and will be for NDOR use only as a cost-efficient way to consolidate resources and increase the potential for mitigation success. NDOR proposes to develop the Agreement to assist in mitigating impacts on waters of the U.S., including wetlands, caused by highway construction projects in Nebraska.

1.1 Purpose

The purpose of this Agreement is to establish guidelines and responsibilities for the establishment, operation, and maintenance of the Sites. The Agreement will be used for compensatory mitigation for unavoidable adverse impacts on waters of the U.S., including wetlands, resulting from NDOR highway construction projects, including mitigation, as required, for activities authorized under the following:

- Section 404 of the Clean Water Act
- Section 10 of the Rivers and Harbors Act
- Executive Order 11990
- State of Nebraska (State) Title 117

NDOR has the following goals for the proposed Agreement:

- To support the national goal of “no net loss” of wetlands by providing wetland mitigation sites.
- To consolidate resources to increase the potential for the establishment and long-term management of successful mitigation that maximizes opportunities for contributing to biodiversity, ecological functions, and/or watershed functions.
- To reduce permit processing times and provide more cost-effective compensatory mitigation opportunities for highway construction projects that qualify for mitigation.
- To increase the review and compliance monitoring efficiency and thereby improve the reliability of efforts to restore, create, or enhance wetland areas and/or stream and riparian corridors for mitigation purposes.

1.2 Location and Ownership of Parcels

The Agreement will consist of multiple wetland and/or stream Sites throughout the State. NDOR will initially assume ownership of the Sites or establish conservation easements or other real estate mechanisms on the Sites. Each Site will have appropriate real estate instruments, such as deed restrictions, conservation easements, or restrictive covenants, placed on them (and

approved by USACE). If NDOR relinquishes ownership of a Site, these restrictive preservation mechanisms will provide for protection of the developed resources at the Site in perpetuity. Credit use at a Site will remain for the sole use by NDOR.

As the Agreement sponsor, NDOR will assume responsibility for the overall operation and management of the Agreement. Inquiries regarding the Agreement ownership and operation can be directed to:

Tony Ringenberg
Highway Environmental Program Manager
Nebraska Department of Roads
Planning and Project Development Division
1500 Highway 2
PO Box 94759
Lincoln, NE 68509-4759
Phone: (402) 479-4410
Email: tony.ringenberg@nebraska.gov

1.3 Interagency Review Team

Members of the IRT include representatives from the following Federal and State agencies:

- U.S. Army Corps of Engineers (USACE)
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS)
- U.S. Environmental Protection Agency (EPA)
- Federal Highway Administration (FHWA)
- U.S. Fish and Wildlife Service (USFWS)
- Nebraska Game and Parks Commission (NGPC)
- Nebraska Department of Environmental Quality (NDEQ)

The IRT will review this Agreement and subsequent bank site applications (see Section 3.2) for the restoration, creation, enhancement, and/or preservation of wetland areas and/or stream and riparian corridors. When the procedures established in this Agreement are in place, the primary role of the IRT will be to review the proposed establishment of Sites and provided recommendations for a Sites inclusion within the NDOR mitigation banking program.

Due to the nature of NDOR's work as Section 404 related, a representative of USACE (or their designee), the authorizing agency, will serve as the IRT chair (Chair). The Chair will be responsible for making final decisions regarding the terms and conditions of this Agreement.

1.4 Disclaimer

This Agreement does not in any manner affect the statutory authorities and responsibilities of the signatory parties.

1.5 Exhibits

The following exhibits are incorporated into this Agreement as appendices:

- Appendix A, Typical Site Development Plan
- Appendix B, Nebraska Wetland Subclass Definitions
- Appendix C, Crediting and Debiting Procedure for the Agreement

2.0 GOVERNING LEGISLATION AND GUIDANCE

NDOR proposes to develop the Agreement to assist in mitigating unavoidable impacts on waters of the U.S., including wetlands, caused by highway construction projects in Nebraska under the Clean Water Act, Section 404 (33 United States Code [USC] 1344) and the Rivers and Harbors Act of 1899, Section 10 (33 USC 403 et seq.). The Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning the Determination of Mitigation Under the Clean Water Act, Section 404(b)(1) Guidelines, effective February 8, 1990, provides guidance on the type and level of mitigation required to demonstrate compliance with the Section 404(b)(1) Guidelines.

This Agreement was developed using Compensatory Mitigation for Losses of Aquatic Resources: Final Rule (33 CFR Parts 325 and 332, April 10, 2008). However, guidance from the following documents is also considered:

- Processing of Department of the Army Permits (33 CFR 325), dated November 13, 1986.
- U.S. Army Corps of Engineers, RGL 08-03, Minimum Monitoring Requirements for Compensatory Mitigation Projects Involving the Creation, Restoration, and/or Enhancement of Aquatic Resources, dated October 10, 2008.
- U.S. Army Corps of Engineers, The U.S. Army Corps of Engineers' Guidance for Compensatory Mitigation and Mitigation Banking in the Omaha District, dated August 2005.
- U.S. Army Corps of Engineers, Omaha District, Nebraska Stream Condition Assessment Procedure, Interim, May 15, 2012.

3.0 ESTABLISHMENT OF BANK SITES

3.1 Bank Site Application

3.1.1 Site Development Plan

For each Site proposed for inclusion in the Agreement, a bank site application shall be submitted to the Chair, for distribution to the IRT (as appropriate), in the form of a Site Development Plan (see Appendix A, Typical Site Development Plan). It shall include, but not be limited to the following information:

- Objectives
- Site selection
- Site protection instrument
- Baseline information
- Determination of credits
- Mitigation work plan

- Maintenance plan
- Performance standards
- Monitoring requirements
- Long-term management plan
- Adaptive management plan
- Financial assurances

3.2 Implementation Timetable

NDOR will determine when additional Sites are needed based on the development and location of NDOR highway construction projects and/or the status of available credits in the Agreement. The implementation timetable for each Site will be outlined in each Site Development Plan.

3.3 Financial Assurance Requirements

NDOR, as the Agreement sponsor, will be responsible and will provide documentation that identifies the securing of adequate funding for operation and maintenance of the Agreement during its operational life as well as for the long-term management of the wetlands, streams, and/or other aquatic resources, as necessary. Should NDOR sell or transfer ownership of a Site, all site protection instruments associated with the Site would remain intact.

NDOR is a governmental unit with the financial capability to implement mitigation banking. Thus, NDOR has access to the necessary financial resources to cover Agreement needs, including long-term management of Sites and unforeseen events as determined by the IRT. Written documentation (letter format) of NDOR's financial resource commitments will be provided to USACE as part of a Site Development Plan. NDOR would provide the necessary financial commitment documentation to USACE for long-term management by a third party should responsibilities for management for a Site be transferred (as defined in the Site Development Plan or at a later date). Any transfer of responsibilities to a third party shall be approved by USACE prior to transfer.

3.4 Real Estate Provisions

NDOR will provide written assurance that the properties that constitute each Site will have appropriate real estate instrument, such as deed restrictions, conservation easements, or restrictive covenants, placed on them prior to any credit release to preserve the Site as wetland areas and/or stream and riparian corridors. NDOR shall submit preliminary copies of the unsigned real estate provisions to USACE for review and approval. If NDOR relinquishes ownership of a Site property, the appropriate real estate instrument established for the Site will provide for protection of the developed resources at the Site in perpetuity. For each Site, the individual restrictive preservation mechanism will be identified. Any credits at the Site available for use by NDOR at the time of the transfer of ownership will be available only to NDOR and not the new property owner.

3.5 As-Built Reports

NDOR will submit to the Chair for distribution to the IRT (as appropriate) an as-built report for each Site added to the Agreement within the first year's Site monitoring report or within one year following completion of the Site. The as-built report will describe any deviation from the

individual Site Development Plan and will include a plan showing finished grades and surface and groundwater elevations, as appropriate.

4.0 OPERATION OF THE AGREEMENT

4.1 Geographic Service Area

The geographic service area (GSA) is the geographic region in which a Site is authorized to provide compensatory mitigation required by Department of the Army permits. The following process will be followed for the establishment of a GSA.

In general, the GSA for a Site will consist of the portion of the HUC 8 watershed containing the Site and the portions of adjacent HUC 8 watersheds to the Site that are located in the same EPA Level IV Ecoregion as the Site. Adjacent HUC 8 watersheds within the same EPA Level IV Ecoregion as the Site but within a different HUC 6 will not typically be included within a GSA boundary. However, Sites located near river confluences with differing adjacent HUC 6 watersheds but within the same EPA Level IV Ecoregion as the Site may be reviewed by USACE for GSA consideration. The Site Development Plan will provide the proposed GSA boundary based on this methodology with refinements to EPA Level IV Ecoregion boundaries based on more detailed landscape or on-site information. The rationale for this approach is to take into account for the scale at which the EPA Level IV Ecoregions were developed as compared to actual landscapes.

USACE will review each GSA and seek comment from the IRT on a case-by-cases basis to determine the applicability of the above methodology including a review of the portions of the adjacent HUC 8's located in the same EPA Level IV Ecoregion. The USACE will ultimately approve the GSA for each Site.

When necessary to facilitate NDOR's decision-making process relative to potential Site acquisitions, it is understood that coordination with the USACE relative to GSA establishment may occur prior to the formal submittal of a Site Development Plan. In these cases, the proposed GSA will be submitted to the Chair, along with a map of the proposed Site and supplemental information that will support the GSA rationale. The Chair will distribute to the IRT as appropriate. In these instances, a timely initial review is desirable to facilitate acquisition of suitable sites. The initial review by USACE (and the IRT as applicable) is preliminary. Formal approval of a site's GSA will occur after a review of the Site Development Plan with ultimate approval by USACE.

4.2 Provisions for Site Access

NDOR will allow or otherwise provide for access to the Sites by all signatory parties, as necessary, for the purpose of inspection and compliance monitoring. To coordinate Site access, inspecting parties shall provide reasonable notice to NDOR prior to inspection of Sites.

4.3 Projects Eligible to Use the Agreement

Developed Sites will be for NDOR use only for mitigating impacts on waters of the U.S. and waters of the State, including wetlands, caused by highway construction projects. Additionally, Sites may be used for mitigating impacts to EO 11990 wetlands and State Title 117 waters. For projects requiring authorization under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, USACE, in consultation with other regulatory and resource agencies, will determine on a case-by-case basis the eligibility of projects to use the Agreement. For

projects requiring authorization under other Federal, State, and tribal programs, such as EO 11990, the appropriate entity will determine the eligibility and will have sole responsibility on determining the applicability of each Site in providing mitigation for their respective area of authority. As discussed in Section 5.4, debits will be tracked for use for each respective program in one ledger per Site. Credits applied for one program would not be available for use for another program. USACE will maintain the official Site ledger in RIBITS.

4.4 Credit Determination Methodology

Site credits will be produced through restoration, creation, enhancement, and/or preservation of wetland areas and/or stream and riparian corridors.

To determine the number of wetland mitigation credits produced for each Site, a site evaluation will be conducted that incorporates the use of the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, January 1987) and applicable Corps Regional Supplement, development of transects for site characterization, or other methodology approved by USACE, in relation to performance standards established for the Site.

To determine the number of stream mitigation credits produced for the Agreement, the pending (at time of this Agreement) Omaha District Nebraska Stream Condition Assessment Procedure, Interim (May 2012) or another USACE approved stream assessment methodology will be used.

Site assessment methodology is subject to change as methodologies for assessing wetland and stream impacts and mitigation bank credits are refined by USACE and subsequently implemented by NDOR.

4.5 Performance Standards

NDOR will be responsible for evaluating the success of the restoration, creation, enhancement, and/or preservation activities at the Sites. For each Site, the Site Development Plan will detail the specific performance standards that are measurable and repeatable. At a minimum, designated performance standards will be developed for all Sites for the following areas:

- General Wetland Performance Standards
 - Vegetation – Vegetation will be reviewed for current USACE delineation criteria, established canopy cover, and dominant species composition appropriate for the region.
 - Hydrology – Minimum inundation/saturation durations needed to support wetland plant species will be determined to correlate to wetland types proposed for establishment.
 - Upland Buffer – Indices such as native species cover (percent of soil covered by native vegetation) richness (total number of species in an area), and diversity will be determined as appropriate for the region.
- General Stream Performance Standards
 - Stream Morphology – The mitigated stream channel will be reviewed for stability and aquatic function compared to the goals and objectives for the site.
 - Riparian Vegetation – Native species cover and richness will be determined as appropriate for the region.

- Upland Buffer – Native species cover and richness will be determined as appropriate for the region.

USACE, in conjunction with the IRT, will review and approve the performance standards as part of the review and approval of the Site Development Plan.

4.6 General Credit Production

As stated in Section 4.4, Assessment Methodology, credits will be produced at the Sites through restoration, creation, enhancement, and/or preservation of wetland areas and/or stream and riparian corridors. Production of credits will vary depending on the type of potential mitigation available at the Site. Minimum credit production ratios have been established in accordance with the U.S. Army Corps of Engineers' Guidance for Compensatory Mitigation and Mitigation Banking in the Omaha District (USACE, August 2005) and the Compensatory Mitigation Final Rule (33 CFR Parts 325 and 332, April 10, 2008). The minimum credit production ratio relates to the number of acres or functional units (depending on the assessment methodology available) required to produce one (1) credit. Ratio determinations are based on the guidance provided by USACE (Personal Communication, 1/27/2014). See Table 1 for wetland credit production ratios.

Table 1. Wetland Credit Production Ratios

Type of Mitigation	Credit Production Ratio
Restoration (re-establishment)	1:1
Restoration (rehabilitation)	1:1
Enhancement	3:1
Creation	1:1
Protection/Maintenance	10:1
Buffer	4:1

Source: USACE, August 2005.

All wetland mitigation will have a minimum 50-foot buffer area, where applicable. Some circumstances relative to right-of-way or easement availability may preclude the ability to establish a 50-foot buffer. However, a minimum 50-foot buffer will be obtained whenever practicable. New buffer area may include deep-water habitat. Pre-existing conditions may be included as buffer area. Existing buffer area may include wetlands, deep-water habitat, or native uplands; however, no credit will be available to pre-existing buffer areas. Improvements to pre-existing buffer areas will be reviewed on a site-by-site basis to determine appropriate buffer ratios.

Stream credit production, as previously discussed in Section 4.4, Assessment Methodology, will use the Omaha District 2012 Interim Draft of the Nebraska Stream Condition Assessment Procedure or another USACE approved stream assessment methodology (if available). When the Nebraska Stream Condition Assessment Procedure is used, one functional unit is worth one credit. Buffers (including associated wetlands or uplands) associated with stream channels will be available for either wetland credit production or for stream credit production. Identification of

the credit production accounting for stream buffers will be identified in Site Development Plan and annual monitoring reports.

4.7 Credit Availability

To enhance Agreement flexibility, some credits may become available for debiting (that is, for use by NDOR) based on the stage and success of the Site development. Pre-crediting is available at three stages of bank development: 1) when the Site Development Plan is approved; 2) when construction is completed; and 3) when the Site or portions thereof meet the 1987 Corps of Engineers Wetlands Delineation Manual criteria and applicable Corps Regional Supplement to the Wetlands Delineation Manual as appropriate. No more than 30 percent of the total potential credits of the Site will be available for pre-crediting. For each Site, available pre-crediting will be identified in the Site Development Plan. All appropriate real estate instruments and financial assurances must be approved by USACE and executed and submitted to USACE prior to release of any credits. All credits at the Site are available when the Site meets the pre-determined performance standards, thereby being ecologically sound, and certified by USACE.

Table 2 provides the general schedule for credits within a mitigation bank to be available for debiting:

Table 2. General Schedule of Credit Availability

Status of Mitigation Bank Site	Percentage of Available Credits Released	Cumulative Percentage of Available Credits Released
Site Development Plan approved	5% ¹	5%
Construction completed	10% ¹	15%
1987 Corps of Engineers Wetlands Delineation Manual criteria met/After year 1 goals are met	15% ¹	30%
Site Meeting Performance Standards ²	100%	100%

Notes:

¹Pre-crediting debit ratios would apply. Credits available will be based on total anticipated credits for a Site.

²Based on total areas meeting established performance standards; partial crediting is allowable.

Credit availability shall be applied using the Corps of Engineers Omaha District Nebraska Stream Condition Assessment Procedure, Interim (May 2012) or another USACE approved methodology. When the Nebraska Stream Condition Assessment Procedure is used, one functional credit is worth one functional debit. Pre-crediting of no more than 15 percent of the total Site is allowed in accordance with the release of credit ratios as provided in Table 2. After construction, the Nebraska Stream Condition Assessment Procedure will determine the number of functional units (and therefore credits) are available.

4.8 Compensation Ratios and Debiting

4.8.1 Wetland Compensatory Mitigation

Compensation ratios, which identify how much of the Site will be used to compensate for project-related impacts, will be determined by USACE during the Section 404 permitting process. Debiting ratios are ultimately determined by USACE, but will be based on two criteria:

- Criteria 1: Cowardin Classification - In-kind replacement of impacted wetlands at a mitigation site based on Cowardin Classification. (The USACE has approved the

combination of water regime modifier “A” (temporarily flooded) and “C” (seasonally flooded).)

- Criteria 2: Nebraska Wetland Subclass - In-kind replacement of impacted wetlands at a mitigation site based on Nebraska wetlands per hydro-geomorphic subclass as defined in the Wetland Program Plan for Nebraska (LeGrange, 2010). See the table of Nebraska hydro-geomorphic wetland subclasses in Appendix B.

Mitigation for impacts occurring out of the established GSA is not applicable and will not be considered.

Based on the above criteria, the following debiting ratios will be applied:

Table 3. Wetland Mitigation Debiting Ratios

	Certified Credit Debiting Ratio	Pre-Credit Debiting Ratio
Two criteria present	1:1	1.5:1
One of two criteria present	2:1	3:1
Neither criteria present	4:1	6:1

Compensation ratios will reflect one-for-one replacement of lost functions. Functions will be identified according those provided per Nebraska hydro-geomorphic wetland subclasses (LeGrange, 2010) and identified in Appendix B. Examples would include depressions located outside of floodplains, wetlands in an agricultural setting, and other highly disturbed or human-made wetlands.

It will be assumed that the creation, restoration, enhancement, or preservation of any given wetland subclass will result in the replacement of impacted wetlands in the same subclass. In the absence of quantitative information on the functions of specific wetland sites, a minimum of one-to-one acreage replacement will be reasonable.

If available, other USACE approved methods, such as a hydro-geomorphic methodology, for assessing functions may also be used to identify functional replacement and applied at new Sites as approved by USACE within the Site Development Plan.

The amount of credit must meet or exceed the amount of debit based on Section 404 permit requirements. Compensation ratios will be determined by USACE during the Section 404 permitting process. If debiting ratio rationale should change based on new USACE policy or procedure, this Agreement would be updated accordingly

USACE will have final approval of the withdrawal of credits for individual projects (if tied to a Section 404 authorization).

4.8.2 Stream Compensatory Mitigation

Compensation ratios for stream compensatory mitigation are established through Omaha District 2012 Nebraska Stream Condition Assessment Procedure (Interim) and associated policy document (dated April 1, 2013) or another USACE approved stream assessment methodology.

4.9 Conditions with Regard to Debiting

During the Section 404 permitting process, USACE will determine whether Site credits may be used to offset unavoidable impacts from a given construction project, as discussed in Section 4.3, Projects Eligible to Use the Agreement.

USACE has sole authority to determine the number of credits available for withdrawal from each Site. NDOR will establish and maintain a ledger of all available credits and all debited credits (see Section 5.4, Accounting Procedures). NDOR will provide Site ledgers to USACE annually (by January 1 of each year). Prior to a request for debit from a Site, NDOR must provide an updated ledger containing a list of all transactions. Debiting will occur only after submittal of all appropriate documentation by NDOR and subsequent approval by USACE in consultation with the IRT (as appropriate). USACE will maintain the official site ledger in RIBITS.

4.10 Provisions for Uses of the Mitigation Bank Sites

NDOR shall allow use of the Sites as follows:

- NDOR shall use or authorize each Site only for purposes specified in the Site Development Plan.
- NDOR may develop restrictive use conditions for a Site as part of the real estate protection instrument that may provide for a variety of public or private beneficial uses. Such restrictive use conditions shall not be to the detriment to any resource contributing to the development or sustainability of credits developed for a Site. Restrictive use conditions developed subsequent to the approval of the Site Development Plan would require the written consent of USACE in consultation with the IRT (as appropriate). NDOR shall not use or authorize a Site for any purpose that interferes with its conservation purposes.

5.0 MAINTENANCE AND MONITORING OF THE MITIGATION BANK SITES

5.1 Maintenance Provisions

NDOR will perform all necessary work to maintain each Site in a manner consistent with the maintenance criteria established in each Site Development Plan. The plans may include provisions for particular maintenance activities, such as removal of invasive species and prescribed burning. Upon closure of the Site, NDOR shall identify the long-term maintenance requirements in the Mitigation Bank Site Closure Plan. This plan is discussed further in Section 5.6, Long-Term Management.

Deviation from maintenance provisions as identified in an approved Site Development Plan is subject to review and written approval from USACE with input from the IRT (as appropriate). The procedure for modifying a Site Development Plan, if necessary, is as follows:

- NDOR, on its own initiative or at the request of the USACE will submit a modification to an approved Site Development Plan. The request will include a justification and a revised Site Development Plan.
- USACE, with input from the IRT (as appropriate), will decide whether to approve the modification.

5.2 Monitoring Provisions

A general monitoring and reporting protocol and subsequent monitoring plan will be established for each Site. Current USACE guidance and methodologies will be used. NDOR will perform all necessary work to monitor the Sites to demonstrate the performance standards established in this Agreement and detailed in each Site Development Plan are met.

Monitoring will begin during the first growing season after construction is complete and the approved planting plan has been implemented. Monitoring of each Site shall occur for a period of no less than 5 years for emergent wetland or riverine systems and stream mitigation projects and 10 years for forested wetland or riverine systems. The last 3 years should be without intervention in the form of removing undesirable vegetation or replanting desirable vegetation. The monitoring results will be provided to USACE on an annual basis during the monitoring period. Monitoring shall continue until USACE, in consultation with the IRT (as appropriate), is confident that the performance standards are being met and/or a trajectory indicates the site is progressing without further manipulation from the NDOR.

Monitoring plans will provide information required for USACE to determine how the bank site is progressing towards meeting its performance standards. Monitoring reports will include as-built plans (as submitted per Section 3.6), maps and photographs to illustrate bank site conditions. Reports can also include any functional assessment or other assessment used to provide measure of functions of the bank site.

5.3 Monitoring Reports

NDOR shall submit to USACE (acting Chair) annual monitoring reports describing the conditions of each Site and comparing those conditions to the performance standards (that is, determining the attainment of prescribed performance standards). USACE will provide to the IRT for review (as appropriate), The monitoring reports will follow the guidance outlined in RGL 08-03, Minimum Monitoring Requirements for Compensatory Mitigation Projects Involving the Creation, Restoration, and/or Enhancement of Aquatic Resources (USACE, October 10, 2008). Information included in the reports will contain sufficient information for the district engineer to determine how the bank site is progressing towards meeting the performance standards set forth in the site monitoring plan. The reports will include information such as the following:

- A project overview that includes the purpose and description of the Site and summary of the performance standards for the Site
- A narrative providing an overview of Site conditions and functions
- A U.S. Geological Survey map showing the location of the Site
- Results surveys as identified in the Site Development Plan (vegetation, soils, and hydrology)
- Appropriate mapping showing such information as the location of sampling plots, permanent photo points, and transects
- An evaluation as to whether the Site is achieving the performance standards
- Photo documentation for Site assessment

- A summary of available credits at the Site
- A ledger indicating credits and debits that have occurred at the Site
- A conclusion that summarizes the site conditions, success in meeting performance standards, and potential remedial actions with associated timetable for implementation

Because the information needed by the IRT will differ by site, restoration method, and technique, each Site Development Plan will specify the information to be included in the monitoring report for each Site. For additional information, see Appendix A, Typical Site Development Plan.

5.4 Accounting Procedures

NDOR shall use an accounting procedure to document the activity of all Site accounts. A ledger for recording credit and debit transactions will be developed for each Site. Each ledger will contain the following information:

- Name and permit number of the projects using compensatory mitigation from the Site (including program for which the credits are being applied)
- Number of mitigation acres withdrawn for each transaction
- Transaction dates
- Number of mitigation acres remaining at the Site
- Total number of wetland acres used at the Site as of the date of each transaction

Each time an approved credit or debit transaction occurs, NDOR will submit an updated ledger (new transactions shall be distinguished by use of font, color or other method) to USACE. For each Site account, NDOR will generate an annual ledger report by January 1 of each year, which will be submitted to the Chair for distribution to the IRT (as appropriate). A flow chart that describes the procedure and a sample ledger are provided in Appendix C, Crediting and Debiting Procedure for the Bank. USACE will maintain the official Site ledger in RIBITS.

5.5 Contingency Plans and Remedial Actions

For each Site, the Site Development Plan shall include general contingency plans in the event that remediation should become necessary. The need for remediation will be determined by USACE in consultation with the other members of the IRT (as appropriate) and with NDOR.

In the event that a Site fails to achieve the performance standards, NDOR shall develop plans for appropriate remedial actions and shall implement the plans and submit them to USACE, in coordination with the IRT (as appropriate), prior to implementation. The remedial actions will be based on information contained in the monitoring reports as well as on-site inspections by the IRT. NDOR will include information relative to the implementation and success of any remedial actions taken on a Site in the annual monitoring report for a Site.

If USACE determines that a Site has incurred a deficit as a result of pre-crediting, debiting of credits will immediately cease. NDOR will determine what remedial actions are necessary to correct the situation and submit them to USACE, in coordination with the IRT (as appropriate), prior to implementation. Upon USACE approval, NDOR will then undertake those corrective measures.

In the event that NDOR fails to implement necessary remedial actions within 30 calendar days after notification by USACE or another authorizing agency, or within an established time frame agreed upon by USACE, the IRT (acting through the Chair) will notify NDOR and the appropriate authorizing agency(ies), and will recommend appropriate remedial actions.

5.6 Long-Term Management

NDOR either will provide long-term management or will transfer long-term management responsibilities to another USACE approved entity. NDOR will provide USACE with a long-term management strategy. Regardless, the wetlands, streams, and/or other aquatic resources at the Site will be protected in perpetuity with the appropriate real estate arrangements. Such arrangements should effectively restrict harmful activities that might jeopardize the purpose of the Site.

Written documentation (letter format) of NDOR's financial resource commitments for long-term management will be provided to USACE as part of a Site Development Plan. NDOR would provide the necessary financial commitment documentation to USACE for long-term management by a third party should responsibilities for management for a Site be transferred (as defined in the Site Development Plan or at a later date). Any transfer of responsibilities to a third party shall be approved by USACE prior to transfer.

5.7 Mitigation Bank Site Closure Plan

Site closure will occur in two phases:

1. Closure of the crediting and debiting procedure – NDOR retains the right to close a Site at any time. At such time, NDOR will notify USACE and will finalize the accounting on the existing Site balance.
2. Closure of the Site – Once the mitigation credits at the Site have been exhausted, the operational life of the given Site will cease, with the exception of arrangements for long-term management.

NDOR will provide written notice to USACE when the operational life of each Site has ended.

After closure of a Site, NDOR either will provide long-term management or transfer long-term management responsibilities to another USACE approved entity, as discussed in Section 5.6, Long-Term Management.

6.0 RESPONSIBILITIES OF THE IRT

6.1 Oversight

The IRT will provide appropriate oversight in carrying out the provisions of this Agreement.

6.2 Review and Confirmation of Reports

USACE and IRT comments on all project plans, annual monitoring reports, credit review reports, contingency plans, and necessary permits for the Umbrella Bank will generally follow timelines outlined in the 2008 Final Rule. Timelines for the review of amendments and modifications to the Umbrella Banking Instrument and the Dispute Resolution process are described in the 2008 Final Rule. If the review period needs to be amended, USACE will inform NDOR.

USACE and IRT will also review and confirm site assessment reports prior to approving credits in the Umbrella Bank to determine whether Sites have achieved development milestones and

performance standards. For credits to be released, NDOR must submit documentation to USACE demonstrating that the appropriate milestones for credit release have been achieved and requesting release. USACE will provide copies of the documentation to the IRT members for review and the IRT must provide comments to USACE within 15 days, unless USACE deems a site visit is necessary, then within 15 days of the site visit. USACE would make a decision within 30 days of the end of the IRT comment period and notify NDOR and the IRT.

6.3 Compliance Inspections

The IRT will conduct inspections of the Sites as determined necessary by USACE in consultation with NDOR to verify credits available in the Sites and to recommend corrective measures, if any, until conditions of the individual Site Development Plans have been fully satisfied or until all the credits have been sold, whichever occurs later.

6.4 Auditing

The USACE will audit Site ledgers, as described in Section 5.4, Accounting Procedures, on an annual basis.

7.0 OTHER PROVISIONS

7.1 Force Majeure

NDOR will not be responsible for Site failures that are attributed to unexpected and disruptive forces that are beyond what would be considered as normal or natural disturbances. Typically, damages caused by floods, droughts, muskrat/geese, and storms are not considered disruptive forces but will be determined on a case-by-case basis by USACE with input from the IRT.

7.2 Dispute Resolution

Resolution of disputes concerning the application of this Agreement shall be in accordance with the Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (60 FR 58605–58614) and 33 CFR 332.8(e).

7.3 Validity, Modification, and Termination of the Banking Agreement

This Agreement will become valid on the date of the last signatory's signature. This Agreement may be amended or modified with the written approval of all signatory parties. Should USACE develop new guidance regarding mitigation banking in the future (for example, functional assessments), any Sites developed prior to the new guidance shall continue to be operated using the terms and conditions of the Agreement that was in place at the time the Sites were approved. In the event that NDOR decides to terminate the Agreement, NDOR will provide written documentation to USACE prior to such termination.

7.4 Controlling Language

To the extent that specific language in this document changes, modifies, or deletes terms and conditions contained in those documents that are incorporated into this Agreement by reference and that are not legally binding, the specific language in this Agreement shall be controlling.

8.0 REFERENCES

33 CFR 325. November 13, 1986. Processing of Department of the Army Permits.

33 CFR 328. November 13, 1986. Definition of Waters of the United States.

- 33 CFR 330. November 22, 1991. Nationwide Permit Program.
- 33 CFR 332. April 10, 2008. Compensatory Mitigation for Losses of Aquatic Resources.
- 40 CFR 230. Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material.
- 60 FR 58605–58614. November 28, 1995. Federal Guidance for the Establishment, Use and Operation of Mitigation Banks.
- 71 FR 15520–15556. March 28, 2006. Compensatory Mitigation for Losses of Aquatic Resources.
- 33 USC 403 et seq. Rivers and Harbors Act of 1899, Section 10.
- 33 USC 1344. Clean Water Act, Section 404.
- 33 CFR Parts 325 and 332 Compensatory Mitigation for Losses of Aquatic Resources: Final Rule April 10, 2008)
- Cowardin, Lewis M., Virginia Carter, and Edward T. LaRoe. December 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31. U.S. Department of the Interior, Washington D.C.
- Environmental Laboratory. January 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, Mississippi.
- NGPC. August 2005. The Nebraska Natural Legacy Project: A Comprehensive Wildlife Conservation Strategy.
- NGPC. October 2010. Wetland Program Plan for Nebraska. Ted LeGrange.
- USACE. February 8, 1990. Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency Concerning the Determination of Mitigation Under the Clean Water Act, Section 404(b)(1) Guidelines. Available at <http://www.usace.army.mil/CECW/Documents/cecwo/reg/mou/migrate.pdf>.
- USACE. October 10, 2008. RGL 08-03, Minimum Monitoring Requirements for Compensatory Mitigation Projects Involving the Creation, Restoration, and/or Enhancement of Aquatic Resources.
- USACE. January 27, 2014. HDR telephone correspondence with Matt Wray, Nebraska Regulatory Office.

9.0 UMBRELLA BANKING AGREEMENT SIGNATORY PAGES

Signatory Page – U.S. Army Corps of Engineers

This agreement, entered into by the Nebraska Department of Roads (NDOR) (Bank Sponsor) and the US Army Corps of Engineers (USACE), is for the purpose of establishing the NDOR Mitigation Umbrella Banking Agreement (Agreement). The Umbrella Bank will be used to mitigate for unavoidable wetland and stream impacts approved through USACE, who is responsible for administering Section 404 of the Clean Water Act. The creation, operation, and use of the Umbrella Bank will be in accordance with this Agreement.

The Interagency Review Team (IRT) that provided technical support to USACE includes the following agencies: EPA, NRCS, USFWS, NDEQ, FHWA, and NGPC. These agencies sign in support of the creation of this Agreement.

The objective of this Umbrella Banking Instrument is to establish guidelines and responsibilities for the establishment, operation, and maintenance of the Umbrella Bank. The Umbrella Bank will be used for compensatory mitigation for unavoidable adverse impacts on aquatic resources, including wetlands resulting from NDOR highway construction projects.

{Bank Sponsor}

Date Signed

Kathryn M. Schenk, Chief, Operations Division,
U.S. Army Corps of Engineers, Omaha District

Date Signed

Signatory Page – Interagency Review Team

This agreement, entered into by the Nebraska Department of Roads (NDOR) (Bank Sponsor) and the US Army Corps of Engineers (USACE), is for the purpose of establishing the NDOR Mitigation Umbrella Banking Agreement (Agreement). The Umbrella Bank will be used to mitigate for unavoidable wetland and stream impacts approved through USACE, who is responsible for administering Section 404 of the Clean Water Act. The creation, operation, and use of the Umbrella Bank will be in accordance with this Agreement.

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BY: _____ Date Signed: _____
U.S. Environmental Protection Agency, Region 7

BY: _____ Date Signed: _____
State Conservationist
Natural Resources Conservation Service

BY: _____ Date Signed: _____
U.S. Fish and Wildlife Service

BY: _____ Date Signed: _____
Federal Highway Administration

BY: _____ Date Signed: _____
Nebraska Department of Environmental Quality

BY: _____ Date Signed: _____
Nebraska Game and Parks Commission

APPENDIX A

Typical Site Development Plan

TYPICAL Site Development Plan

I. Project Information

A. PROJECT OVERVIEW AND OBJECTIVES

1. Project Location
2. Project Summary
3. Factors for Site Selection
3. Goals and Objectives (Habitat types and functions to be restored or enhanced)
4. Establishment and Operation
5. Site Protection Arrangements
6. Schedule and Milestones (Implementation timetable)
7. Financial Assurances
8. Real Estate Provisions

B. AUTHORITIES

C. BASELINE DESCRIPTION OF MITIGATION SITE (Narrative and mapping data)

1. Brief Summary of Proposed Site and Purpose
2. Project Description (If known)
 - a. Location
 - i. Legal
 - ii. Directions to site using road and highway names
 - iii. Relative geographic location within HUC watershed
 - iv. Surrounding land use
 - v. Proximity to existing wetlands and streams
 - vi. Maps (U.S. Geological Survey (USGS) 7.5 foot quadrangle, National Wetlands Inventory (NWI), aerial)
 - b. Impacted wetland acreages and/or stream linear feet
 - c. Delineation report
 - d. Section 106, Endangered Species Act, or other documentation
3. Mitigation Site Information
 - a. Assessment methods
 - b. Wetland classification (Cowardin et al., December 1979)
 - c. Stream assessment
4. Vegetation and Soil Data (Indicate baseline sampling transects/points on site map)
 - a. Vegetation data
 - i. Gross community characterization

- ii. Species list
 - iii. Relative abundance
 - b. Soil analysis (Type and profile)
- 5. Hydrology
 - a. Source
 - b. Surface water
- 6. Map and Photo Data
 - a. USGS 7.5 foot quadrangle map (Indicate site location and area of hydrologic influence)
 - b. Soil survey map
 - c. NWI map
 - d. City/County blue line aerial photographs and/or Farm Services Agency (FSA) photographs (Previous 5 years)
- 7. Site Map
 - a. Physical features
 - i. Current dimensions of aquatic resources as described by Cowardin classification system (Cowardin et al., December 1979).
 - ii. Topographic map
 - iii. Groundwater elevations
 - iv. Natural hydrologic features
 - v. Seasonal pool elevation
 - vi. Potential pollutant sources
 - b. Cultural features
 - i. Power lines
 - ii. Roads
 - iii. Fences, gates
 - iv. Houses, buildings
 - v. Drainage ditches, culverts, tile lines
- 8. Biological and Ecological Characteristics of Existing Property
 - a. Areas amenable to restoration, enhancement, or creation
 - b. Existing aquatic habitat description
 - c. Wildlife species using existing habitat
 - d. Existing upland buffers
 - e. Existing disturbances (Man-made or otherwise)

- f. Relation of existing wetlands and/or streams and/or riparian buffers to proposed mitigation

II. Wetland Mitigation Site Work Plan

A. SITE ANALYSIS

1. Conceptual Design
2. Post-Construction Restored Aquatic Resources (As described by Cowardin classification system)
3. Upland Buffer
4. Hydrologic Alterations
5. Seasonal Pool Elevations
6. Access Roads and Fencing
7. Adjacent Land Use

B. SITE CONSTRUCTION ACTIVITIES

1. Water Control Measures
2. Erosion Control Measures During and After Construction
3. Grading Plan
4. Plantings
5. Schedule

C. SITE MAINTENANCE

1. Vegetation Management Techniques
 - a. Restoration of failed plantings
 - b. Removal of non-target species (Exotics, pest species)
 - c. Grazing and mowing
 - d. Prescribed burning
2. Hydrologic Manipulation
 - a. Water control structures
 - b. Weirs
 - c. Spring seep maintenance

D. PERFORMANCE STANDARDS AND MONITORING REQUIREMENTS

1. Goals and Construction Phases
2. Short-term Objectives and Functions Desired
3. Long-term Objectives and Functions Desired
4. Assessment Methodology (Using best available methods)
5. Monitoring Requirements
 - a. Vegetation

- Permanent plots/transects (Reference to baseline sampling)
 - Species composition and vegetative cover
 - b. Soils (Permanent sampling points)
 - c. Hydrology
 - Seasonal pool elevations
 - Seasonal groundwater levels (Permanent piezometer sampling points)
 - Water quality
 - d. Monitoring Schedule
 - e. Photographs
 - f. Reporting Schedule
- E. ADAPTIVE MANAGEMENT, CONTINGENCY AND REMEDIAL ACTION PLAN
- F. LONG-TERM MANAGEMENT PROVISIONS
- G. CREDIT PRODUCTION
1. Assessment Methodology
 2. Schedule of Credit Production
 3. Ratio of Credits

III. Example Signatory Pages

Example of Mitigation Bank Site Signature Page - U.S. Army Corps of Engineers

(Specific bank name and information removed. Should be modified to fit individual bank needs)

This agreement, entered into by the Nebraska Department of Roads (NDOR) (Bank Sponsor); and the US Army Corps of Engineers (COE), is for the purpose of establishing the [*enter Bank Name*] Mitigation Bank (Bank). The Bank will be used to mitigate for unavoidable wetland and stream impacts approved through the COE, who is responsible for administering Section 404 of the Clean Water Act. The creation, operation, and use of the Bank will be in accordance with the NDOR Umbrella Banking Agreement (Agreement), Appendix 1 to this agreement.

The Interagency Review Team (IRT) that provided technical support to the Corps includes the following agencies: USACE, EPA, NRCS, USFWS, NDEQ, FHWA, and NGPC. These agencies sign in support (under separate cover) of the creation of this Mitigation Bank.

The objective of the Bank is to [*list type of compensation*] approximately [#] acre(s) and [#] linear feet of stream channel. The goal of the bank is to create [*Name Cowardin classification and function assessment description*]. Water regime modifiers are [*list modifiers*].

The primary geographical service area for this bank will encompass portions of [*list watershed*] and [*Hydrologic Unit(s) #*]. At the discretion of the COE, credits may be approved outside of the primary geographic service area.

Nebraska Department of Roads

Date Signed

Kathryn M. Schenk, Chief, Operations Division,
U.S. Army Corps of Engineers, Omaha District

Date Signed

Example of Mitigation Bank Signature Page – Interagency Review Team

(Specific bank name and information removed. Should be modified to fit individual bank needs)

This agreement, entered into by the Nebraska Department of Roads (NDOR) (Bank Sponsor); and the US Army Corps of Engineers (COE), is for the purpose of establishing the [*enter Bank Name*] Mitigation Bank (Bank). The Bank will be used to mitigate for unavoidable wetland and stream impacts approved through the COE, who is responsible for administering Section 404 of the Clean Water Act. The creation, operation, and use of the Bank will be in accordance with the Bank name Bank instrument, Appendix 1 to this agreement.

The Interagency Review Team (IRT) that provided technical support to the Corps includes the following agencies: USACE, EPA, NRCS, USFWS, NDEQ, FHWA, and NGPC. These agencies sign in support of the creation of this Mitigation Bank.

The objective of the Bank is to [*list type of compensation*] approximately [#] acre(s) and [#] linear feet of stream channel. The goal of the bank is to create [*Name Cowardin classification and function assessment description*]. Water regime modifiers are [*list modifiers*].

The primary geographical service area for this bank will encompass portions of [*list watershed(s)*] and [*Hydrologic Unit(s) #*]. At the discretion of the COE, credits may be approved outside of the primary geographic service area.

Director of Water, Wetlands, and Pesticides U.S. Environmental Protection Agency	Date	State Conservationist Natural Resources Conservation Service	Date
Regional Director U.S. Fish and Wildlife Service	Date	Director Nebraska Department of Environmental Quality	Date
Nebraska Division Administrator Federal Highway Administration	Date	Director Nebraska Game and Parks Commission	Date

APPENDIX B

Nebraska Wetland Subclass Descriptions

Appendix A- HGM Subclasses

HGM subclasses in Nebraska and their corresponding natural community.

Wetland Subclass ¹	Description	Predominate Region or complex ²	Natural Community Crosswalk ³
Riverine Channel	Vegetated river or stream channels or vegetated wetland fringe along unvegetated river or stream channels.	Statewide	Sandbar Willow Shrubland, Perennial Sandbar, Western Streamside Wet Meadow, Sandbar/Mudflat,
Riverine Floodplain Rapid Permeability, w/minimal out of bank flooding	Wetlands (wet meadows) situated on floodplain soils with rapid permeability and receiving minimal out of bank flooding.	Platte River	Eastern Riparian Forest, Western Riparian Woodland, Eastern Cottonwood-Dogwood Riparian Woodland, Eastern Cottonwood- Willow Riparian Woodland, Diamond Willow Woodland, Riparian Dogwood- False Indigobush Shrubland, Eastern Cordgrass Wet Prairie, Eastern Sedge Wet Meadow, Northern Sedge Wet Meadow, Northern Cordgrass Wet Meadow, Western Streamside Wet Meadow
Riverine Floodplain Rapid Permeability, w/regular out of bank flooding	Wetlands (wet meadows) situated on floodplain soils with rapid permeability and receiving regular out of bank flooding.	Elkhorn and Loup rivers	Eastern Riparian Forest, Western Riparian Woodland, Eastern Cottonwood-Dogwood Riparian Woodland, Eastern Cottonwood- Willow Riparian Woodland, Riparian Dogwood- False Indigobush Shrubland, Eastern Cordgrass Wet Prairie, Eastern Sedge Wet Meadow, Northern Sedge Wet Meadow, Northern Cordgrass Wet Meadow, Western Streamside Wet Meadow
Riverine Floodplain Moderate to Slow Permeability, w/minimal out of bank flooding	Wetlands situated on floodplain soils with moderate to slow permeability and receiving minimal out of bank flooding.	Missouri River, from Sioux City to Omaha	Eastern Riparian Forest, Western Riparian Woodland, Eastern Cottonwood-Dogwood Riparian Woodland, Eastern Cottonwood- Willow Riparian Woodland, Riparian Dogwood- False Indigobush Shrubland, Eastern Cordgrass Wet Prairie, Eastern Sedge Wet Meadow, Northern Cordgrass Wet Meadow, Western Streamside Wet Meadow

Riverine Floodplain Moderate to Slow Permeability, w/regular out of bank flooding	Wetlands situated on floodplain soils with moderate to slow permeability and receiving regular out of bank flooding.	Missouri River, downstream from Plattsmouth	Eastern Riparian Forest, Western Riparian Woodland, Eastern Cottonwood-Dogwood Riparian Woodland, Eastern Cottonwood- Willow Riparian Woodland, Riparian Dogwood-False Indigobush Shrubland, Eastern Cordgrass Wet Prairie, Eastern Sedge Wet Meadow, Northern Cordgrass Wet Meadow
Saline Depressions	Wetlands situated on floodplain soils with slow permeability and receiving inputs of saline groundwater	Eastern Saline Wetlands	Eastern Saline Marsh, Eastern Saline Meadow
Playa Depressions	Wetlands situated in wind-formed depressions that receive water predominately from surface runoff. They are episaturated with short or long duration ponding.	Rainwater Basins, Southwest Playas, Central Table Playas, Todd Valley	Pond Marsh, Playa Wetland, Wheatgrass Playa Wetland
Floodplain Depressions	Wetlands situated in floodplain depressions with long duration ponding, such as oxbows.	Statewide	Pondweed Aquatic Wetland
Sandhill Depressions, episaturated	Wetlands situated in Sandhill depressions located on episaturated soils (e.g., sand over clay).	Sandhills and Sandhill Borders	Sandhills Aquatic Wetland, Sandhills Freshwater Marsh

Sandhill Depressions, endosaturated	Wetlands situated in Sandhill depressions located on endosaturated soils. This would include most Sandhill marshes.	Sandhills	Sandhills Aquatic Wetland, Sandhills Freshwater Marsh
Western Alkaline Floodplain Depressions	Wetlands situated on fine textured alkaline floodplain soils.	North Platte River valley	Western Alkaline Marsh, Western Alkaline Meadow
Sandhill Alkaline Depressions	Wetlands situated on coarse textured alkaline Sandhill soils.	Western Sandhills	Western Alkaline Marsh
Mineral Soil Flats	Wetlands situated on flat endosaturated Sandhill mineral soils. This would include most Sandhill wet meadows	Sandhills	Northern Sedge Wet Meadow, Northern Cordgrass Wet Prairie
Organic Soil Flats	Wetlands situated on flat endosaturated Sandhill organic soils. These wetlands are termed fens.	Sandhills	Sandhills Fen, Marsh Seep
Slope Wetlands	Wetlands situated on slopes that receive water from springs and seeps discharging due to an aquatard (e.g., glacial till over clay).	Eastern third of state	Marsh Seep, Spring Seep, Prairie Fen

Slope Wetlands, Canyon Springs	Wetlands situated on slopes that receive water from springs and seeps discharging due to an aquatard (e.g., sand over bedrock).	Niobrara River valley	Marsh Seep, Spring Seep
Slope Wetlands, Sandhill Springs	Wetlands situated on slopes that receive water from Sandhill springs.	Sandhills	Marsh Seep, Spring Seep

¹ Subclass is based on hydro-geomorphic classification system, applied to Nebraska by Jasmer et al. 1997.

² There is the potential for many of these subclasses to be found throughout Nebraska.

³ From Rolfsmeier and Steinauer 2010.

APPENDIX C

Crediting and Debiting Procedures for the Bank

Crediting and Debiting Procedure for the Bank



