Municipal Separate Storm Sewer System (MS4)
Annual Report

January 1, 2013 – December 31, 2013

NDEQ Permit No: NE0134015

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March 27, 2014

Nebraska Department of Environmental Quality
Wastewater Section
1200 N Street, Ste. 400
PO Box 98922
Lincoln, NE 68509-8922

ATTN: Blayne Renner, Stormwater Program Coordinator

RE: Nebraska Department of Roads Municipal Stormwater Permit [NE0134015]

Dear Blayne:

Per Part IV.A of the Nebraska Department of Roads (NDOR) Municipal Stormwater Permit [NPDES Permit NE0134015], NDOR is submitting the attached Annual Report for Permit Year *One* (*January 1, 2013 – December 31, 2013*).

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Signed: _____ Date: 3/31/14

Printed Name: Ronald Poe Title: Highway Environmental Program Manager

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Executive Summary of Program Activity

The NDOR Storm Water Management Program (SWMP) was developed by the Nebraska Department of Roads (NDOR) in 2006 to comply with Municipal Separate Storm Sewer System (MS4) Permit application requirements. Compliance activities are summarized and recorded in routine reports to the Nebraska Department of Environmental Quality (NDEQ). This report documents MS4 Permit compliance efforts made during January 1, 2013 through December 31, 2013.

NDOR has completed the first year of the new Stormwater Management Program for the second MS4 Permit. The following highlights some of the major accomplishments made in each of the program areas throughout 2013:

Education/Outreach and Public Involvement Program

- ✓ Approximately 300 people attended erosion control training classes in 2013.
- ✓ NDOR's Live Erosion & Sediment Control Inspector Training & Certification Program underwent a substantial update to course content to more effectively address BMP selection, installation and maintenance.
- ✓ NDOR's Erosion & Sediment Control Inspector *ONLINE* Training & Certification Course was developed and will be ready in 2014. Registration for and completion of on-line courses will be available at http://ne-ltap.unl.edu/erosion-control
- ✓ NDOR developed the new "NDOR Stormwater Treatment in MS4 Communities" training course for designers. This course and materials introduced designers to the Chapter 3 of the Drainage Design and Erosion Control Manual.
- ✓ Stormwater Treatment Design classes were provided 3 times throughout 2013 with approximately 75 people attending.

Illicit Discharge Detection and Elimination Program

- ✓ Dry weather monitoring was completed for all "High Priority Outfalls" according to the IDDE Plan. Approximately 60 new outfall points were mapped in the Omaha Metro Area during 2013.

- ✓ IDDE monitoring efforts are now recorded electronically. A geodatabase containing all outfall points mapped by NDOR is housed and maintained internally. This geodatabase can be loaded onto GPS units and used to monitor previously mapped outfall points. Electronic data collection allows RSU to greatly decrease the amount of paperwork and time associated with monitoring efforts. Information to help inspectors identify each outfall point is included in the geodatabase and available through the GPS unit in the field.

- ✓ NDOR updated MS4 boundary maps in 2013 to be consistent with current census-available data. The expanded MS4 areas will require additional outfall mapping to occur in the current permit cycle. NDOR initiated mapping efforts for the Omaha Metro Area in 2013 and will continue to map new outfalls in 2014 for other MS4 areas where applicable.

Construction Stormwater Program

- ✓ NDOR created and initiated a new project environmental review process within the Central Office. This new process requires staff from four Environmental Units to log into the ECODatabase system and enable inspection questions related to project-specific environmental commitments. This is done prior to construction when the project Green Sheet Review Process is completed for each project. The Roadside Stabilization Unit then enables project inspections for the project that will document each commitment is being completed during the project. All inspections are recorded and tracked in the ECODatabase system. Compliance summary reports are available to query inspection data into reports that gauge environmental compliance and performance for projects across the state.
- ✓ In addition to new procedural changes being made within the Environmental Division, NDOR as an Agency has established 8 Strategic Goals in 2013 to address the Mission of the Department of Roads. One of the Goals was determined to be "Environmental Stewardship." This specific goal is measured by documenting and tracking completion of environmental commitments on NDOR projects. The ECODatabase system is being used to complete the documentation and tracking. NDOR has established a performance measure of 100% completion of environmental commitments, 100% completiong of anticipated inspections, and 100% completion of identified corrective actions on NDOR projects.
- ✓ NDOR has established a three tiered inspection approach for documenting inspections in ECODatabase. The first tier consists of project level inspections (Routine Environmental Inspections) that are conducted at least once every 14 days. These inspections allow NDOR to satisfy the NPDES Construction Stormwater Permit requirements for content and frequency of site inspections. The second tier of inspections (Environmental Compliance Oversight Inspections) is conducted by District Environmental Coordinators or third party consultants, on a monthly or less frequent basis. Finally the third tier inspections are the Environmental Compliance Audits that are conducted by Headquarters Staff. The second and third tier of inspections are used by NDOR to improve the effectiveness of routine site inspections and provide compliance assistance where needed to satisfy the NPDES MS4 permit requirements.
- ✓ All corrective actions identified during field inspections are recorded with a resolution date, method, and responsible person.

Post Construction Stormwater Program

- ✓ Two new design guides, forebays and principal spillways, were developed for incorporation into Drainage Design and Erosion Control Manual Chapter 3.
- ✓ Standard plans for Stormwater Treatment BMPs were developed that coincide with the Stormwater Treatment BMP Guides. Standard plans will undergo final reviews in 2014.
- ✓ NDOR updated the MS4 boundaries used to determine where Stormwater Treatment Practices may be required. The definition of MS4 boundary is included in the Chapter and maps are maintained with current boundary information for use during the Design Process.
- ✓ NDOR began discussing stormwater treatment policy alternatives. Alternatives may be necessary to address requirements to provide stormwater treatment in instances when treatment within the Treatment Drainage Area at the time of construction is not considered feasible. Options being considered include treatment offsets, post project treatment BMP construction, and in-lieu fees.

Pollution Prevention and Good Housekeeping Program

- ✓ A total of 10 facility audits were performed across NDOR Districts 0, 2 & 5 in 2013. NDOR maintenance facilities are located in the Lincoln, Omaha region and a Yard in western Nebraska. The Yards include Lincoln "Hill" campus (with 6 sub areas), Plattsmouth, Blair, Fremont, Elkhorn, Omaha 108th St, Omaha S 25th St, Mormon Bridge, Melia Hill and Gering. This is the second round of audits for the facilities located in these areas.
- ✓ A business process for addressing stormwater corrective actions that require long-term planning or significant capital inputs is in the process of being developed.
- ✓ NDOR Highway Spill Protocol continues to be refined. A working draft has been released and will be finalized in 2014. Many specific components have already been implemented including updates to the Maintenance Manual to serve as a resource to policy implementation. "Green cards" are now included in all glove compartment boxes of NDOR vehicles.
- ✓ The ECODatabase is being expanded to cover other areas of stormwater pollution management such as oil pollution prevention & general environmental program administration.

Figure 1 NDOR State-wide MS4 Areas

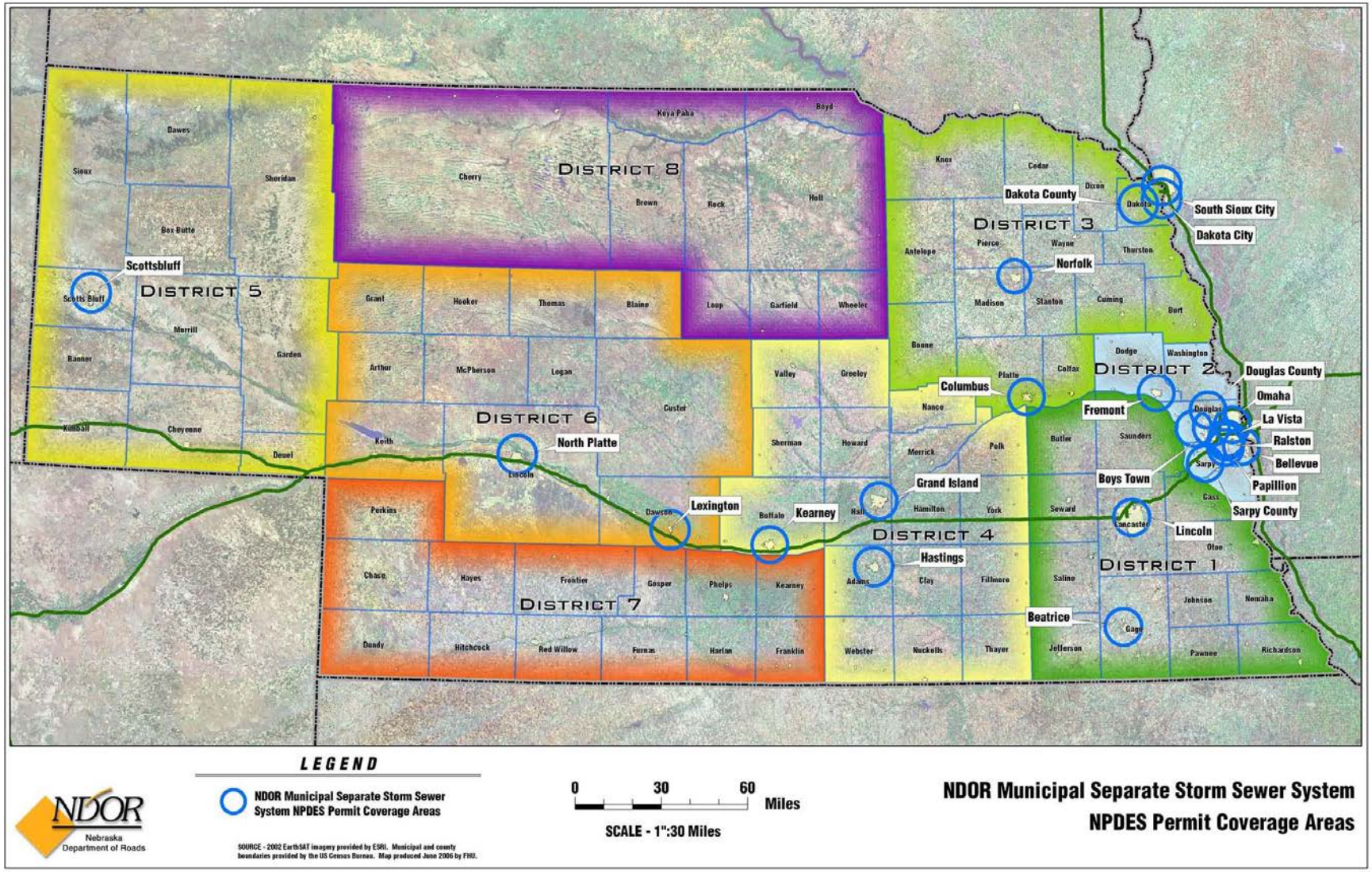
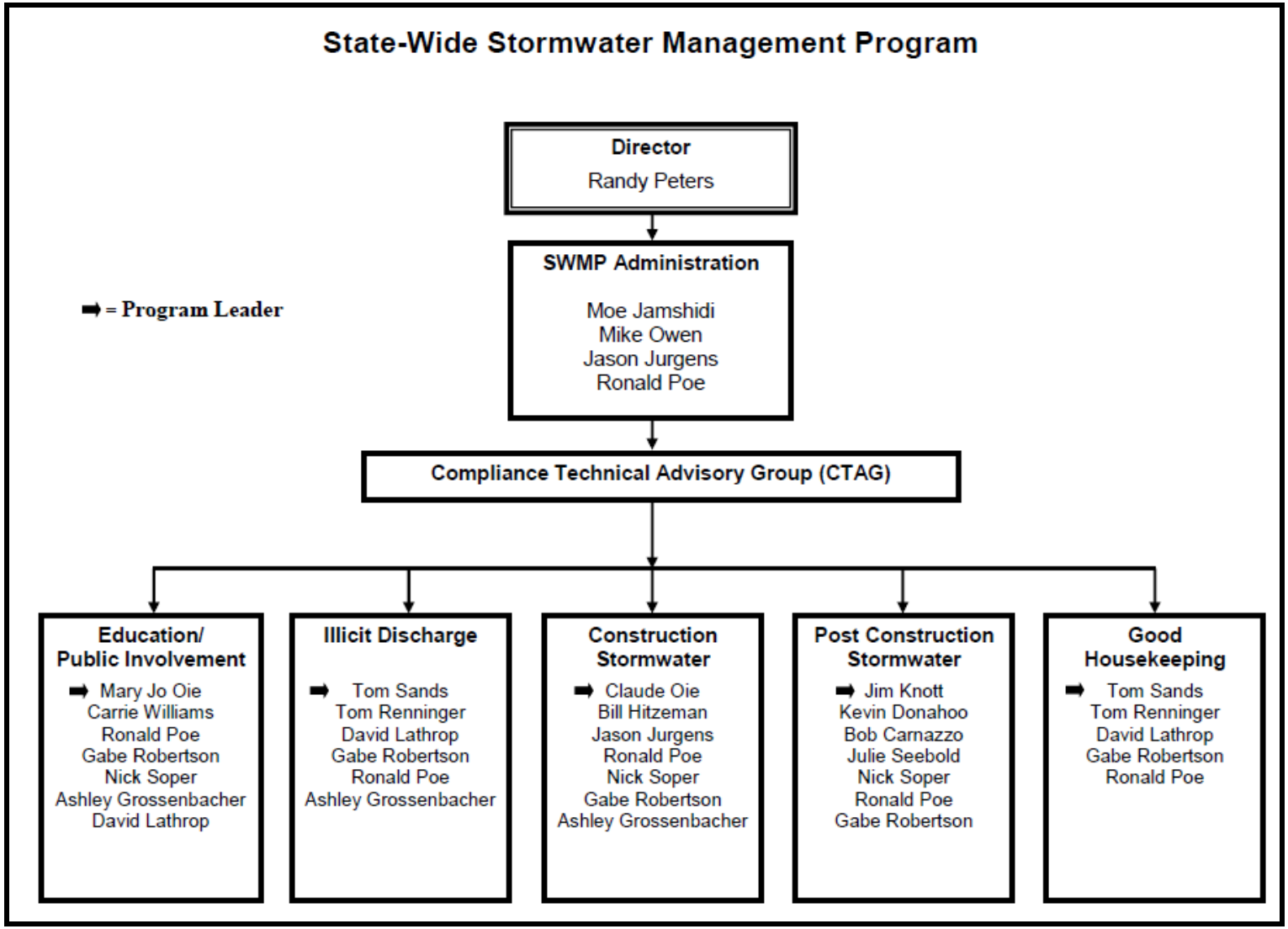


Figure 2 NDOR COMPLIANCE TECHNICAL ADVISORY GROUP



1.0 & 2.0 PUBLIC EDUCATION AND OUTREACH

The 2013 measurable goals for Public Education and Outreach are summarized below.

BMP 1: Stormwater Education Materials

- **Measurable Goal 1** - Maintain Stormwater Education Materials as one aspect of the current and accurate PEO Strategy with SWMP

  - ✓ The NDOR PEO Strategy lists all materials NDOR maintains to address direct and indirect stormwater education.
  - ✓ Construction Stormwater BMP Fact Sheets along and BMP Pocket Guides were included as handouts in Erosion Control Training Classes.
  - ✓ The NDOR Drainage Design and Erosion Control Manual - Chapter 3 and associated Stormwater Treatment Design Guides were included as handouts for post construction stormwater training classes. These documents are also available on the NDOR website.

- **Measurable Goal 2** - Coordinate resources needed to develop stormwater quality education materials

  - ✓ NDOR evaluated the stormwater content presented on their web pages and began working toward an update of the entire Environmental Section website. Opportunities to improve the layout and content provided on the website were discussed and are planned to be made in 2014.
  - ✓ Individual Construction Stormwater BMP Fact Sheets for Erosion Control (7), Sediment Control (13), and Good Housekeeping (6) were created to improve communication of key learning objectives for BMP selection, installation, and maintenance needs.
  - ✓ Two additional Stormwater Treatment Design Guides were created for principal spillways and forebays and were incorporated into the NDOR Drainage Design and Erosion Control Manual (Chapter 3).
  - ✓ Standard plans for Stormwater Treatment BMPs were drafted to coincide with the Post Construction Stormwater Treatment BMP Guides. Additional review and development will occur in 2014.
  - ✓ Significant updates were made to the Erosion Control Inspector Certification and Recertification Course.
  - ✓ A stormwater treatment design course was developed and implemented to introduce designers to Chapter 3 of the Drainage Design and Erosion Control Manual.

- **Measurable Goal 3** - Distribute, track, and report stormwater quality education materials made available to the Target Audience

  - ✓ The NDOR Public Education and Outreach Strategy lists educational references such as manuals, policies, and standards that are required for completing work with NDOR. These core education materials are available to anyone working for or with NDOR. While not all of these materials can functionally be tracked, they are still required references for completion of all work for NDOR. The PEO Strategy will be updated in 2014 to clarify the current version and access location for each of these materials. When updates are made to core educational materials, the impacted primary target audience is notified. Updates this year included:

- The Nebraska design profession was notified via email on October 24, 2013 of the new MS4 Stormwater Treatment Practice requirements in the NDOR Drainage Design and Erosion Control Manual Chapter 3.
    - A link to download Drainage Design and Erosion Control Manual and the Design Guidance was provided on the NDOR website.
    - A training class was also developed and to introduce designers to the new requirements. The course titled, "NDOR Stormwater Treatment in MS4 Communities," is being coordinated the Nebraska LTAP with assistance from FHU Consulting. This course is required for NDOR designers and is optional to non-NDOR designers.

✓ Presentation slides, NDOR Field BMP Pocket Guides (3,500 Distributed to date), BMP Fact sheets, NDOR environmental procedures, permit information, temporary erosion control plan requirements, final stabilization references, associated environmental commitments, and example tracking forms were distributed to each attendee of the Erosion Control Inspector Certification course listed in Appendix B.

✓ Presentation slides, Drainage Design and Erosion Control Manual Chapter 3, Stormwater Treatment Design Guides, example problem sets and tracking forms were distributed to each attendee of the Stormwater Treatment Design Training course listed in Appendix B.

✓ "Discover Nebraska's Roadside Flowers and Grasses" brochures were provided to rest area informational kiosks for distribution to the public. In addition, brochures were provided to gardening groups, classroom teachers, and other groups upon request. Since its original printing of 10,000 copies, a second printing has been largely distributed as well. The brochure has been updated in 2013 and is being reprinted in 2014.

BMP 2: Stormwater Training and Events

- **Measurable Goal 1 -** Maintain Stormwater Training and Events as one aspect of the current and accurate PEO Strategy

✓ Upon completion of the live Erosion Control Inspector certification course, attendees are required to pass an exam and beginning in 2014 will be certified to inspect NDOR projects for 5 years, instead of 3 years.

✓ Erosion Control Inspector Interim Certification is now available only to individuals that have not received certification from NDOR previously for stormwater inspections. Training will be provided through an on-line set of modules to allow individuals meet minimum qualifications to inspect NDOR projects until a certification course can be attended. The Interim certification will be valid for 6-months and is not renewable. Attendance at a live training session and a passing exam score will be required to receive full certification.

✓ Erosion Control Inspector Recertification will now be made available through on-line training modules and certified inspectors will be notified by email (using current email account on file) of their requirement to renew. Inspectors will be notified at least three months prior to certification expiring. Inspectors will also be notified when their certification has expired. If the certification expires, the individual will be required to attend the live certification course and cannot use the on-line recertification option.

✓ Introduction and training for the new Stormwater Treatment Design requirements and standards are now necessary. Attendance and participation is expected, but certification is not required for this training. Training is to be provided as an interactive session to all NDOR design staff, consultants and municipal design engineers responsible for designing roadway stormwater management practices.

- ✓ NDOR now receives feedback from attendees of the new Stormwater Treatment Design Training course. Feedback is directed to the Hydraulics Unit of NDOR to direct improvements that could be made to the content, delivery and setting of the training course.

- **Measurable Goal 2** - Coordinate resources needed to develop Stormwater Training and facilitate Event opportunities

  - ✓ NDOR's Live Erosion & Sediment Control Inspector Training & Certification Program underwent substantial update of content to support learning objectives.
    - Fact sheets were created which better coordinate with PowerPoint presentations so information flows to the audience and allow it to be portable for long-term access and reinforcement/reference.
    - Multiple instructors were equipped to deliver various modules so classes would be more readily available.
    - Presentation materials were updated to improve visual content, reflect current practices and standards, and focus on case studies from Nebraska projects.
    - Presentation materials were updated to improve learning objectives for BMPs selection, installation, and maintenance.
    - The six Erosion Control Inspector Certification presentations were condensed to five by consolidating repetitive content. Portions of these presentations are also used also for the Erosion Control Inspector Recertification classes.
    - Learning objectives related to understanding water quality regulations, BMPs, and documentation requirements remained unchanged, but content was improved to better accomplish those objectives.
  - ✓ NDOR's Erosion & Sediment Control Inspector Training & Certification Program on-line options were developed and will be made available in 2014.
    - A 2-hour Interim Certification (3 modules) option and a 6-hour Re-Certification (6 modules) option were recorded.
    - The on-line training format facilitated by LTAP allows users to create an account, register for course content, listen to recorded modules that are incorporated with slides used during the live certification courses, and complete quiz questions that evaluate a minimum level of qualifications for being a certified stormwater inspector for NDOR projects.
    - Registration for and completion of on-line courses will be available at http://ne-ltap.unl.edu/erosion-control
  - ✓ NDOR prepared an interactive Drainage Design and Erosion Control Manual Chapter 3 and Stormwater Treatment BMP Training presentation including a program overview, introduction to stormwater treatment practices, sample problem design, and discussion of additional design considerations.
  - ✓ NDOR coordinated assistance from LTAP to facilitate registration and attendee evaluation of Erosion Control Inspector and Stormwater Treatment Design training sessions. Evaluations were provided to all stormwater training attendees to measure training & program effectiveness. Feedback from evaluations helps refine and enhance training content and delivery.
  - ✓ NDOR coordinated assistance from Felsburg Holt & Ullevig to help develop and deliver live Erosion Control Inspector Certification and Recertification courses as well as Stormwater Treatment Design classes.

- **Measurable Goal 3** - Promote, sponsor, (co)host, track, and report Stormwater Training and Event opportunities provided to the Target Audience

  - ✓ Live training for Erosion Control Certification and Recertification was provided throughout the year and is summarized in Appendix B.
    - Approximately 300 attendees received erosion control training through NDOR's program in 2013. All training opportunities are available on the Nebraska LTAP website.

  - ✓ Three (3) training courses regarding NDOR's new Chapter 3 - Stormwater Treatment within MS4 Communities, was presented.
    - Target Audience 1st Session – August 29th - Interstate and Expressway Group and Consultant Coordinators – Estimated 20 attendees
    - Target Audience 2nd Session – October 17th - Roadway Design Group – Estimated 17 attendees
    - Target Audience 3rd Session – December 18th - Roadway Design Group and Managers – Estimated 8 attendees
    - Additional courses will be offered in early 2014 and is available on the Nebraska LTAP, Erosion Control Training Page.
  - ✓ NDOR Stormwater Program Staff provided program-related presentations at the following State and Regional events:
    - Iowa Roadside Vegetation Conference, Storm Lake, Iowa, September 19-20, 2013
    - IECA Great Rivers Annual Conference, Kansas City, MO, October 28, 2013
  - ✓ NDOR Presented to approximately 30 consultants and municipalities about Drainage Design and Erosion Control Manual Chapter 3 at the Annual Post-Construction Stormwater Conference http://water.unl.edu/propertydesign/postconstructionworkshop on March 21, 2013.

BMP 3: Public Review and Comment

- **Measurable Goal 1** - Maintain Public Review and Comment as one aspect of the current and accurate PEO Strategy

  - ✓ No changes were made to the Public Review and Comment approach to the Public Education and Outreach Strategy in 2013.

- **Measurable Goal 2** - Coordinate resources needed to facilitate review and comment by the Target Audience

  - ✓ Public participation opportunities for all projects were posted on the NDOR website and in locally relevant news paper publications.
  - ✓ Meeting schedules, agendas, and summaries were distributed for Quarterly CTAG meetings, District Environmental Coordinator Meetings, and Directors and Agency Update.

- **Measurable Goal 3** - Promote, facilitate, track, and report Target Audience review opportunities

  - ✓ Each project let in 2013 achieved the NDOR Public Participation Policy standards.
  - ✓ An update was provided April 16, 2014 to NDOR Directors and Resource Agencies.
    - Feedback from NDOR Directors during this meeting created discussion about and resulted in the transition to a 5-year Erosion Control Inspector certification period.
  - ✓ Quarterly CTAG meetings were held throughout 2013. Meeting dates are summarized in Appendix B.
    - Each meeting included a summary of activity completed by MCM task groups. Feedback provided during these sessions was a key component of directing the efforts of Construction and Post Construction task groups throughout the year.
  - ✓ District Environmental Coordinator Meetings were held throughout the year and are also summarized in Appendix B. These meetings address a variety of environmental topics and provide a chance for District and Central staff to communicate on project environmental issues.

BMP 4: Public Input Resources

- **Measurable Goal 1** - Maintain Public Input Resources as one aspect of the current and accurate PEO Strategy

  - ✓ No changes were made to the Public Input Resources approach to the Public Education and Outreach Strategy in 2013.

- **Measurable Goal 2** - Coordinate resources needed to host public input resources (hotline, website, DIRK, ECODatabase, etc.)

  - ✓ NDOR Roadside Stabilization Unit, Design Division and Maintenance Division environmental staff members take phone and email communication from the primary target audience throughout the day. A general NDOR phone number is available and switchboard operators transfer stormwater related questions to appropriate staff members. Agencies, Designers, Inspectors, Contractors and other NDOR staff utilize the expertise and availability of these technical staff members to address timely questions related to stormwater management.
  - ✓ The NDOR website provides anyone with internet access the ability to submit questions, comments, or suggestions to the Agency. Notifications to the agency that are related to stormwater management are forwarded from the Communications Division to the Roadside Stabilization Unit to address.

- **Measurable Goal 3** - Promote, facilitate, track, and report public input provided to the MS4

  - ✓ NDOR staff members do not track the number of phone calls and emails (including emails forwarded from the NDOR website administrator) that are handled each year.
  - ✓ Number of relevant DIRK records

Public Education and Outreach Activities Scheduled for 2014 & 2015

- ✓ Update Environmental Section Website
- ✓ Complete updates to PEO Strategy
- ✓ Develop ECODatabase User Guides
- ✓ Initiate Updates to the NDOR Field BMP Pocket Guide
- ✓ Initiate Review of Chapter 2 in Drainage Design and Erosion Control Manual
- ✓ Initiate discussion on training program for Operations Division
- ✓ Implement new Section 800 (Seeding and Erosion Control) Specifications
- ✓ Update the SWPPP designer training course
- ✓ Rollout the new Online Erosion Control Training Course
- ✓ Continue offering Erosion Control and Stormwater Treatment training courses as needed

3.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The 2013 measurable goals for Illicit Discharge Detection and Elimination are summarized below.

BMP 1: Dry Weather Inspections

- **Measurable Goal 1** - Update IDDE Plan with inspection priorities, reporting forms, contact info.

  - ✓ IDDE monitoring efforts are now done electronically. A geodatabase containing all outfall points mapped by NDOR is housed and maintained internally. This geodatabase can be loaded onto GPS units and used to monitor previously mapped outfall points. Electronic monitoring allows RSU to greatly decrease the amount of paperwork and time associated with monitoring efforts. Information to help inspectors identify each outfall point is included in the geodatabase and available through the GPS unit in the field. Informational fields include;
    - Outfall Point ID Number
    - Highway Number
    - Reference Post Location
    - Priority
    - Illicit Discharge Previously Reported
    - Receiving Water
    - Watershed
    - Monitoring Frequency
    - Date Last Monitored
    - Date Initially Mapped
    - MS4 City
    - Photos
  - ✓ How-To/guidance documents for the new electronic monitoring procedures have been developed for
    - Updating fields in the geodatabase
    - Importing information into the GPS

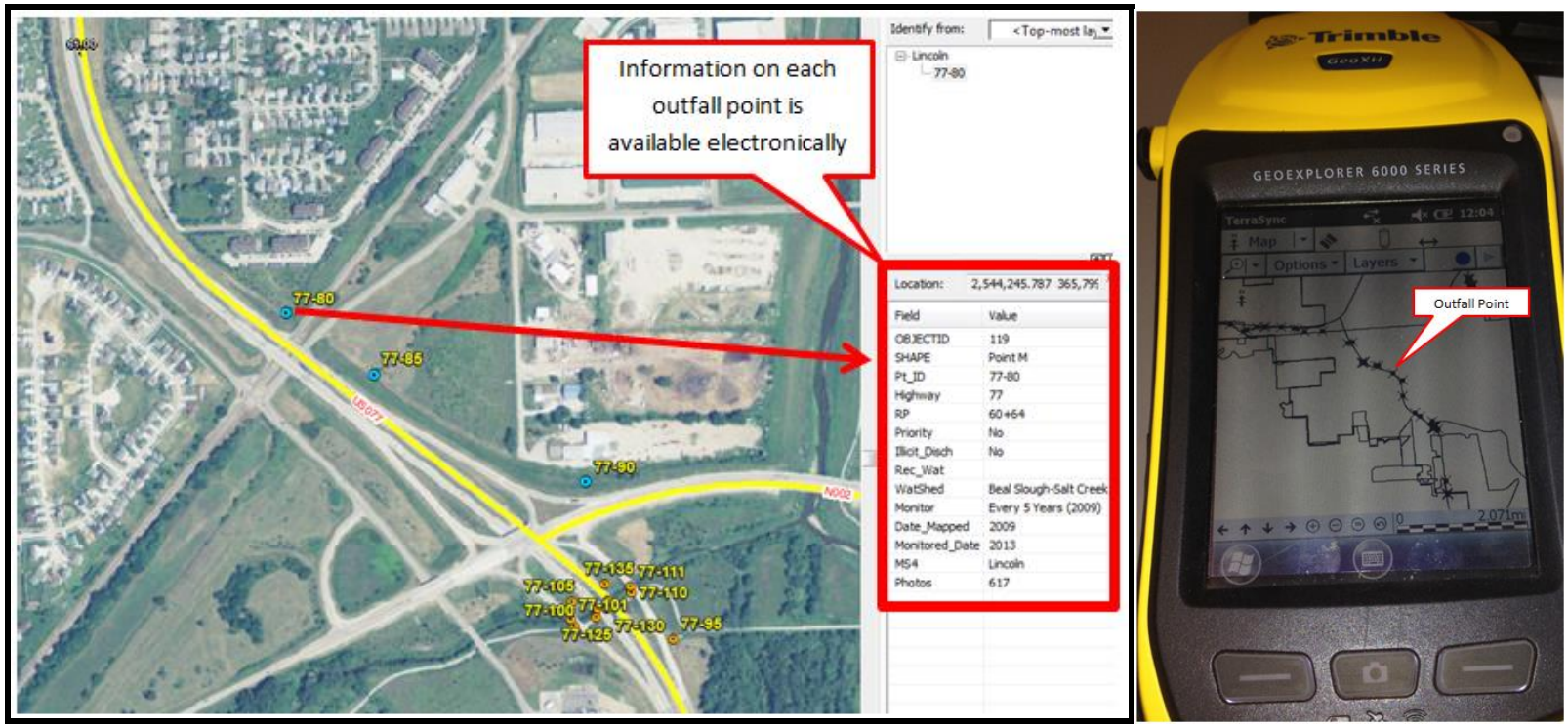
- **Measurable Goal 2** - Follow dry weather field screening procedures

  - ✓ All existing priority outfall points were field monitored using GPS units as described above.
  - ✓ RSU identified field mapping and monitoring procedures that will need updated in 2014 from existing resources.

- **Measurable Goal 3** - Record incident and inspection dates, results, and observations in a database.

  - ✓ Outfall Geodatabase was updated for all monitored outfall points.
  - ✓ Newly mapped outfall points and associated informational fields were added to the geodatabase.

The following picture shows how outfall points are displayed in the GIS system and on the GPS unit. Information collected in the field using the GPS unit can be uploaded seamlessly to the GIS database for tracking.



BMP 2: Discharge Investigation and Removal

- **Measurable Goal 1** - Update IDDE Plan with policies, permits, and procedures for investigating discharges and the Enforcement Response Plan for causing removal of discharges

  - ✓ IDDE Plan is currently under review and will need to be updated in 2014. A new Spill Protocol is being developed by NDOR to better supplement the IDDE Plan.
  - ✓ Enhancements are being considered for NDOR's DIRK to more effectively capture/record/track illicit discharges occurring on NDOR right of way. As these new programs develop, the IDDE plan will be updated to reflect the new policies and procedures.

- **Measurable Goal 2** - Maintain current and accurate statutes, policies, permits, procedures, Environmental Response Plan (ERP) and written investigation protocol

  - ✓ Current and accurate statutes and permits are being maintained. Policies and procedures for IDDE are currently under review and will be updated in 2014/2015.

- **Measurable Goal 3** - Follow investigation and enforcement procedures and record details required by the IDDE Plan in a database.

  - ✓ NDOR is following the current IDDE Plan and is recording details in a GIS database.

BMP 3: Storm Sewer System Mapping

- **Measurable Goal 1** - Coordinate resources needed to complete mapping of all existing stormwater outfalls.

  - ✓ NDOR developed new MS4 boundary maps in 2013.
  - ✓ The expanded MS4 areas will require additional outfall mapping to occur in the current permit cycle. NDOR initiated mapping efforts for the Omaha Metro Area in 2013 and will continue to map new outfalls in 2014 for other MS4 areas where applicable.
  - ✓ Approx. 60 new outfall points were mapped in the Omaha Metro Area during 2013.

- **Measurable Goal 2** - Develop and implement protocol to record all new development and redevelopment plans to include geographic reference for all outfall locations.

  - ✓ NDOR discussed this measurable goal in 2013 and will modify the project close-out inspection process in 2014 to include a check for outfall points. When a NDOR project is completed and later inspected to close the Construction Stormwater Permit, the existing outfall map for the project area will be cross referenced with the field conditions to ensure that everything is updated in the outfall database. If outfalls were eliminated or added during the project, this process will identify those points and records will be updated to reflect the field.

IDDE Inspections

Table 1 Summary of Illicit Discharge Detection and Elimination Inspections

Activity	Summary of Activity
Dry Weather Inspections	▸ Dry weather monitoring was completed for all "High Priority Outfalls" according to the IDDE Plan. One incident of illicit discharge (concrete dumping) was found during outfall monitoring activities in 2013. This particular incident was reported to the NDOR District Office and Central Staff followed up with an additional inspection one month later to look for any signs of additional concrete dumping in the area. It appeared that it was an isolated incident. ▸ NDOR is transitioning from Central Staff inspections of outfalls to District Monitored using the DIRK reporting system. Additional enhancements to the DIRK system are planned to potentially incorporate monitoring into that process.
2013 DIRK Spill Incident Breakdown	▸ After filtering and sorting 2013 spill data, thirty spill incidents were recorded in DIRK. Of those 30, 17 were corn mash spills and 3 manure spills. The remaining 10 spills were categorized as miscellaneous. ▸ The general impression is that DIRK incidents are underreported by a large margin across all categories including spills. ▸ Corn mash spill & manure spills are first a slippery road public hazard and second "spills". Unlike manure spills, many corn mash spills can be traced to an exact point of origin or a handful of likely points of origin with minimal investigation. The Highway Spill Protocol team is reviewing corn mash spills for follow up actions. ▸ Of the 30 spills, 8 spills were entered into DIRK for notification to Lathrop/Mattison. ▸ Of the 30 spills, 6 occurred in MS4 areas. Of the spills occurring in MS4 areas, DIRK notifications to Lathrop/Mattison were sent out for 3 of 6 spills. ▸ Of the 30 spills, 8 DR176 spill reports were received. Of the 8 spill reports received, 7 of them were for gluten spills. No DR 176 spill reports were received from spills inside MS4 areas. ▸ Of the 30 spills, no estimates on quantity released were provided. ▸ Of the 30 spills, 3 incidents were reported to have had environmental cleanup by contractors hired by Responsible Owners. Of the 3 clean ups, Operations assisted with one cleanup to ensure process was followed to meet all NDOR requirements. Initial DIRK notification to Lathrop/Mattison for the other 2 incidents that a clean-up company would be hired was provided. ▸ Of the 3 spills with environmental cleanup by contractors, none submitted a DR176 form. ▸ Of the objects & solid debris found on roadway or in ROW, none were described as deliberate dumping.

IDDE Activities Scheduled for 2014 and 2015

- ✓ Improve coordination of GIS data and recordkeeping for Annual Reporting
- ✓ Continue mapping new outfall points included in expanded MS4 areas.
- ✓ Outfall Monitoring
- ✓ Maintain current IDDE Plan
- ✓ Develop "Enforcement Response Plan" aka NDOR Spill Response Protocol
- ✓ Discuss enhancements to the DIRK reporting system more effectively include IDDE events.
    - Suggested Updates to DIRK Database and Work Practices
    - Train districts on when to log incidents into DIRK. http://www2.dor.state.ne.us/dirk/login.aspx
    - Strengthen automatic push notification for incidents with potential legal & environmental concerns.
    - Embed DR176 Hwy Spill Reporting form in DIRK similar to SPDs.
    - Document more specific information on objects & materials with potential to contaminate waters of State including quantities and whether hazardous. Embed data entry guidance on potentially water contaminating/hazardous conditions in DIRK.
    - Enable more than one type of categorization per incident. Remove unneeded categories. Add frequently described conditions.
    - Update DIRK map with new keyword filtering. Enable date ranges to filter data. http://drvmweb4/DIRK/
    - Document deliberate dumping.
    - Document gluten spills.
    - Potentially be able to run End of Year Reports

4.0 CONSTRUCTION SITE RUNOFF CONTROL

The 2013 measurable goals for Construction Site Runoff Controls are summarized below.

BMP 1: Construction Stormwater Pollution Prevention Plans

- **Measurable Goal 1** - Maintain Agency Standard Specifications that address construction stormwater BMPs.

  - ✓ The Roadside Stabilization Unit (RSU) is continually reviewing and updating Section 800 Specifications related to erosion control and seeding. Until NDOR prints a new version of the Spec Book, "Standard Specifications for Highway Construction" RSU will begin implementing the changes as special provisions on new projects letting in April 2014 and beyond.
  - ✓ In addition to Specification updates, RSU also reviewed and modified the erosion control detail sheets. Several new details were added and others better clarified on the detail sheets to assist with compliance in the field. One of the major changes in erosion control specifications was the modification of NDORs Erosion Checks. Erosion Checks will now become Silt Checks and are broken up into four categories based on the material of the check and the size. This will allow NDOR greater flexibility in specifying a particular BMP in certain areas of the project. This equates to better erosion control performance in the field and additional guidance for field staff.

- **Measurable Goal 2** - Enforce contracts that enable the Agency to require temporary erosion and sediment control plans from contractors.

  - ✓ NDOR is implementing the measures listed in the "State-Wide Stormwater Management Program: Enforceable Authority" document.
  - ✓ Temporary erosion and sediment control plans were submitted for all NDOR projects and maintained with the project SWPPP. Contractors submit the plans to NDOR for review prior to or during the preconstruction meeting.

- **Measurable Goal 3** - Follow checklist and document development and review considerations for SWPPPs and temporary erosion and sediment control plans.

  - ✓ All Stormwater Pollution Prevention Plans for NDOR projects follow standard review requirements. Each year RSU reviews the SWPPP template and makes changes and improvements based off of field input and changing permit requirements. NDOR utilizes the "Clarity" Project Tracking Software to document design steps involved in assembling the SWPPPs pre-construction. Recent improvements to NDOR SWPPPs have included the following:
    - Added a SWPPP Amendments sheet in the very front of the SWPPP binder. This outlines all of the additional documentation that an NDOR Project Manager will need to obtain for the SWPPP prior to and during Construction. For example, the Contractor's Stormwater Pollution Prevention Plan and list of certified erosion control inspectors that will be available on the project for project inspections or install and maintain BMPs.

- NDOR is now including blank erosion control plan sheets (for temporary BMP documentation) in the SWPPP for the entire project length. This gives project inspectors an easy to use process for documenting field BMPs, dates and other erosion control notes for the SWPPP.
- The soil and water portion of the SWPPP is now completed entirely using ArcMap. This review process saves RSU time preparing the SWPPP and allows for a more effective soils map

✓ NDOR utilizes a standard SWPPP template for stormwater permitted projects. This template is available on NDOR's website for Local Public Agencies and Consulting firms to use if they need additional guidance.

- **Measurable Goal 4** - Maintain current list of permitted construction sites within the MS4.

✓ NDOR tracks all of the permitted projects through the ECODatabase System. This has proved to be an invaluable tool for managing projects for environmental commitments and tracking the status of projects through design, construction and into establishment. See Appendix C for a list of NPDES permitted projects.

✓ GIS Maps are also developed using the project information within the ECODatabase. This effort benefits the statewide compliance oversight program.

✓ No project information has been removed from NDOR ECODatabase for completed projects. An archiving process was discussed for completed projects. NDOR record retention policies were being updated in 2013. NDOR ECO-Database will maintain records of completed projects for the minimum required by the NPDES construction permit, NPDES MS4 permit, or NDOR record retention policy, whichever is longer.

- **Measurable Goal 5** - Maintain the Public Education and Outreach Strategy to reflect current information and targeted messages about Construction SWPPPs.

✓ NDOR updated the outreach strategy in 2013 and will continue to modify the document as needed to best reflect education goals. NDOR completely updated the erosion and sediment control training courses and materials in 2013. As erosion and sediment control BMPs evolve and new guidance becomes available, it is NDOR's goal to get that information to the target audience in a timely manner to improve the program and maintain compliance. See NDOR's "Public Education and Outreach Strategy" for additional information.

BMP 2: Construction Stormwater Inspections

- **Measurable Goal 1** - Maintain ECODatabase and paper inspection forms to use for construction stormwater inspections.

✓ For all projects Let in March of 2013 or later, project inspectors are required to log all environmental inspections in ECOD. Several updates were made to the ECODatabase Inspection Tool in 2013. They are highlighted below:

- Added a new Inspection report template in ECODatabase to record Threatened and Endangered Species surveys.
- Added a new Inspection report template in ECODatabase to record Migratory Bird Surveys.

- Developed ECODatabase summary reports for tracking environmental inspections and corrective actions in the system. NDOR can now very quickly determine whether or not the appropriate inspections are being logged on a project and how quickly corrective actions are being addressed.
- The ECODatabase system also sends out inspection email reminders and past due notices to project inspectors based off of the required inspection frequency assigned at Central.
- Provided additional notification rules to keep project stakeholders aware upcoming and past due inspection activities.
- Modified type and amount of information presented for project reviewers to view on-line to enhance communication and oversight of project inspection expectations.
- Simplified user field findings entry by tying required actions to problems types rather than non-compliance type to enhance the quality of inspection information provided.
- Added full recipient list to the bottom of each submitted inspection notification to enhance the communication and oversight of project inspections.
- Improved ability to notify certified inspectors of expiring certification to help reinforce the requirement to renew credentials.
- Created pre-construction summary of required inspections and anticipated questions to help project managers anticipate inspection requirements before projects begin.
- Began creating options for system summary reports that are helpful for tracking overall program compliance and priority areas for improvement.
- Added additional database field integration for local project representatives that NDOR must provide stormwater inspections for.
- Added project data fields for minimum anticipated inspections, typical frequency and role typically responsible for inspection to improve project communication and tracking.
- Began tracking average days to complete corrective actions by various filters.
- Modified availability of inspection types by project phase to distinguish between Construction and Establishment inspections typically completed at different frequencies.
- Standardized the list of required actions for potential BMP problems to improve consistency and ease of data management.
- Modified rules that allowed all users with access to a project to potentially document resolution of Corrective Actions.
- Added new logic for inspection questions that must only be asked until satisfied and then are no longer displayed so inspectors know that all questions asked during any inspection are required.
- Added a new batch email function for stormwater program administrators to quickly share new information with all NDOR ECODatabase users.
- Revised the ability to manage users who are authorized to complete inspection for individual projects by creating user role default privileges.
- Simplified the inputs for Summary-type questions to assist inspectors in completing inspections in a timely manner.
- Created a new one-time inspection type and rules for delay in notification so that a close-out inspection can be conducted after construction has been completed and timely notifications can be provided of upcoming and past due dates.

- Tied system rules to NPDES requirements and date fields because NDOR ECODatabase would also be tracking environmental commitments for projects that do not need NPDES permits. The project start date, completion date and NPDES Notice of Termination Date establish project status, inspection frequency, and notification changes.
- Updated notification for inspectors from 3-year to 5-year notification to be consistent with NDOR Public Education and Outreach Strategy changes.
- Summary reports for average days to perform corrective actions, project inspections, and number of corrective actions were completed for use.
- Added User Role and Project Status to software sync tables to improve the ability to collect compliance data for project inspections and corrective actions.
- Modified the previous use of the Winter Conditions option by adding more quality control rules to ensure inspections are required during the winter period even when the ground is not frozen.
- Created additional inspection report templates that give more flexibility than the standard stormwater field BMP inspections.
- Enhanced the ability to isolate NPDES-related projects and create summary reports.
- Created additional functionality for creating performance reports that demonstrate achievement of NDOR environmental stewardship goals.

- **Measurable Goal 2** - Maintain Agency construction stormwater Compliance Oversight plan and inspection procedures.

  - ✓ NDOR is planning to update the Compliance Oversight Plan throughout 2014 to reflect program changes made during 2013. Specifically, NDOR implemented a new project environmental review process within the Central Office that was initiated in March 2013. This new process requires the four Environmental Units to log into the ECODatabase system and turn on specific questions for each project related to environmental commitments. This is done during the project Green Sheet Review Process completed for each project. RSU then assigns project inspections to the project to document that those commitments are being completed on the project. All inspections are recorded and tracked in the ECODatabase system. Summary reports can now also be generated to query this data into reports to gauge performance throughout the state. Additional work will be conducted within the ECODatabase system to refine these reports and develop new ones.
  - ✓ In addition to new changes being made within the Environmental Division, NDOR as a Department established 8 Strategic Goals in 2013 to address the Mission of the Department of Roads. One of those 8 goals was determined to be “Environmental Stewardship.” This specific goal consists of documenting and tracking environmental commitments on NDOR projects to ensure that they are being completed. This goal will be measured using the ECODatabase system with the intent of achieving a 100 percent completion rate of environmental commitments on NDOR projects.

- **Measurable Goal 3** - Conduct routine, complaint response and Compliance Oversight inspections and document inspection dates, findings, and Corrective Actions required.

  - ✓ NDOR follows the inspection frequency requirements listed in the Nebraska Construction Stormwater General Permit. In addition to permit requirements, NDOR has also developed an Environmental Compliance Oversight Plan that outlines criteria for which projects will be assigned inspections. NDOR is now using the ECODatabase Inspection System to document environmental inspections. Each project that goes through the environmental review at Headquarters is evaluated and assigned inspections based upon established criteria. For example large grading projects will receive a greater number of inspections than a simple overlay project may be assigned.
  - ✓ NDOR has established a three tiered inspection approach for documenting inspections in ECODatabase. The first tier consists of project level inspections (Routine Environmental Inspections) that are conducted at least once every 14 days. The second tier of inspections (Environmental Compliance Oversight Inspections) is conducted by District Environmental Coordinators or third party consultants, on a monthly or less frequent basis. Finally the third tier inspections are the Environmental Compliance Audits that are conducted by Headquarter Staff. Audits can range from a one-time project inspection frequency to a once a month frequency depending on the complexity of the project. Table 2 summarizes the inspections conducted in 2013.
  - ✓ All corrective actions recorded during field inspections are recorded with a resolution date, method, and responsible person.

Table 2 Summary of Statewide Construction Site Environmental Inspections

Activity	Summary of Activity	Estimated # of Inspections Anticipated	Total # of Inspections Submitted	Overall Performance
Statewide Environmental Construction Site Inspections	Routine Environmental Inspections Project level inspections conducted on a biweekly basis by Project Managers and/or Project Inspectors	868	971	112%
	Environmental Compliance Oversight Inspections Routine oversight inspections conducted by on-call Consultants and District Environmental Coordinators (DECs)	296	263	89%
	Environmental Compliance Audits Environmental audits conducted by NDOR Roadside Stabilization Unit Staff	75	55	73%

- **Measurable Goal 4** - Maintain the Public Education and Outreach Strategy to reflect current information and targeted messages about conducting Construction Stormwater Inspections.

  - ✓ NDOR conducts stormwater and erosion control training across the state. Anyone inspecting, maintaining or installing erosion control BMPs on NDOR projects is required to be certified in the NDOR Erosion Control Inspector Certification course. See section 1.0 Education and Outreach for additional information on NDOR's training and certification program.
  - ✓ Erosion and Sediment Control courses for interim certification, certification, and recertification were updated to cover information related to Construction Stormwater Inspections. Conducting inspections is a primary learning objective for these courses. The current information and targeted messages are related to selection, installation, maintenance and documentation required for BMPs evaluated in the field.
  - ✓ During the year, inspectors were notified and trained about updates the NDOR ECODatabase software. District updates were provided to demonstrate changes to the software so that inspections could be completed accurately.

BMP 3: Construction Stormwater Enforcement

- **Measurable Goal 1** - Update the Agency construction stormwater Enforcement Response Plan and associated enforcement mechanisms available to the Agency.

  - ✓ During the first MS4 permit cycle, NDOR developed the "State-Wide Stormwater Management Program: Enforceable Authority" document along with NDOR's Compliance Oversight Plan. These two documents outline how erosion control requirements will be inspected and enforced on NDOR construction sites. Both documents will be reviewed and updated in 2014 to reflect recent changes to NDOR's stormwater program.
  - ✓ The ECODatabase inspection system was enhanced throughout 2013 to query inspection data collected in the field. The system allows NDOR to run summary reports. These reports provide a snapshot of compliance efforts in the state and allow oversight staff the ability to respond quickly to sites with issues.
  - ✓ Corrective Action Reports are developed after an inspection report is logged in the ECODatabase system and are automatically distributed through email to all appropriate personnel on the project. Corrective actions are required to be addressed within 7 days. Actions that go beyond 7 days can be assessed a financial dis-incentive for each day that they are not corrected. This dis-incentive would be applied to the project Prime Contractor.
  - ✓ NDOR is revising the special provision, which relates to the dis-incentive, in 2014 to make improvements.

- **Measurable Goal 2** - Maintain current and accurate construction stormwater policies, procedures, permits, Enforcement Response Plan, and project contracts.

  - ✓ New erosion control/seeding specifications will be implemented in 2014. Updates to the NDOR Environmental Compliance Oversight Plan and Enforcement Response Plan are scheduled for 2014.

- **Measurable Goal 3** - Follow ERP and document enforcement communication dates, parties involved, actions taken, and resolution dates in a database.

  - ✓ NDOR is able to enforce the erosion control program through specifications and contract documents. In addition, several years ago the Department developed the Temporary Water Pollution Control Special Provision that included a dis-incentive /incentive section. When used this provision assesses a financial penalty to contractors that do not respond to corrective actions within the 7-day window. The provision also pays an incentive to contractors who respond within 48 hours of a rain event. Since the inception of this provision several recommendations have been made to improve how effective the provision is as well as to increase how often it gets implemented on construction sites. NDOR has coordinated with AGC Nebraska to gather input on potential changes they would like to see in this provision. Current timeline may put these changes in place during the 2014 construction season.
  - ✓ Other enforcement tools available to the Department include withholding payment for work and project shut down.
  - ✓ NDOR also took the necessary step of funding a new Environmental Compliance Position with the Roadside Stabilization Unit in 2013. This position will be responsible for project Environmental Audits and the review and oversight of project inspections and corrective actions submitted by NDOR inspectors.

NDOR had one enforcement action issued in 2013 by NDEQ. That action is summarized below in Table 3.

Table 3 Summary of Construction Site Enforcement Actions

Date Action Issued	Description of Enforcement Action	Resolution
8/30/2013	Gretna East Project, NER111937. Failure to meet the requirement of NPDES General Permit NER 110000 Part III.A.2, III.E.1, III.E.2, III.I.4, III.L.4	The issues were addressed and documented to NDEQ in a letter dated 9/25/13

Construction Site Runoff Control Activities Scheduled for 2014 & 2015

- ✓ Develop additional summary reports from ECODatabase as needed
- ✓ Maintain current SWPPP template
- ✓ Update Environmental Compliance Oversight Plan
- ✓ Review Enforceable Authority Document
- ✓ Initiate review of Chapter 2 (Erosion Control Design) of the Drainage Manual
- ✓ Rollout new erosion control specifications

5.0 Post-Construction Site Runoff Control

The 2013 measurable goals for Post-Construction Site Runoff Controls are summarized below.

BMP 1: Post Construction Stormwater Treatment BMPs

- **Measurable Goal 1** - Maintain current Post Construction Stormwater Treatment BMP Guides as references to the Drainage Design and Erosion Control Manual Chapter 3

  - ✓ Two new design guides, forebays and principal spillways, were developed for incorporation into Drainage Design and Erosion Control Manual Chapter 3.
  - ✓ Standard plans for Stormwater Treatment BMPs were developed that coincide with the Stormwater Treatment BMP Guides. Standard plans will undergo final reviews in 2014.

- **Measurable Goal 2** - Implement Agency policy and standards for selection, design and maintenance of Post Construction stormwater treatment BMPs

  - ✓ NDOR received written approval on September 17, 2013 from FHWA to implement Drainage Design and Erosion Control Manual Chapter 3.
  - ✓ NDOR updated the MS4 boundaries used to determine where Stormwater Treatment Practices will be required. The definition of MS4 boundary is included in the Chapter and maps are maintained with current boundary information for use during the Design Process.
  - ✓ NDOR discussed and noted the potential for some water quality treatment BMPs to become wetlands or be constructed as wetlands for water quality purposes. Questions were raised by the technical group about the potential for these features to become jurisdiction wetlands under Section 404 of the Clean Water Act and require additional mitigation requirements by the U.S. Army Corps of Engineers if impacted in the future. The ability to avoid stormwater treatment practices from also being regulated as jurisdictional wetlands in the future is desirable.
  - ✓ NDOR began discussing appropriate naming conventions and plan notations for stormwater treatment practices on NDOR projects. Practices will be included on construction plans for bidding and construction purposes. Right-of-way plans and maintenance records also need a consistent method of documentation for cross-references and record keeping. Recommendations were made to update Drainage Design and Erosion Control Manual Chapter 3 forms to include a maintenance identification reference number that is obtained during the design process.
  - ✓ NDOR began discussing stormwater treatment policy alternatives. Alternatives may be necessary to address requirements to provide stormwater treatment in instances when treatment within the Treatment Drainage Area at the time of construction is not considered feasible. Options being considered include treatment offsets, post project treatment BMP construction, and in-lieu fees.

- **Measurable Goal 3** - Follow procedures adopted for reviewing Post Construction Stormwater Treatment BMPs on all new development and redevelopment projects

  - ✓ Projects located within a MS4 community that are to be turned in during calendar year 2014 were evaluated and designers were informed of next steps as required.
  - ✓ Projects located within a MS4 community that are to be turned in during calendar year 2015 and beyond will be adding Stormwater Treatment Practices as needed thru the environmental meetings listed in the design process outline.

- **Measurable Goal 4 -** Maintain current list and information about Post Construction stormwater treatment BMPs installed within the MS4 boundary

  - ✓ Stormwater Treatment Practices will be required on projects that are turned in during calendar year 2014. Information related to type, location and maintenance activity will be tracked for each practice.
  - ✓ Completed Treatment Practices to date are included in Table 4.

Table 4 Summary of Completed Stormwater Treatment Practices

Project	**Practice**
Fullerton South	Bridge Deck Runoff Capture System – Gutter system conveys bridge deck runoff back to grassed areas.
Fremont South	Bridge Deck Runoff Capture System – Gutter system conveys bridge deck runoff back to grassed areas.
District 1 Construction Office	Bio Swale to Treat Parking Lot Runoff
Prosser Spur (2 Bridges)	Bridge Deck Runoff Capture System – Gutter system conveys bridge deck runoff back to grassed areas.

Post Construction Site Runoff Control Activities Scheduled for 2014 and 2015

- ✓ Standardize Stormwater Treatment labeling on plan sets
- ✓ Develop GIS Stormwater Treatment BMP tracking database
- ✓ Develop Maintenance Guides for Treatment BMPs
- ✓ Continue researching offset/retrofit options and criteria

6.0 POLLUTION PREVENTION AND GOOD HOUSEKEEPING

The 2013 measurable goals for Good Housekeeping and Pollution Prevention Program are summarized below.

BMP 1: Maintenance Facility Operations

- **Measurable Goal 1 -** Maintain maintenance facility inventory with a map, routine assessment and periodic audit assessment and investigation procedures.

  - ✓ An accurate inventory of all facilities within the MS4 boundaries is maintained.

- **Measurable Goal 2** - Maintain current site-specific stormwater runoff control plans at all high-priority MS4 facilities.

  - ✓ All high-priority MS4 FRCP plans are being maintained.
  - ✓ Each facility retains an accurate record of qualified inspectors for routine inspections, facility inspection areas, facility inspection map, and inspection form.

- **Measurable Goal 3** - Conduct and record routine inspections and findings in a central database.

  - ✓ Beta testing was nearly completed for the ECODatabase FRCP Module in 2013. ECODatabase will serve as the central database for inspections and findings.

- **Measurable Goal 4 -** Conduct audits of MS4 facilities and record evaluation results in a central database

  - ✓ A total of 10 facility audits were performed across NDOR Districts 0, 2 & 5 in 2013. NDOR maintenance facilities are located in the Lincoln, Omaha area and Northwest. The Yards are located in Lincoln "Hill" campus (with 6 sub areas), Plattsmouth, Blair, Fremont, Elkhorn, Omaha 108th St, Omaha S 25th St, Mormon Bridge, Melia Hill and Gering. The records were comprehensive and visual assessment determined this facility has fully implemented the program. This is the second round of audits for the facilities located in these areas.
  - ✓ Site Supervisors, when available, accompanied the NDOR Highway Environmental Program Specialist during the walk-through audit inspection. Areas of concern as it relates to the FRCP program and other regulatory considerations were photographed. The inspection observations were recorded in a central database – ECODatabase. A final report generated by the database including photos and a "punch-list" of needed corrective actions. Final reports were sent to Districts to implement within 15 days.

BMP 2: Highway Stormwater Drainage System Inspection and Maintenance

- **Measurable Goal 1 -** Update inspection and maintenance policy for Treatment BMPs and drainage features in the Maintenance Manual.
  - ✓ A policy evaluation was initiated in 2013 and draft recommendations were made for consideration in 2014.
    - The suggested recommendations include updates to Chapter 3 – Work Activities included in the Maintenance Manual and supplemental information tied to existing Maintenance Activity Codes.
    - Suggested updates to Stormwater Treatment Practices to Chapter 11 – Environmental, Section 11.9.
      - A model Stormwater Treatment Practice inspection form to go with Storm Water Treatment Practices was drafted.
  - ✓ Recommendations to update recommended Best Management Practices for individual Maintenance Activity Codes was provided in 2008 and reintroduced in 2013 for consideration. Updates to Activity Codes 2101, 2111 and 2114 will be made to address dewatering/disposing of waste.

- **Measurable Goal 2 -** Conduct routine and complaint response inspections and maintain Treatment BMPs, open channels, and catch basins.
  - ✓ See Table 4 for a list of constructed Treatment BMPs. Inspections will occur in 2014 and maintenance will be assigned as needed.
  - ✓ Maintenance for open channels and catch basins, when completed, is recorded as Maintenance Activity Code 2101, 2102, 2111, and 2114. Time and materials provided for these activities are not recorded

- **Measurable Goal 3 -** Track Treatment BMP information including geographic location, inspection dates, observations, communications, and maintenance actions.
  - ✓ Treatment BMPs are currently tracked using a GIS Database maintained at Central.
  - ✓ NDOR identified three existing databases that could be used for tracking maintenance of Treatment BMPs in the future. All three require further evaluation in 2014, but include EAMS, NDOR ECODatabase, or a GIS Database.
  - ✓ Work practices will be developed to conduct inspections, document inspections, communicate findings, and schedule and complete maintenance actions. A maintenance guide will manual will capture the best practices as part of the Public Education and Outreach Strategy in 2014.

- **Measurable Goal 4 -** Review and update enforceable authority to address adjacent MS4 and contractor maintenance of Treatment BMPs and drainage features.
  - ✓ An NDOR policy review of enforceable authority within adjacent MS4s was completed in 2007.
  - ✓ For Stormwater Treatment Practices constructed in Adjacent MS4s, NDOR intends to apply existing authority provided by State Statute 39-101(6) to require "the act, operation, or continuous process of repair, reconstruction, or preservation of the whole or

any part of any highway, including surface, shoulders, roadsides, traffic control devices, structures, waterways, and drainage facilities, for the purpose of keeping it at or near or improving upon its original standard of usefulness and safety."

- ✓ The jurisdictional responsibility for maintenance of the state highway system is based on functional classifications found in State Statute 39-2103.
- ✓ NDOR does not utilize contractors for maintenance of Treatment BMPs at this time. If contractors are utilized, enforceable authority will be required through contract agreement language.

- **Measurable Goal 5** - Enforce statutes, contracts and agreements for Treatment BMP and drainage feature maintenance.

  - ✓ Treatment BMPs have not been constructed in areas that require enforcement of statutes, contracts or agreements to date.
  - ✓ NDOR State Statutes for maintenance of highway drainage features within Adjacent MS4s remain in place at this time. Adjacent MS4s are not required to report to NDOR about maintenance activity completed on highway drainage features.
  - ✓ NDOR staff completed inspection and maintenance of existing drainage features that are not the responsibility of Adjacent MS4 authority.

BMP 3: Highway Maintenance Activities and Operations

- **Measurable Goal 1** - Develop highway and parking lot sweeping practices to include with NDOR Maintenance Manual.

  - ✓ Highway and parking lot sweeping practices are categorized by NDOR Maintenance Activity Code 2050 – Unspecified Roadway and Shoulder Maintenance
  - ✓ A policy evaluation was completed in 2013 and draft recommendations were made for consideration in 2014. The suggested recommendations include updates to Maintenance Activity Code 2050 to address Best Management Practices for sweeper operation, storage, and material handling.

- **Measurable Goal 2** - Review Agency maintenance activities and operations conducted within MS4s and update the NDOR Maintenance Manual with pollution prevention practices.

  - ✓ Final draft guidelines created/revised for maintenance & operations best practices: oil-water separators, sorbents, likely scenarios oil spill response documents for diesel, gasoline, oil-water separators; tanks inspections, striping paint environmental considerations, rag handling, aerosol cans, hazardous waste testing plan of antifreeze, oil-water separators & part washer solvents; revisions to SPCC plan, revised spill forms DR99 & DR 176.
  - ✓ A business process to resolve corrective actions requests that require planning or capital improvements is under development.
  - ✓ A policy evaluation was completed in 2013 and draft recommendations were made for consideration in 2014. The suggested recommendations include updates to Chapter 3 – Work Activities included in the Maintenance Manual and supplemental information tied to existing Maintenance Activity Codes 2511, 2514 and 2521.
  - ✓ The policy evaluation completed in 2013 and draft recommendations made for consideration in 2014 also included suggested updates to Chapter 8 – Winter Operations. Small amendments to this Chapter and additional Public Education and Outreach

materials are suggested to reinforce important underlying pollution prevention principals. NDOR will retain a flexible approach to Winter Operations as icy surface treatment requirements vary throughout the State and within the season. NDOR reviewed Sections of Chapter 8 that address Equipment, Materials (including bridge de-icing materials), and Ice Control

- ✓ Section 8.2 – Equipment properly maintained is good pollution prevention. Many practices that are good for protecting equipment are also good for the environment.
- ✓ Section 8.4 – Materials must be managed by NDOR to minimize cost of operations, but environmental impact must also be considered in selection and use of materials. Material management practices are often facility and District specific but Approved Brands List is used for anti-icing/deicing chemical selection.
- ✓ Section 8.5 – Ice Control methods vary based on the physical conditions presented during winter weather. Timing, intensity, duration, cost, and availability of materials often make the selection of material a situational decision that an often change during the course of one winter storm event. Industry references such as AASHTO, NCHRP Report 577, and others may be used to establish the boundaries of flexible guidelines NDOR follows for Winter Maintenance Best Management Practices. These references reflect current research available regarding use of salt alternatives, anti-icing methods, and product substitutions for winter maintenance where public safety is not diminished.
- ✓ The policy evaluation completed in 2013 and draft recommendations made for consideration in 2014 also included recommended approaches to create and improve Public Education and Outreach resources for Winter Maintenance practices.

- **Measurable Goal 3** - Implement Agency maintenance and operation policies.

  - ✓ On an ongoing basis, a participant guide is distributed via the New Highway Maintenance Supervisor/Superintendent Training Courses.
  - ✓ In 2013, discussions continue on the Hwy Hazardous Spill Protocol. Responsibilities for District personnel are being defined. Other areas under consideration pertain to Right-of-Way Occupancy permits and performance bond issues (i.e. when needed and amounts charged). The protocol is a collaborative effort between the NDOR Operations Division, NDEQ and NDOR Districts. This protocol was identified as necessary based on components included in the NDOR Illicit Discharge Detection and Elimination Program.
  - ✓ In 2013, SPCC plans templates were updated. The new templates separate site specific information from general plan information enabling plans program wide general information to be down loaded as new updated versions are created.
  - ✓ In 2013, the ECODatabase is being tested to capture SPCC tank & oil-water separator inspections.
  - ✓ In 2013, the ECODatabase is also being tested for confirming compliance activities including administration requirements are being met.
  - ✓ Oil Spill Prevention Control & Containment (SPCC) plans were updated with requisite site visits in 2013: Crawford, Gordon, Gering, Merriman, Imperial, Benkelman, Maywood, McCook Hwy 6, Kimball, Big Springs, North Platte I-80, Wallace, Grand Island Old Potash Rd, St Paul, Fullerton, Central City, Norfolk Alaska Ave, Norfolk Salt Storage, Omaha 108th St, Auburn, Lincoln Salt Valley, Lincoln “Hill” Campus, Lyons.

- **Measurable Goal 4** - Enforce statutes, contracts and agreements for pollution prevention required of contractors and Adjacent MS4s.

  - ✓ Nebraska State Statutes remain in effect to require maintenance of the Nebraska State Highway System.
  - ✓ Municipal Maintenance Agreements are enforced with all Nebraska MS4 Phase I and II municipalities.

Summary of Pollution Prevention/Good Housekeeping Inspections and Enforcement Actions

Table 5 Summary of Pollution Prevention and Good Housekeeping Inspections and Enforcement Actions

Activity	Summary of Activity
Facility Runoff Control Plan Site Inspections	Qualified individuals from each facility conduct monthly site-evaluations using the FRCP inspection checklist and corrective action form. Twenty five facilities statewide are actively participating in performing monthly inspections. FRCP audits were conducted in Districts 0, 2, and 5. Auditors reviewed inspection records, provided visual reinforcement and training through photo-documentation.
PP/GH Enforcement Actions	Corrective action "punch-lists" were provided to each individual facility audited in 2013. Other environmental regulatory considerations and Best Management Practices (e.g. flammable cabinets and activities near storm drains) were addressed in facility specific photo documentation audit reports sent to each District.

Pollution Prevention and Good Housekeeping Activities Scheduled for 2014 & 2015

- ✓ Conduct 3 Year Audit for District 4 & 6 in 2014.
- ✓ Conduct 3 Year Audit for District 1 & 3 in 2015.
- ✓ Fully implement ECODatabase for all monthly FRCP facilities.
- ✓ Fully implement ECODatabase Annual environmental program activity review.
- ✓ Fully implement ECODatabase for tank inspections, secondary containment drainage & oil-water separator inspections.
- ✓ Fully implement ECODatabase for weekly hazardous waste inspections.
- ✓ Set up maintenance program for Treatment BMPs, open channels, and catch basins.
- ✓ Finalize Highway Hazardous Spill Protocol.
- ✓ Finalize business process to address corrective actions that require planning or capital inputs.
- ✓ Update DIRK to better track, filter & sort, follow up & report on IDDE spills & deliberate dumping.
- ✓ Revise EDC training for SPCC plan.
- ✓ Finalize BMPs for salt handling & storage. Update Maintenance Manual.
- ✓ Finalize highway & facility maintenance road & parking lot street sweeping BMPs. Update Maintenance Manual.
- ✓ Discuss Enforce statutes, contracts and agreements for pollution prevention required of contractors and Adjacent MS4s.
- ✓ Develop plan to inventory assets with environmental considerations.
- ✓ Develop newsletter articles to aid in environmental program education.
- ✓ Review & update Hazardous Waste Management program. Train “The Hill” & Material & Research laboratory staff. Develop SQG guideline document.
- ✓ Develop plan and begin determination of potential hazardous streams such as oil-water separators, part washer solvent fluids, spent antifreeze & used sorbents.
- ✓ Review options for logging hazardous waste generation & disposal for Maintenance Yards.
- ✓ Review program of activities to transport hazardous materials.

7.0 Additional Requirements

This Section of the Annual Report summarizes NDOR's efforts to comply with additional MS4 Permit requirements that are not specifically associated with the six Minimum Control Measures.

7.1 Evaluation of Compliance and the Appropriateness of Identified BMPs

Part 7.1.1 of the MS4 Permit requires NDOR to evaluate SWMP compliance and the appropriateness of identified BMPs.

- The measurable goals NDOR has established in the SWMP provide appropriate targets and direction for complying with MS4 permit requirements to protect waters of the state from stormwater runoff.
- Because NDOR has implemented stormwater management BMPs that demonstrate progress toward each SWMP measurable goal, as documented in this Summary Report, NDOR is in compliance with conditions and requirements of the MS4 Permit.
- NDOR staff members actively participate in stormwater industry working groups and remain knowledgeable about appropriate BMPs and measurable goals related to transportation MS4s which are implemented through continuous improvement of Agency policies, procedures, and practices.

7.2 Proposed Changes to SWMP

Either the Department or the Permittee may propose amendments that are consistent with the requirements in Part 6.1 of the Permit for the SWMP or evaluation program at any time. Proposed amendments shall not be implemented without agreement from both the Department and Permittee.

- No changes are proposed to the current SWMP.

7.3 Improvements or Degradation in Receiving Waters

- NDOR is not aware of any improvements or degradations to receiving water quality that are currently caused by stormwater runoff from highways or maintenance facilities.

7.4 Compliance Assistance from other Entities

- NDOR continues to partner with the Local Technical Assistance Program (LTAP) of the University of Nebraska to implement statewide stormwater training as well as FHU Consulting for MS4 permit compliance.

7.5 Data Collection and Analysis

- See Appendix D: Current Research Projects.

7.6 Annual Budget and Expenditures

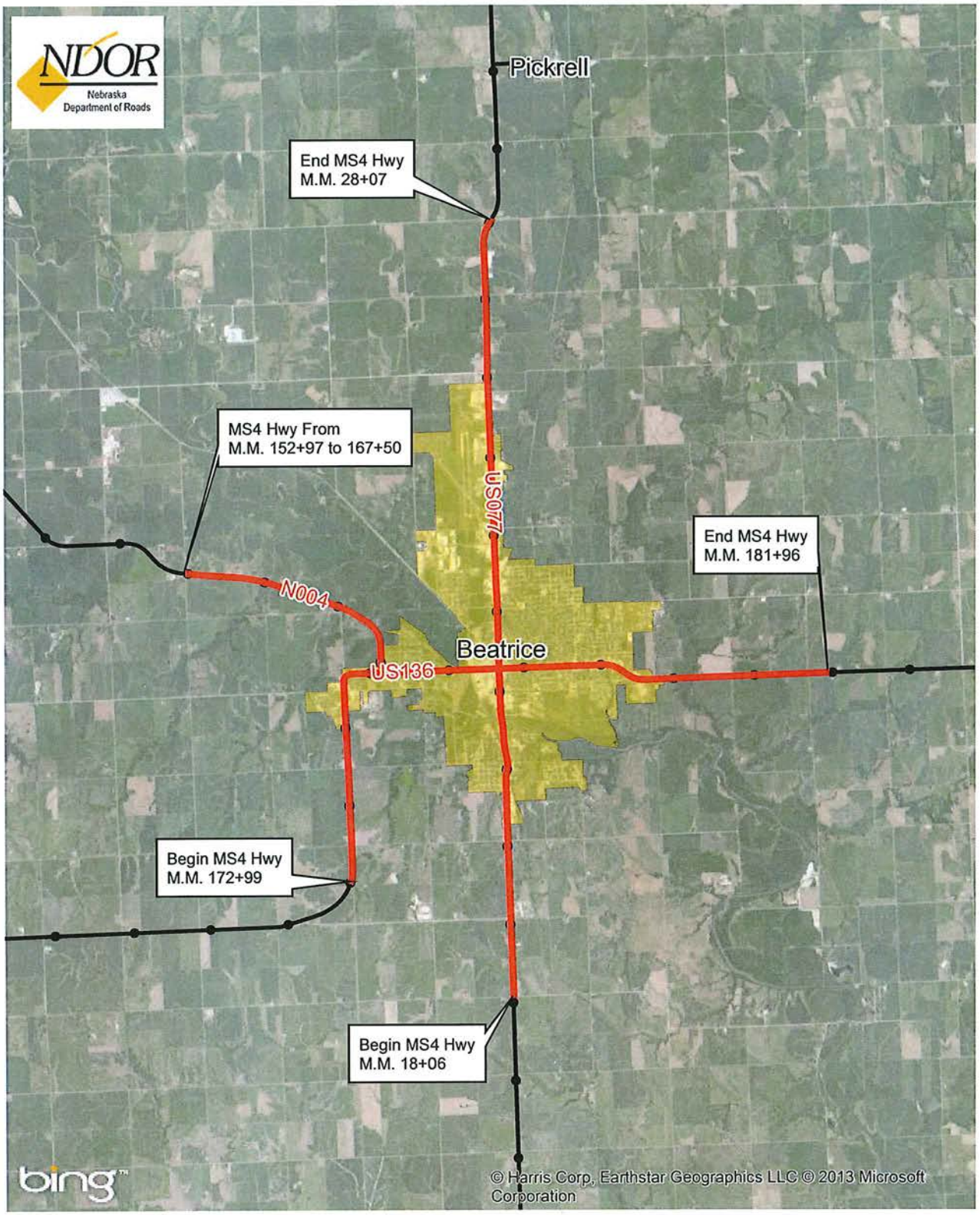
- See Appendix E: NDOR Annual MS4 Budget.

APPENDIX A: NDOR MS4 BOUNDARY MAPS

The following maps document the boundaries within which NDOR will implement its policies and procedures for Stormwater Treatment within MS4 Communities (State MS4 permitted Highway Segments) for years 2013-2017.
NDOR's MS4 boundary maps were established using a combination of the following considerations:

1. EPA Urbanized Area Maps (2010 Census)
2. City Corporate Limits (2013)
3. City Extra Territorial Jurisdiction (ETJ) - Accounts for future development

To avoid having to update maps on a regular basis and risk impacting project designs, NDOR factored in urban development around each permitted community by using their ETJ. A NDOR project may take several years to complete, and if MS4 boundaries change mid-design this would be problematic. The ETJ will allow NDOR the flexibility of only updating these maps every MS4 permit cycle (5 years) since future urban expansion is already accounted for.



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary

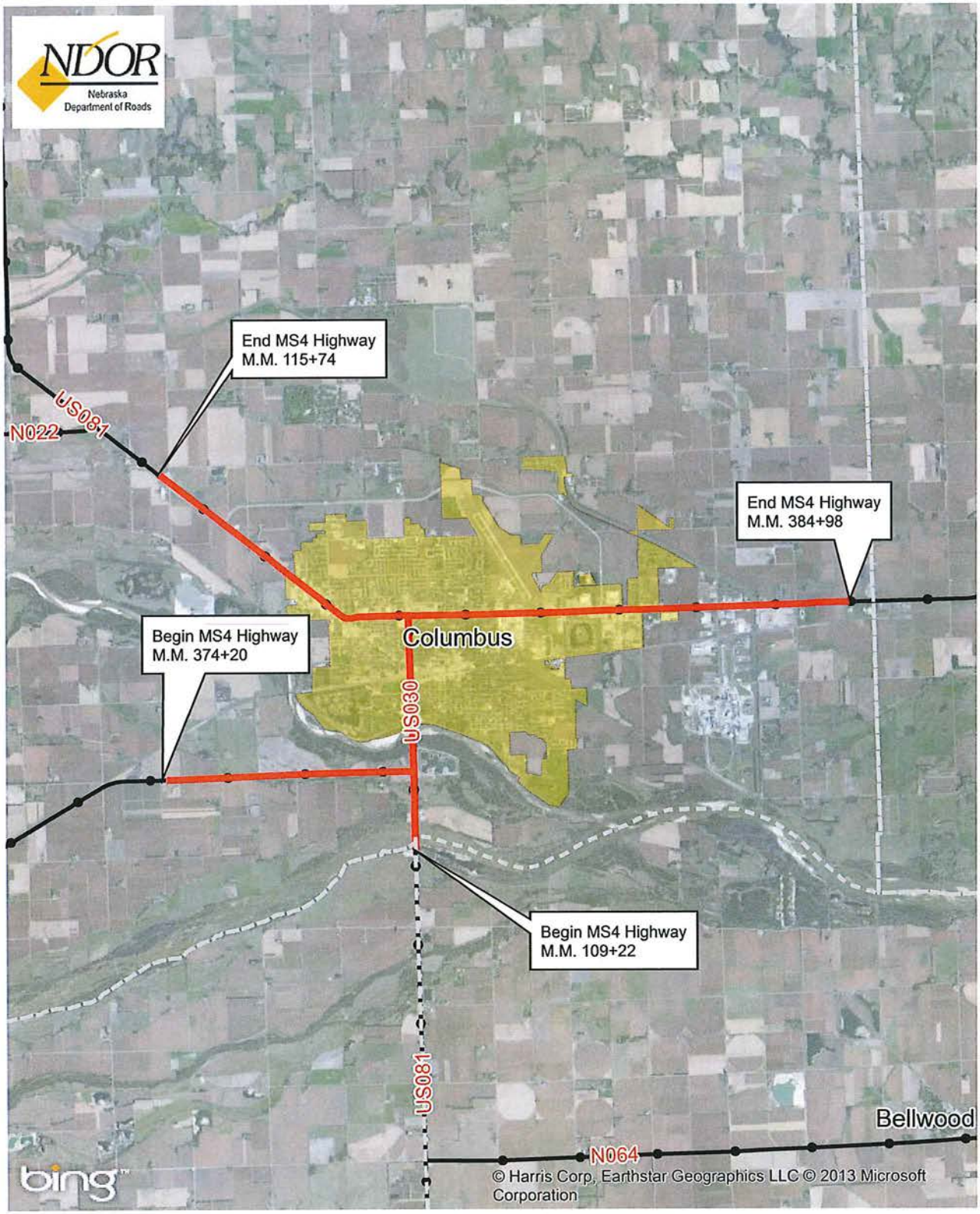
N

0 5,000 10,000 20,000 Feet

Beatrice

NDOR MS4 Area

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

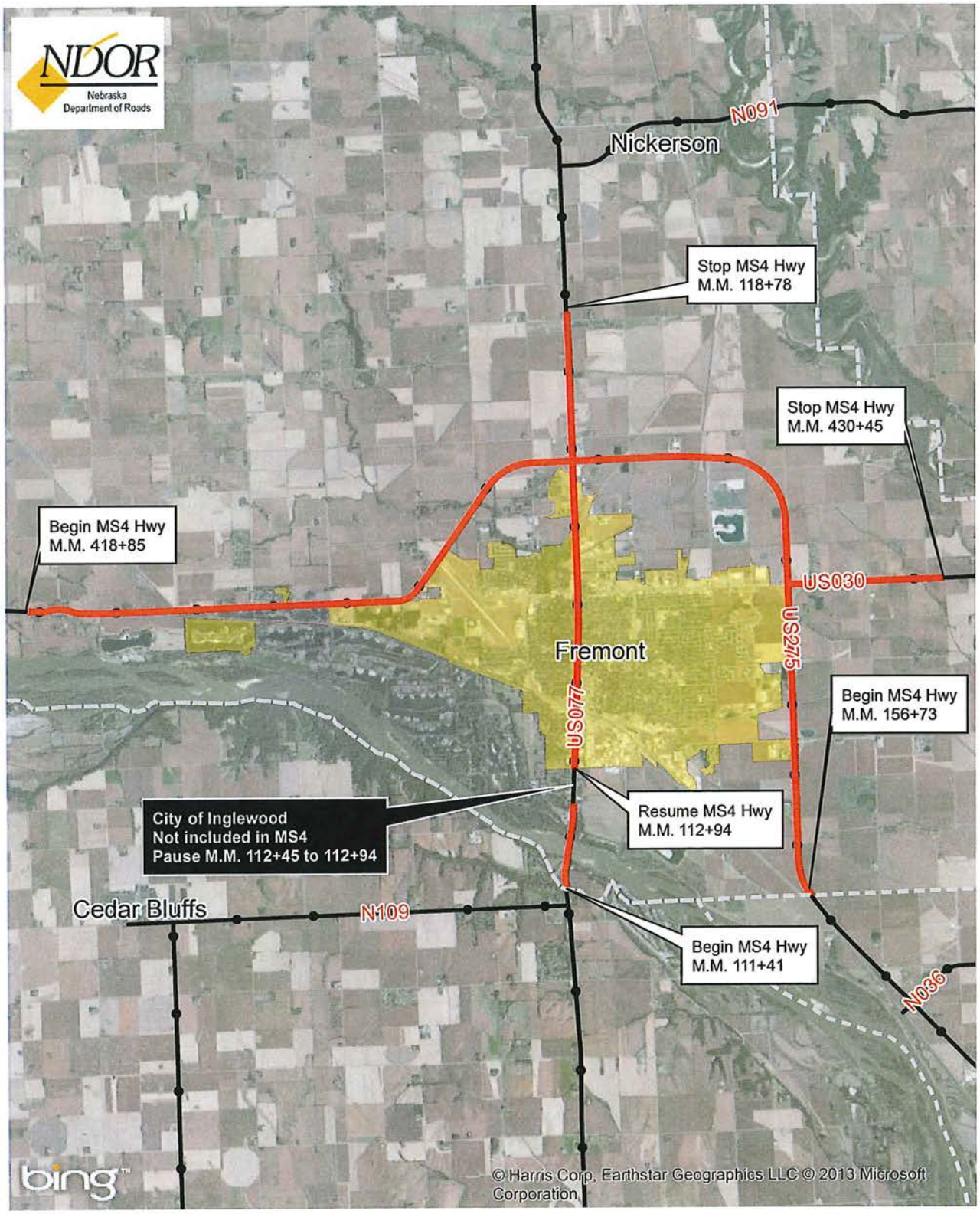
N

0 5,000 10,000 20,000 Feet

Columbus

NDOR MS4 Area

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

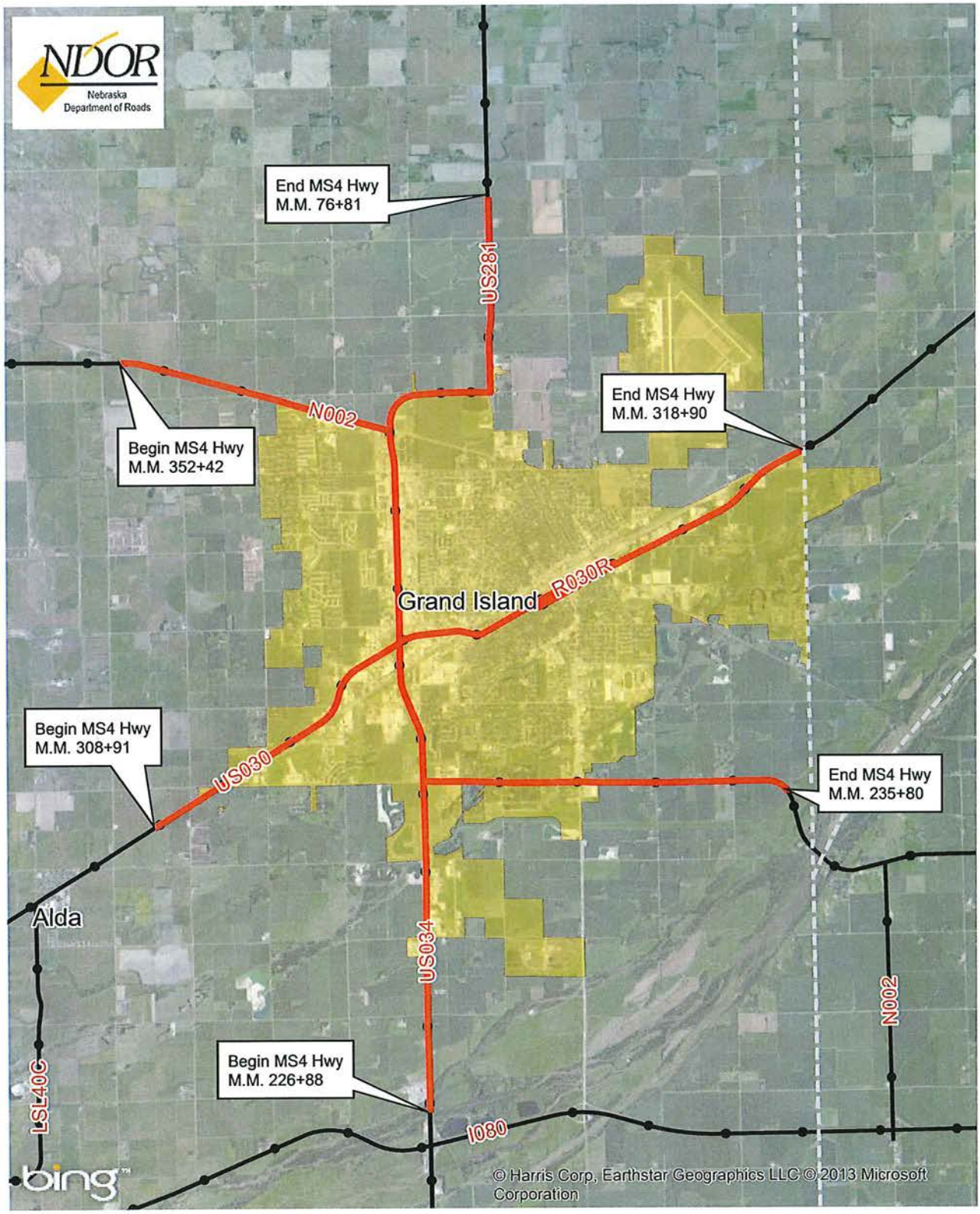
N

0 5,000 10,000 20,000 Feet

Fremont

NDOR MS4 Area

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

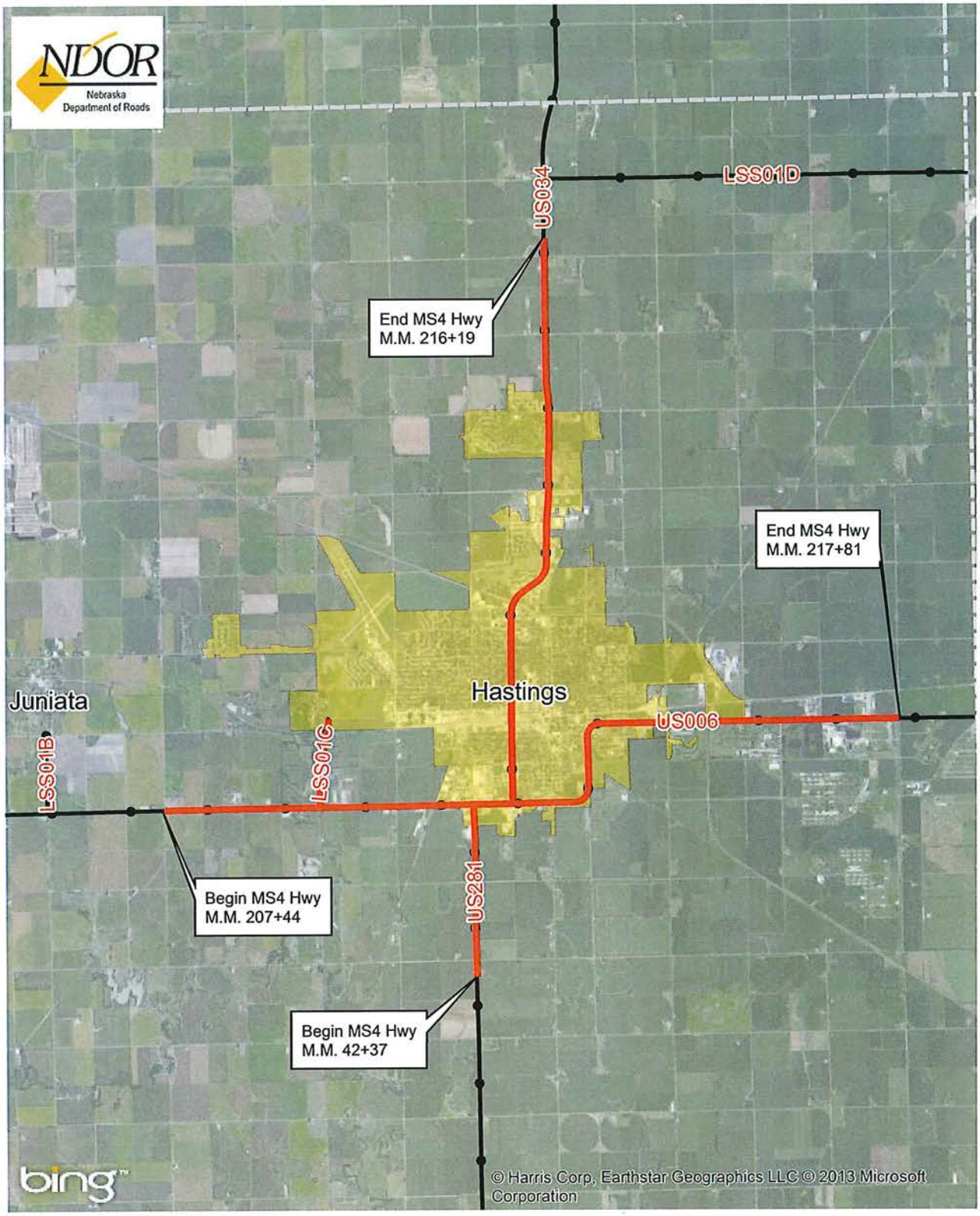
N

0 5,000 10,000 20,000 Feet

Grand Island

NDOR MS4 Area

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

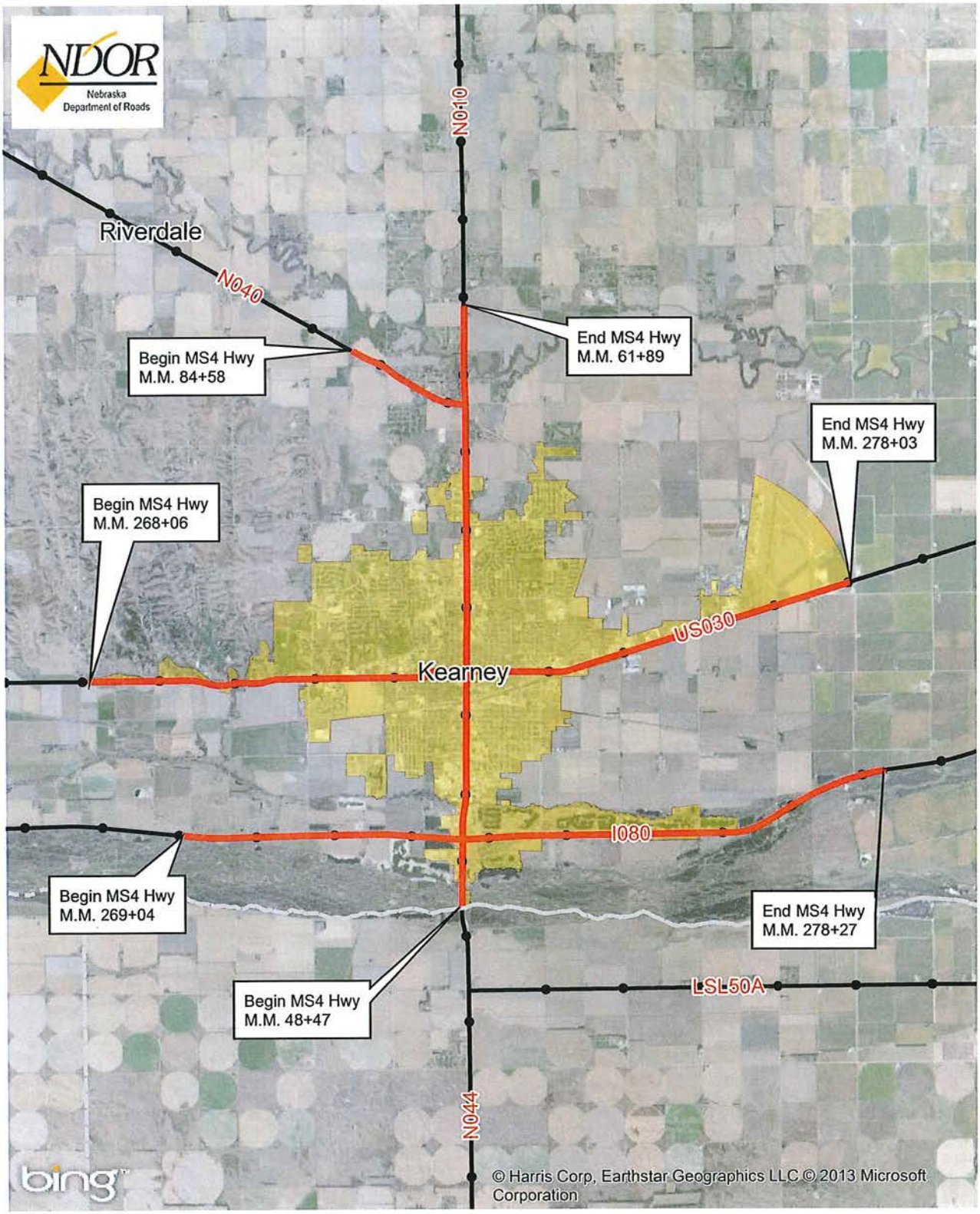
N

0 5,000 10,000 20,000 Feet

Hastings

NDOR MS4 Area

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

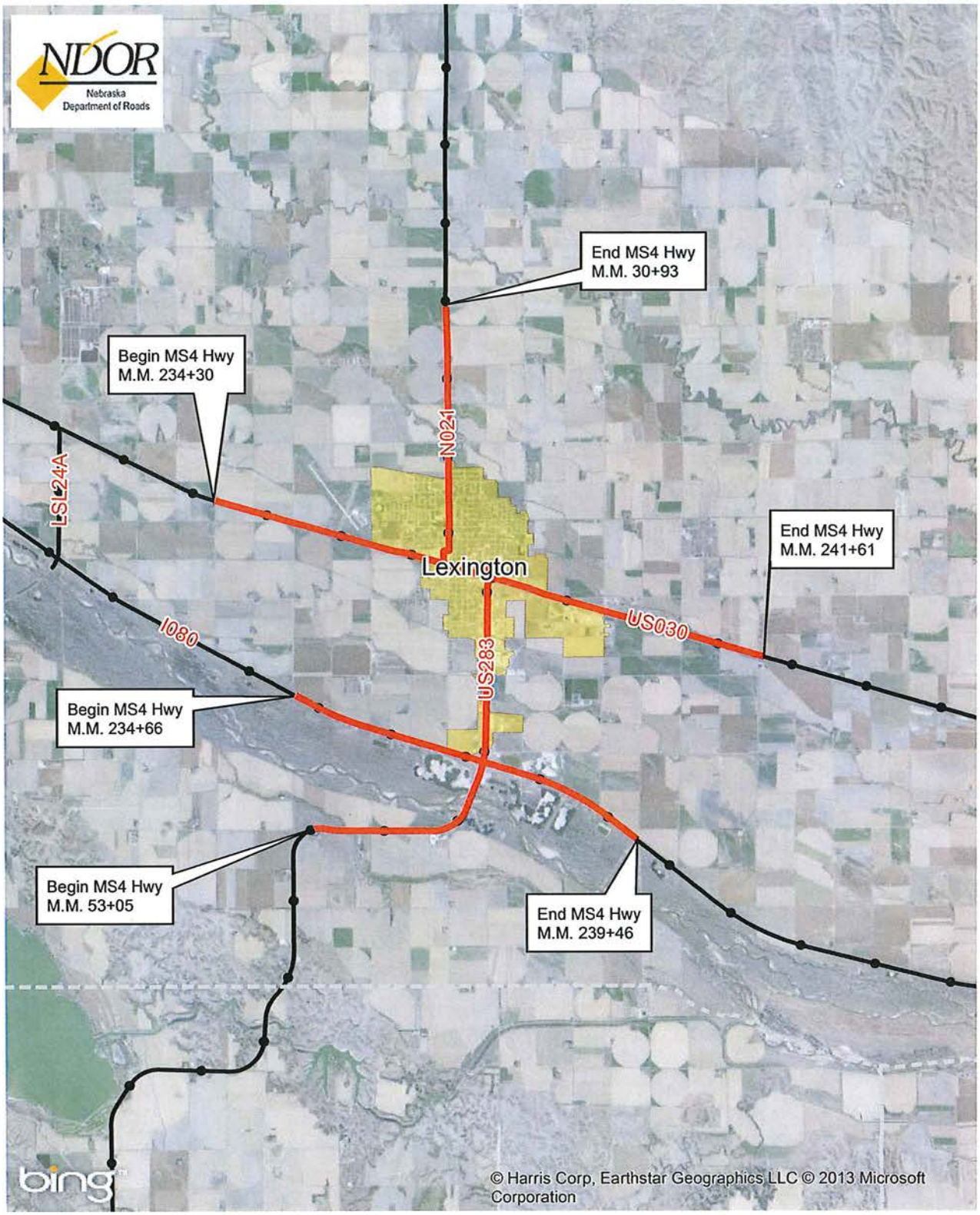
N

0 5,000 10,000 20,000 Feet

Kearney

NDOR MS4 Area

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

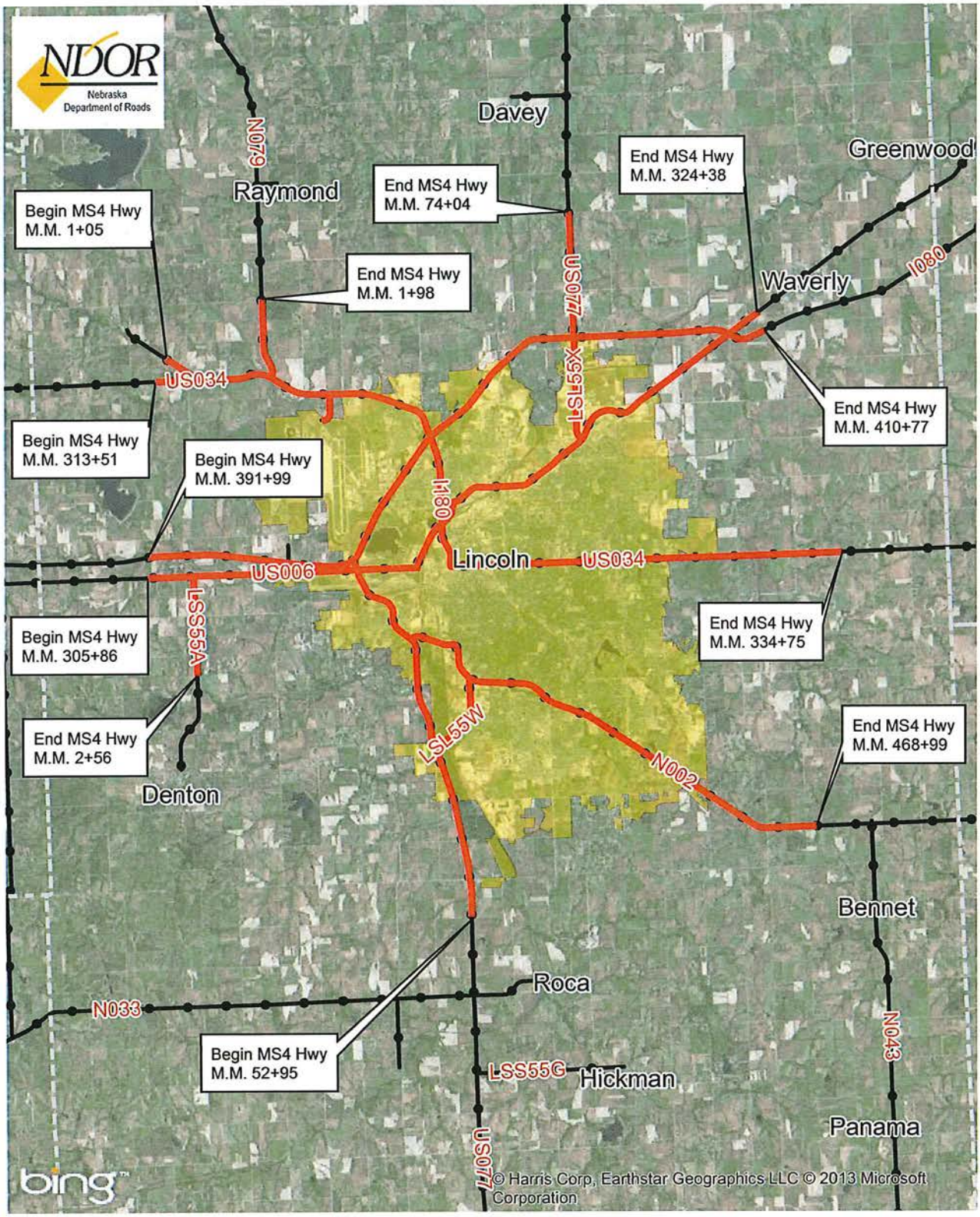
N

0 5,000 10,000 20,000 Feet

Lexington

NDOR MS4 Area

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

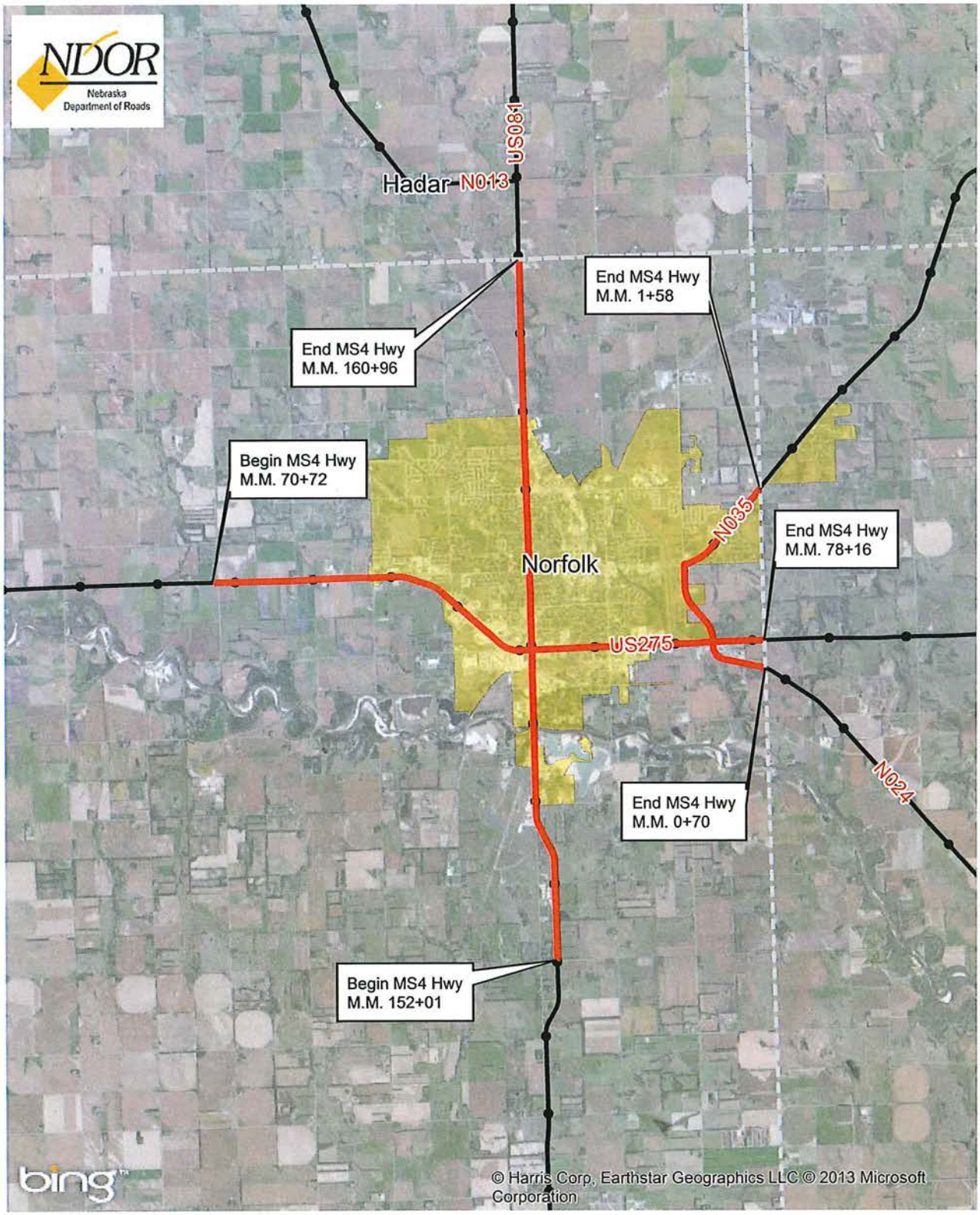
N

0 10,00020,000 40,000 Feet

Lincoln

NDOR MS4 Area

1 inch = 20,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

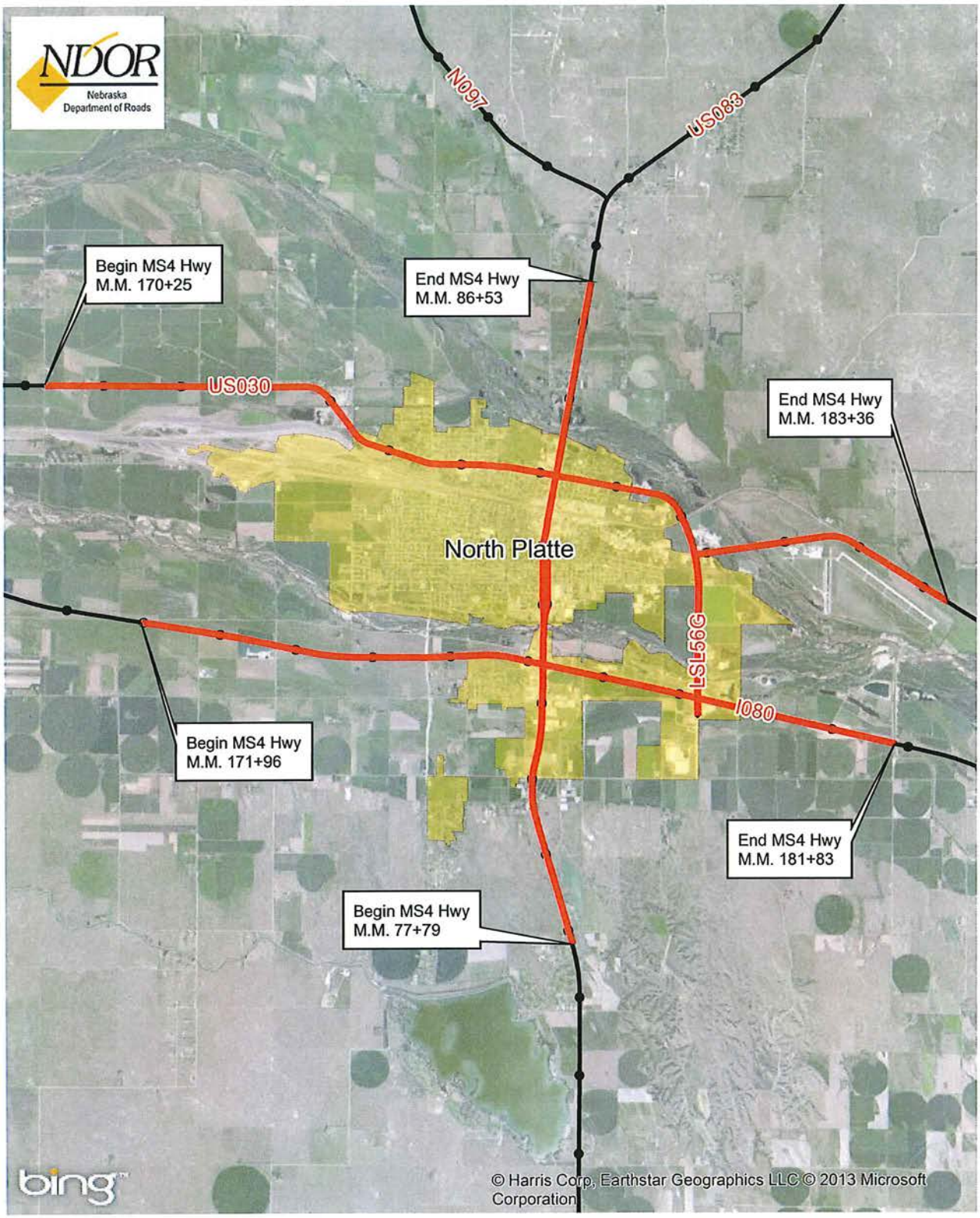
N

0 5,000 10,000 20,000 Feet

Norfolk

NDOR MS4 Area

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

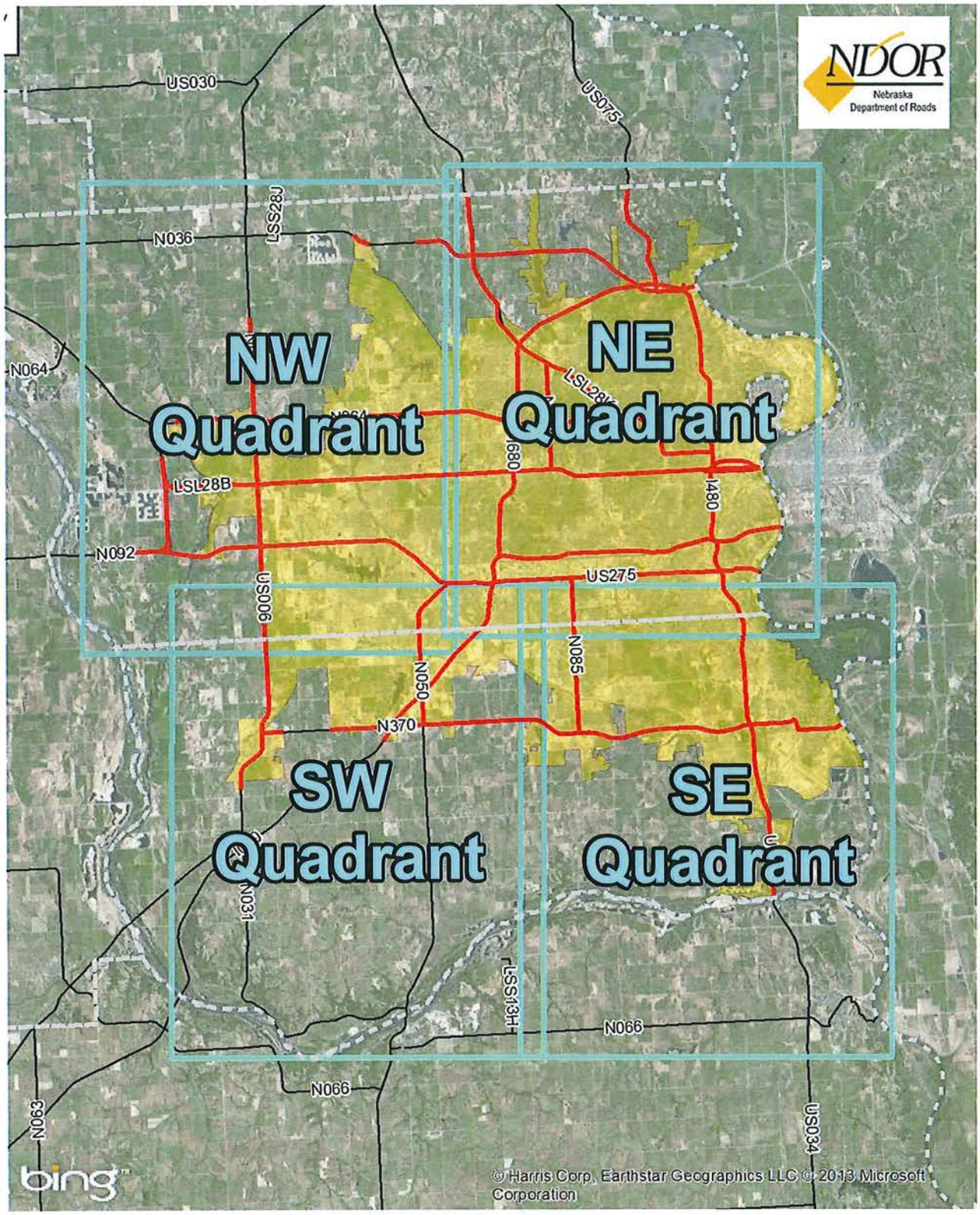
N

0 5,000 10,000 20,000 Feet

North Platte

NDOR MS4 Area

1 inch = 10,000 feet



Legend

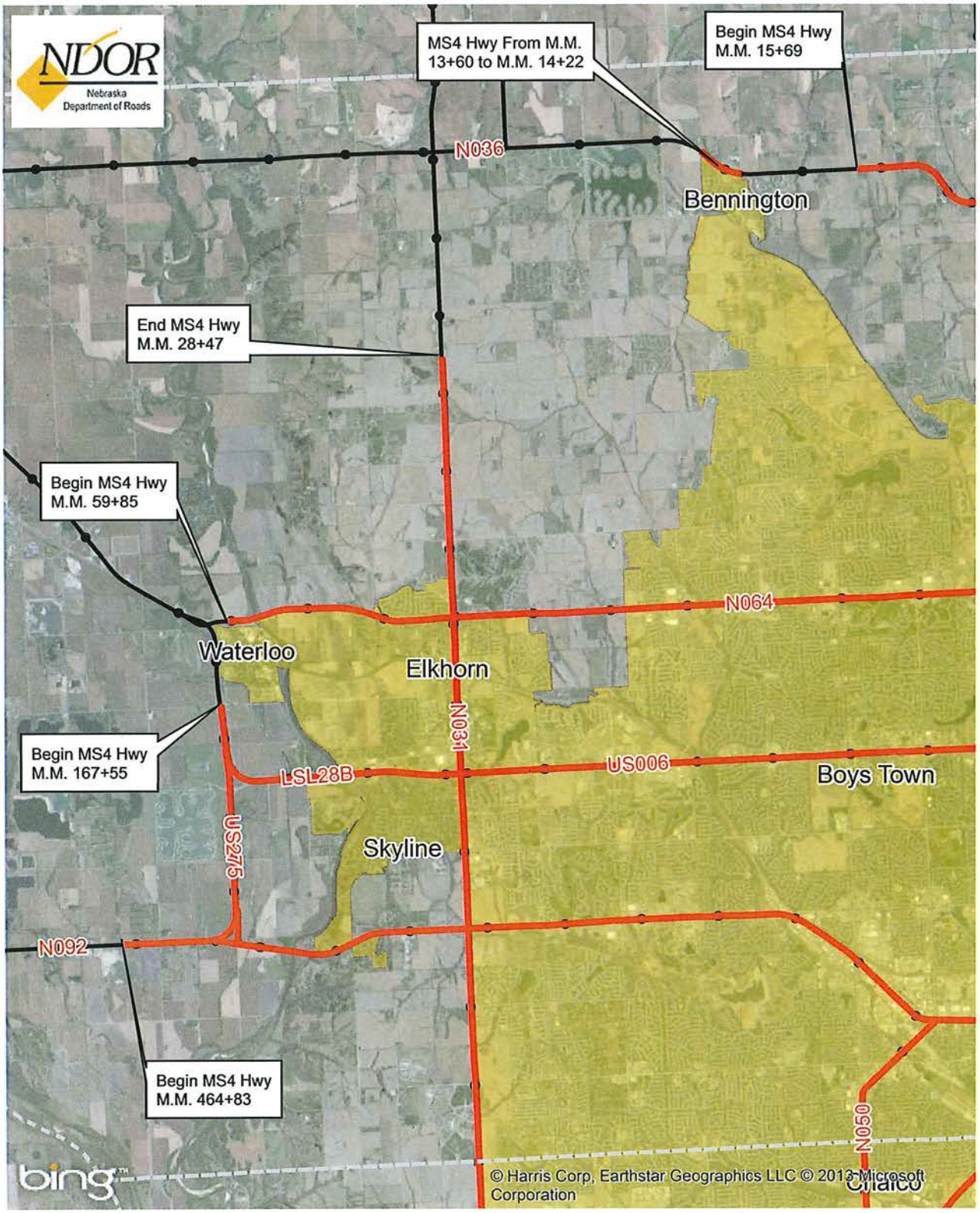
- NDOR MS4 Highway
- NDOR Non-MS4 Highway
- Urbanized Boundary
- county

N

0 12,50025,000 50,000 Feet

Omaha Area Urbanized Area Key

1 inch = 25,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

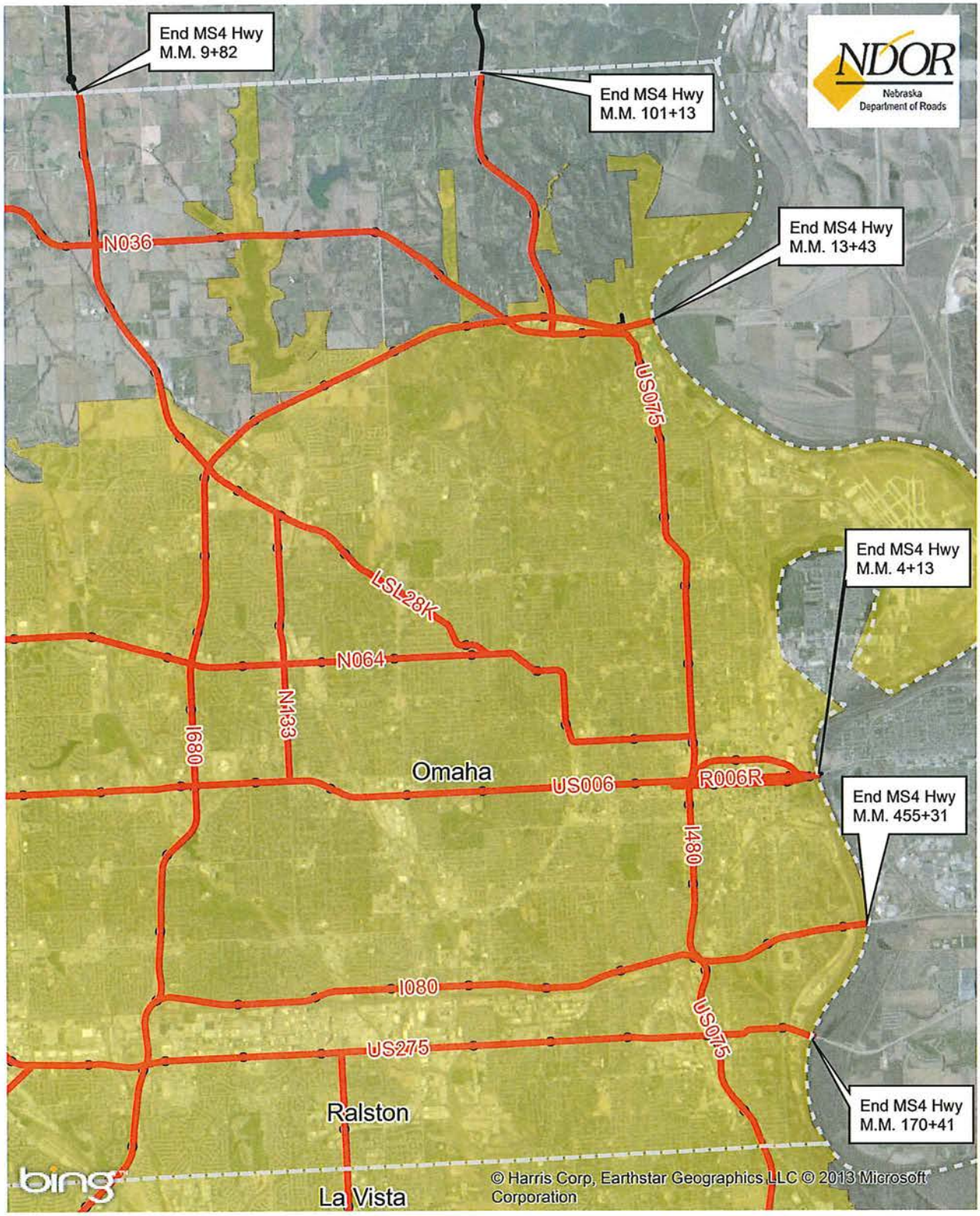
N

0 5,000 10,000 20,000 Feet

Omaha Urbanized Area

NDOR MS4 Area - NW Quadrant

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

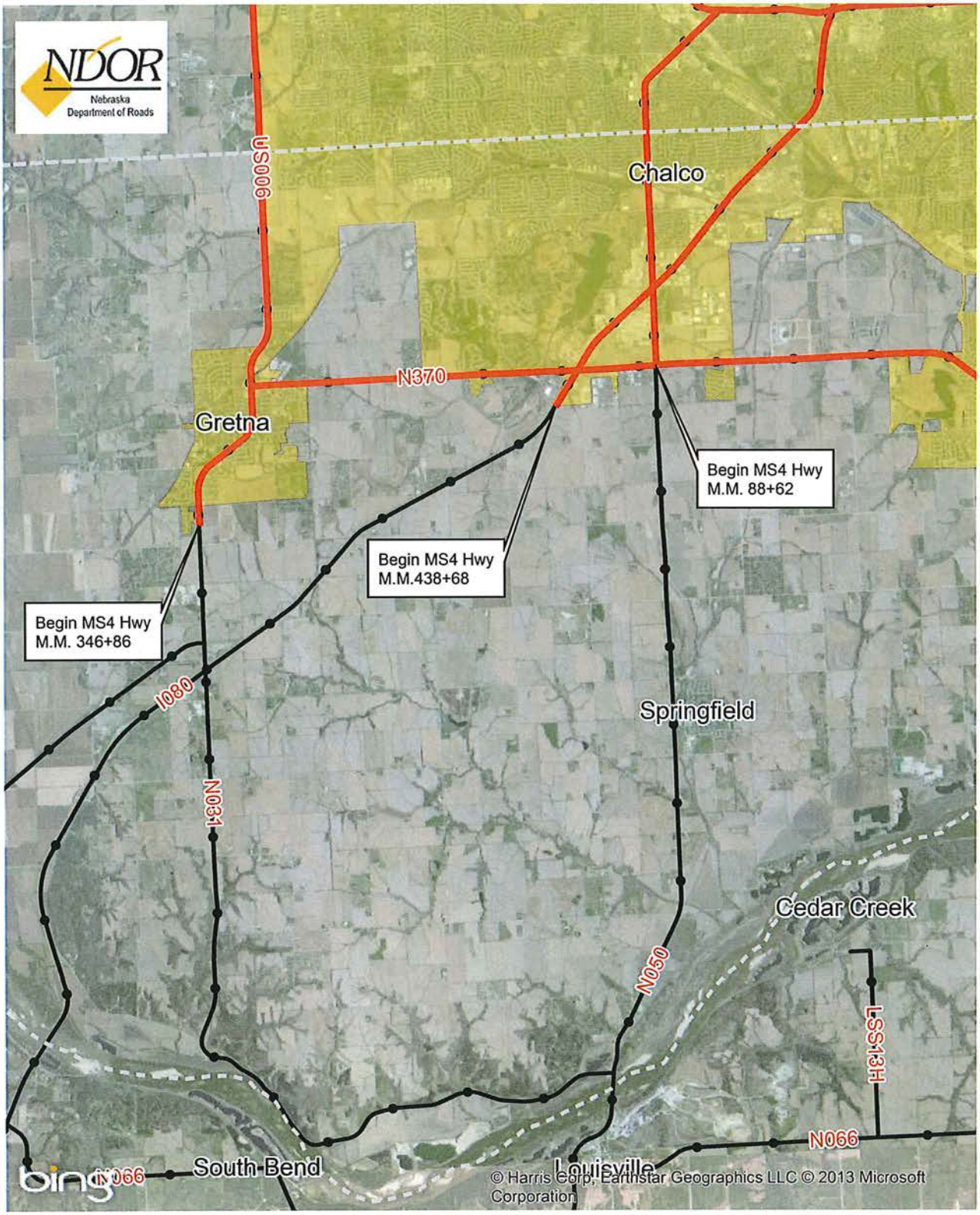
N

0 5,000 10,000 20,000 Feet

Omaha Urbanized Area

NDOR MS4 Area - NE Quadrant

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

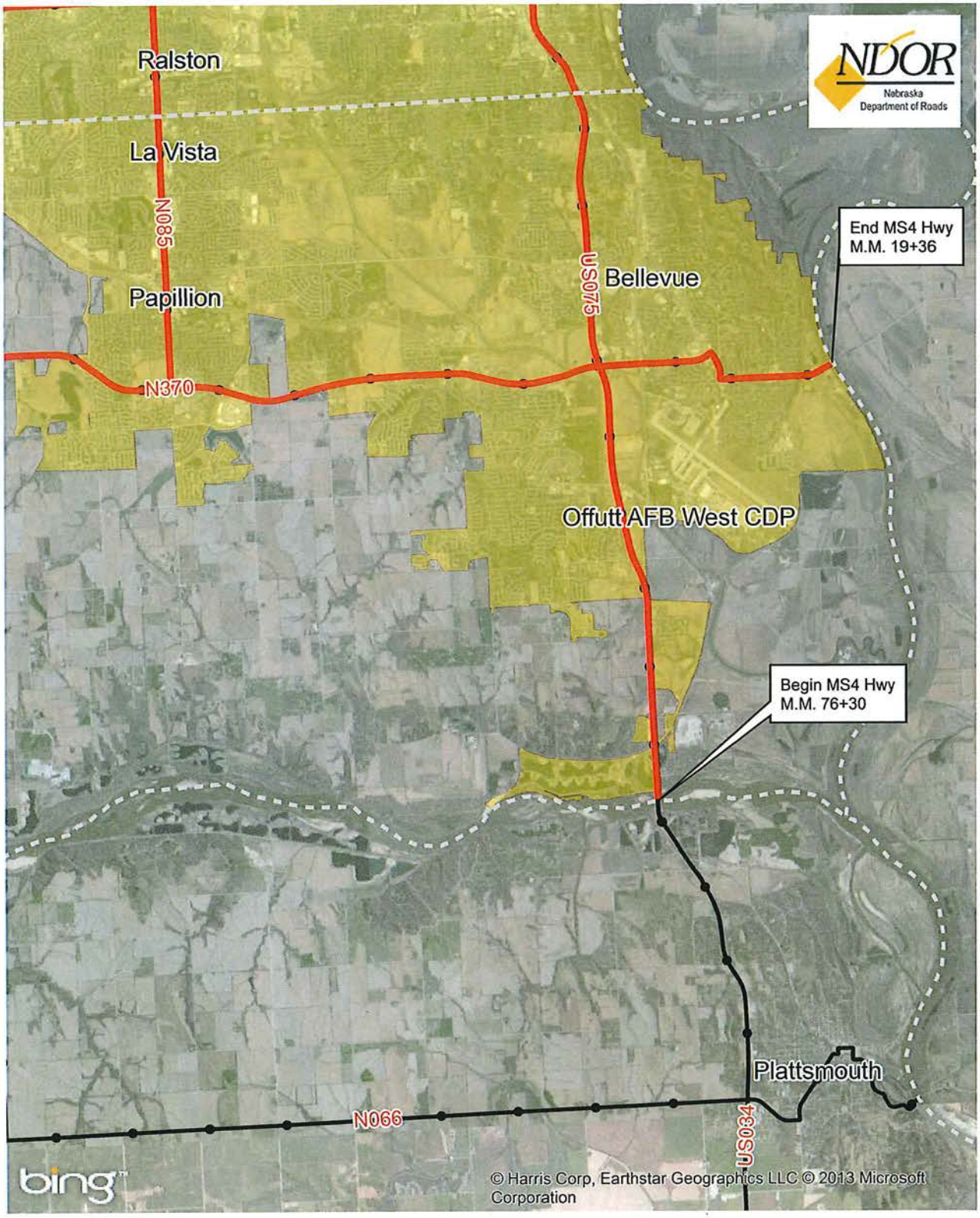
N

0 5,000 10,000 20,000 Feet

Omaha Urbanized Area

NDOR MS4 Area - SW Quadrant

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

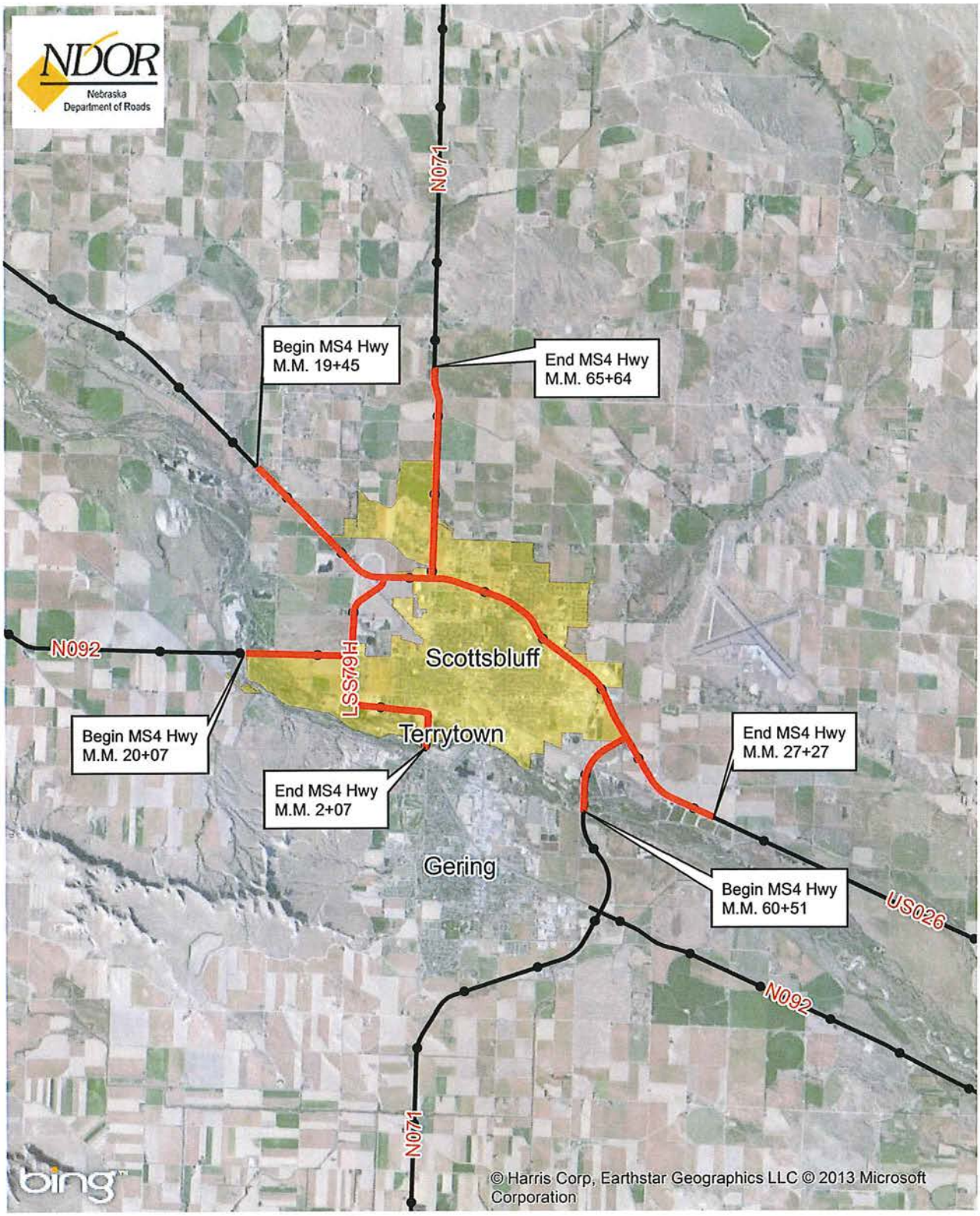
N

0 5,000 10,000 20,000 Feet

Omaha Urbanized Area

NDOR MS4 Area - SE Quadrant

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

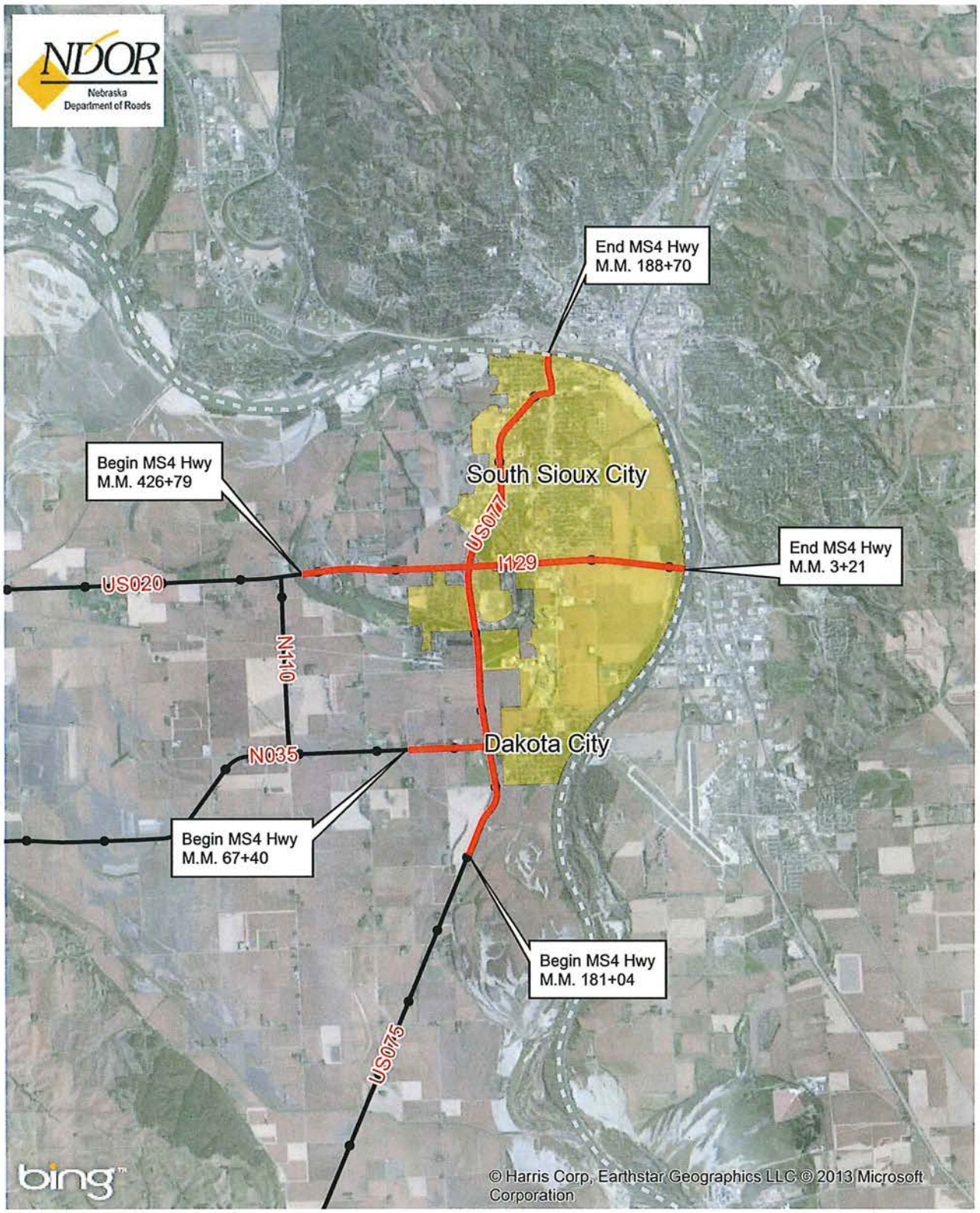
N

0 5,000 10,000 20,000 Feet

Scottsbluff

NDOR MS4 Area

1 inch = 10,000 feet



Legend

- MS4 Highway
- NDOR Non-MS4 Highway
- NDOR Mile Markers
- Urbanized Boundary
- county

N

0 5,000 10,000 20,000 Feet

South Sioux Urbanized Area

NDOR MS4 Area

1 inch = 10,000 feet

APPENDIX B: 2013 STORMWATER EDUCATIONAL ACTIVITIES AND EVENTS

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
Jan 16: Mahoney State Park, NDOR Erosion Control Inspector Certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	43 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan and NDOR's Field BMP Pocket Guide	Full Day Erosion Control Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
Jan 17: Mahoney State Park, NDOR Erosion Control Designer Training	Contractors, Consultants, Municipalities, NDOR Employees	42 Attendees / Handouts include Erosion Control Presentations & NDOR's Field BMP Pocket Guide	Two Day SWPPP Designer Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
January 31: ECO-Database Training Meeting	NDOR Headquarters Environmental Staff	25 Attendees	Introduction of new Green Sheet Review Process using ECO-Database	X		X	X	
January 31: EPA Road Salt Webinar	NDOR Environmental Staff, Operations Staff	8 Attendees	EPA Webinar addressing "Road Salt Prevention Strategies"	X	X			X
Feb 5: Omaha, NDOR Erosion Control Inspector Re-certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	25 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan	Erosion Control Re-certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
Feb 11: CTAG Stormwater Meeting	NDOR Employees	11 Attendees	Quarterly stormwater meeting of the MS4 Compliance Technical Advisory Group	X	X	X	X	X

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
Feb 26: Lincoln, NDOR District 1 Environmental Meeting	NDOR D1 Construction Project Managers and Inspectors	Approx. 35 NDOR Employees	ECO-Database/Environmental Update Meeting for District Construction Staff	X		X	X	
Feb 27: Grand Island, NDOR Erosion Control Inspector Re-certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	14 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan	Erosion Control Re-certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
Feb 27: Grand Island, NDOR District 4 Environmental Meeting	NDOR D4 Construction Project Managers and Inspectors	Approx. 30 NDOR Employees	ECO-Database/Environmental Update Meeting for District Construction Staff	X		X	X	
Feb 28: Holdrege, NDOR District 7 Environmental Meeting	NDOR D7 Construction Project Managers and Inspectors	Approx. 30 NDOR Employees	ECO-Database/Environmental Update Meeting for District Construction Staff	X		X	X	
March 5-7: Kearney, NDOR Project Managers Conference	NDOR Employees and Contractors	Approximately 250 NDOR Employees	Annual Project Managers Conference	X		X	X	
March 5: Kearney, District Environmental Coordinators Meeting	NDOR District Environmental Coordinators and HQ Environmental Staff	20 NDOR Attendees	NDOR Environmental Programs Coordination Meeting with District Staff	X	X	X	X	X
March 12: Scottsbluff, NDOR District 5 Environmental Meeting	NDOR D5 Construction Project Managers and Inspectors	Approx. 20 NDOR Employees	ECO-Database/Environmental Update Meeting for District Construction Staff	X		X	X	
March 13: Scottsbluff, NDOR Erosion Control Inspector Re-certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	15 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan	Erosion Control Re-certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
March 14: North Platte, NDOR District 6 Environmental Meeting	NDOR D6 Construction Project Managers and Inspectors	Approx. 35 NDOR Employees	ECO-Database/Environmental Update Meeting for District Construction Staff	X		X	X	
March 14: North Platte, NDOR Erosion Control Inspector Re-certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	10 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan	Erosion Control Re-certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
March 21: Lincoln, NeFSMA Post Construction Conference	Businesses, Contractors, Consultants, Municipalities, NDOR Employees	4 NDOR Employees Attended	NDOR District 1 Presented on Bio-Swale Project that is located at D1 Construction Office.					
March 26: Norfolk, NDOR Districts 3 & 8 Environmental Meeting	NDOR D3 & D8 Construction Project Managers and Inspectors	Approx. 100 NDOR Employees	ECO-Database/Environmental Update Meeting for District Construction and Maintenance Staff	X		X	X	
March 27: Norfolk, NDOR Erosion Control Inspector Certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	30 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan and NDOR's Field BMP Pocket Guide	Full Day Erosion Control Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
March 28: Lincoln, NDOR Erosion Control Inspector Certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	36 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan and NDOR's Field BMP Pocket Guide	Full Day Erosion Control Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
April 4: Lincoln, NDOR Erosion Control Inspector Re-certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	25 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan	Erosion Control Re-certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
April 9: North Platte, NDOR Erosion Control Inspector Certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	8 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan and NDOR's Field BMP Pocket Guide	Full Day Erosion Control Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
April 16: NDOR Stormwater Program Update	NDOR Administration, Partner Agencies	25 Attendees	Presentation to update NDOR administration and Partner Agencies on NDOR's Stormwater Program.					
April 23: MOU Meeting with Partner Agencies	NDEQ, NDOR & FHWA	25 Attendees	Meeting to discuss NDOR Projects and Environmental Issues					
May 30: Corn Mash Spill Training	NDOR Employees	8 Attendees	Training on how to handle corn mash spills.	X	X			

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
June 18: N Platte, District Environmental Coordinators Meeting	NDOR District Environmental Coordinators and HQ Environmental Staff	18 NDOR Attendees	NDOR Environmental Programs Coordination Meeting with District Staff	X	X	X	X	X
June 20: CTAG Stormwater Meeting	NDOR Employees	11 Attendees	Quarterly stormwater meeting of the MS4 Compliance Technical Advisory Group	X	X	X	X	X
June 27: Lincoln, NDOR Erosion Control Inspector Re-certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	12 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan	Erosion Control Re-certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
July 11: Nebraska City, NeFSMA Floodplain and Stormwater Mgmt Conference	Consultants, Cities, Counties, NDOR Employees, Regulatory Agencies	6 NDOR Attendees	NeFSMA Stormwater Conference.	X		X	X	
July 16: Lincoln, NDOR Erosion Control Inspector Certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	41 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan and NDOR's Field BMP Pocket Guide	Full Day Erosion Control Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
July 29-Aug 1: Lincoln, New Supervisor and Superintendent Training	NDOR Maintenance Supervisors and Superintendents	20 NDOR Employees	Training provided bi-annually or quarterly on all environmental areas related to Supervisors/Supt's job duties.	X	X			X

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
Aug 29th: Lincoln, NDOR Stormwater Treatment Design Course	NDOR Designers, Consultant Designers	25 Attendees	Full day training course to introduce designers to Chapter 3 of the NDOR Drainage Design and Erosion Control Manual titled "Stormwater Treatment within MS4 Communities."	X			X	
Sept 11: Lincoln, NDOR Erosion Control Inspector Certification Training	Businesses, Contractors, Consultants, Municipalities, NDOR Employees, Utilities	33 Attendees / Handouts include Erosion Control Presentations & Example Erosion Control Plan and NDOR's Field BMP Pocket Guide	Full Day Erosion Control Certification Course Sponsored by NDOR and Nebraska Local Technical Assistance Program (NE-LTAP)	X		X	X	
Sept 16: Lincoln, FRCP/SPCC Training	NDOR Employees	10 Attendees	Facility runoff control plan training.	X	X			X
Oct 9: CTAG Stormwater Meeting	NDOR Employees	14 Attendees	Quarterly stormwater meeting of the MS4 Compliance Technical Advisory Group	X	X	X	X	X
Oct 17th: Lincoln, NDOR Stormwater Treatment Design Course	NDOR Designers, Consultant Designers	25 Attendees	Full day training course to introduce designers to Chapter 3 of the NDOR Drainage Design and Erosion Control Manual titled "Stormwater Treatment within MS4 Communities."	X			X	
Oct 22-24: Ashland, NEPA Training	NDOR Staff, Consultants	Approx. 50 Attendees	FHWA Sponsored Course on NEPA and the Transportation Decision Making Process	X				

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
Oct 28-30, IECA 4-State Stormwater Conference	Iowa DOT, Missouri DOT, Nebraska DOT and Kansas DOT	4 NDOR Attendees	Multi State Stormwater Networking Conference. NDOR presented on the status of its Stormwater Program.	X	X	X	X	X
November: Environmental Bulletin Distributed	Contractors and NDOR Construction Staff	Approx. 200-500 people receive the Environmental Bulletin	Routine news bulletin to provide project managers and district environmental staff with current permit requirements, training opportunities and other environmental related guidance.	X		X	X	
Dec 10-11: Grand Island, District Environmental Coordinators Meeting	NDOR District Environmental Coordinators and HQ Environmental Staff	15 NDOR Attendees	NDOR Environmental Programs Coordination Meeting with District Staff	X	X	X	X	X
Dec 18th: Lincoln, NDOR Stormwater Treatment Design Course	NDOR Designers, Consultant Designers	25 Attendees	Full day training course to introduce designers to Chapter 3 of the NDOR Drainage Design and Erosion Control Manual titled "Stormwater Treatment within MS4 Communities."	X			X	
Dec 19: South Dakota, Environmental Peer Exchange Meeting	South Dakota DOT Environmental Staff	10 Attendees	NDOR demonstrated the ECO-Database Program and Highlighted other successful aspects of NDORs Stormwater Program for SDDOT.	X	X	X	X	X
Dec 31: Online SPCC Training	NDOR Employees	46 Attendees	Course is provided to comply with SPCC education requirements for employees that handle oils and fuels.	X	X			X

Education Provided or Information Distributed	Target Audience	Attendance/ Number Distributed	Description	MS4 Program Addressed				
				Water Quality	IDDE	CSW	PCSW	PP/GH
Ongoing: Bi-Weekly Post Construction CTAG Workgroup Meetings	NDOR Post Construction Program Work Group	6 NDOR Employees, 2 Consultant Employees	Regular Meetings to develop Chapter III of Erosion Control and Drainage Design Manual and Draft Treatment BMP Design Guides.	X			X	
Ongoing: Quarterly Environmental Interagency Meetings	DEQ/Corp/USFWS/NGPC/ FHWA/NDOR Environmental Staff and Administration	Approx. 25 NDOR Employees	Quarterly partnership meetings to discuss upcoming projects and programs.	X		X	X	
Ongoing: Weekly MS4 Permit/ECOD Meetings	NDOR Staff/MS4 Consultant	2-6 Attendees	Routine MS4/ECOD development meetings.	X	X	X	X	X
Ongoing: NDOR Environmental Website Outreach	NDOR employees and the general public	7,929 visits to the Environmental Site	Contains information related to the Environmental Section	X	X	X	X	X

APPENDIX C: NDOR NPDES PERMITTED PROJECTS STATEWIDE (2013)

PROJECT NAME	PROJECT NUMBER	NPDES AUTHORIZATION #	PROJECT STATUS
BARNESTON WEST	BR-8-6(106)	NER112841	Construction
WAHOO BYPASS	S-77-2(1025)	NER113855	Construction
WAVERLY - GREENWOOD	IM-NH-80-9(842)	NER111580	Establishment
56TH STREET - WAVERLY INTERCHANGE	IM-NH-80-9(850)	NER112093	Construction
NW 56TH - US-77 S. INTERCHANGE, LINCOLN	IM-NH-80-9(862)	NER114214	Not started
NW 56TH ST BRIDGE, LINCOLN	IM-NH-80-9(864)	NER114213	Not started
HUMBOLDT EAST & WEST	STP-4-7(105)	NER112733	Establishment
US-6 - BEAVER CROSSING	RD-L80E(1010)	NER112843	Establishment
LINCOLN EAST	NH-HSIP-34-6(141)	NER114086	Not started
SEWARD EAST	RD-34-6(1036)	NER113441	Construction
WAVERLY - GREENWOOD	RD-6-6(1048)	NER113444	Construction
AUBURN EAST	NH-136-7(126)	NER114062	Not started
N-112 - BEATRICE	NH-77-1(130)	NER113505	Construction
KANSAS LINE NORTH	RD-73-1(1009)	NER114092	Construction
IN AUBURN	NH-136-7(123)	NER114063	Not started
KANSAS LINE - W JCT N-8	STP-112-1(103)	NER113441	Establishment
US-6/W 40TH STREET, LINCOLN	HSIP-6-6(161)	NER113856	Not started
NEBRASKA CITY NORTH	NH-75-2(171)	NER113548	Construction
HOMESTEAD NATINAL MONUMENT ENTRANCE	FLH-4-6(116)	NER113303	Construction
PAWNEE CITY NORTH	RD-50-1(1008)	NER113566	Establishment
UNION SOUTH	S-75-2(1059)	NER114184	Not started
GRETNA EAST	STPD-370-7(119)	NER111937	Construction
N-36 NORTH, OMAHA	STPD-133-3(102)	NER113221	Construction
I-80/480 - 60TH ST (WB)	S-80-9(1185)	NER113962	Construction
126TH - 96TH ST, OMAHA	S-80-9(1189)	NER113961	Construction
N OF CENTER ST - PACIFIC ST (NB), OMAHA	S-680-9(1190)	NER113960	Construction
MISSOURI RIVER BRIDGE APPROACH, BELLEVUE	NH-34-7(118)	NER112498	Establishment
FREMONT SOUTH BRIDGE	NH-BR-77-3(128)	NER112091	Construction
N-92 EAST	RD-275-7(1041)	NER113506	Construction
FREMONT - US-275	RD-30-6(1041)	NER113507	Construction

PROJECT NAME	PROJECT NUMBER	NPDES AUTHORIZATION #	PROJECT STATUS
US-275 EAST	STP-91-7(108)	NER112607	Establishment
SCRIBNER NORTH	BH-HSIP-275-6(141)	NER112971	Construction
CEDAR CREEK SPUR	STP-S13H(104)	NER114064	Construction
N-1 TO PLATTSMOUTH	NH-34-7(128)	NER113241	Construction
NORFOLK SOUTHEAST	DPS-35-3(105)	NER111490	Establishment
TILDEN SOUTH	STPD-45-3(107)	NER113857	Construction
PETERSBURG - ELGIN	STPD-14-3(112)	NER113511	Establishment
E JCT N-45 - MADISON	STPD-32-5(107)	NER113504	Not started
ALBION WEST	STPD-91-5(118)	NER113404	Establishment
STANTON SOUTH	STP-57-3(107)	NER113501	Construction
IN TILDEN & BATTLE CREEK NORTH	STP-45-3(110)	NER113512	Construction
N-57 - WISNER	NH-275-6(140)	NER31938	Construction
IN COLUMBUS	RD-30-5(1044)	NER114091	Not started
IN MADISON & EAST	STP-32-5(108)	NER114183	Not started
JCT. N-32/US-77	HSIP-32-7(111)	NER114003	Construction
SANTEE SPUR EAST	STP-12-5(116)	NER12A071	Construction
JCT. US-81/N-22 WEST OF COLUMBUS	HSIP-81-3(145)	NER113503	Construction
Santee Slides	Misc-S54D(1005)	NER10000I	Construction
VERDIGRE EAST & SOUTH SLIDES	MISC-14-4(1016)	NER112997	Establishment
IN GENOA	S-22-5(1012)	NER114182	Not started
IN POLK & WEST	STPD-66-5(104)	NER113440	Establishment
RED CLOUD SOUTH	STPD-281-1(112)	NER41877	Not started
US-281 - LOCUST ST., GRAND ISLAND	STP-34-4(126)	NER112920	Establishment
N-78 WEST	STPD-136-4(112)	NER113240	Construction
PLATTE RIVER TO US-81	STPD-92-5(107)	NER113502	Construction
FULLERTON SOUTH	BR-14-2(124)	NER112682	Construction
IN BLUE HILL & SOUTH	STPD-281-1(114)	NER112836	Establishment
CENTRAL CITY NORTH	STP-14-2(127)	NER114107	Not started
BELGRADE NORTH & EAST	RD-52-3(1009)	NER113549	Construction
BUFFALO/DAWSON COUNTY LINE EAST	STP-30-4(155)	NER112922	Establishment
EAST JUNCTION US-281 EAST	STP-74-4(110)	NER112919	Establishment
IN NORTH LOUP AND SOUTH	STP-11-3(120)	NER113500	Construction

PROJECT NAME	PROJECT NUMBER	NPDES AUTHORIZATION #	PROJECT STATUS
IN GUIDE ROCK & SOUTH	STP-78-1(104)	NER114180	Not started
ST PAUL EAST	STP-92-4(112)	NER113247	Construction
KEARNEY EAST	HSIP-80-5(70)	NER112354	Establishment
E. JCT. US-281 - LAWRENCE	STP-4-4(108)	NER114199	Not started
BOELUS EAST	MISC-58-2(1009)	NER114216	Not started
OSHKOSH - LEWELLEN	NH-26-1(157)	NER113963	Construction
SIOUX/BOX BUTTE CO LINE - N-2	STP-71-4(119)	NER113966	Construction
COLORADO LINE - US-30	RD-19-2(1007)	NER113405	Establishment
SUNOL & LODGEPOLE LINKS	STP-L17E(108)	NER113730, NER113729	Construction
CHADRON SOUTH	NH-385-4(134)	NER113959	Construction
SIDNEY WEST	STP-30-1(130)	NER113239	Establishment
POTTER - BROWNSON	IM-BH-80-1(178)	NER113246	Construction
Sidney EB Rest Area Truck Parking	80-1(1041)	NER112581	Construction
WEST OF SUNOL - WEST OF LODGEPOLE	NH-80-2(97)	NER114090	Not started
DUNNING NORTHEAST	STPD-91-3(103)	NER113214	Establishment
BIG SPRINGS - BRULE	STPD-30-2(133)	NER112355	Establishment
SARGENT SOUTH	STPD-183-3(113)	NER113958	Not started
ROSCOE - PAXTON	IM-80-3(105)	NER111934	Construction
SARGENT NORTH	STPD-183-3(115)	NER112349	Establishment
BIG SPRINGS SOUTHWEST	STPD-138-2(107)	NER113509	Construction
COLORADO LINE NORTHEAST	STPD-138-2(108)	NER113508	Establishment
NORTH PLATTE EAST	IM-80-3(136)	NER113460	Establishment
BRADY EAST	IM-80-4(136)	NER112185	Establishment
GOTHENBURG EAST & WEST	IM-80-4(137)	NER112613	Establishment
COZAD - DARR	IM-80-4(138)	NER112612	Establishment
HERSHEY EAST	IM-80-3(140)	NER113965	Construction
PAXTON - LINCOLN CO. LINE	IM-80-3(141)	NER114089	Not started
SUTHERLAND WEST	IM-80-3(143)	NER113245	Construction
GOTHENBURG SOUTH	STR-47-2(1009)	NER113138	Establishment
DISMAL RIVER NORTH & SOUTH	RD-83-3(1014)	NER114181	Not started
GOTHENBURG INTERCHANGE	STR-80-4(1031)	NER114088	Not started
ANSLEY EAST	STP-92-3 (105)	NER113510	Construction

PROJECT NAME	PROJECT NUMBER	NPDES AUTHORIZATION #	PROJECT STATUS
GOTHENBURG - CUSTER CO. LINE	STP-47-2(111)	NER113858	Construction
COZAD SOUTH BRIDGE	STP-21-2(110)	NER113964	Not started
COMSTOCK SOUTH	STP-183-3(116)	NER113244	Establishment
OXFORD SOUTH BRIDGE	BR-46-1(102)	NER113044	Establishment
MAYWOOD - CURTIS	S-23-2(1014)	NER112727	Establishment
HAYES CENTER SOUTH	S-25-1(1008)	NER114087	Not started
BENKELMAN SOUTH	STP-34-2(124)	NER112970	Construction
DANBURY WEST	STPD-89-2(108)	NER113443	Construction
CULBERTSON - MCCOOK	STPD-6-2(122)	NER112192	Establishment
MOOREFIELD EAST & WEST	STPD-23-2(121)	NER113439	Construction
MINDEN EAST & SOUTH	NH-STP-6-4(124)	NER112610	Establishment
RED WILLOW CREEK NORTH	RD-83-1(1023)	NER114093	Not started
CURTIS EAST	STP-23-2(124)	NER113459	Construction
FARNUM ROAD EAST CULVERTS	MISC-18-2(1004)	NER112969	Establishment
ERICSON EAST	STPD-70-4(104)	NER113215	Establishment
SPARKS WEST	STP-12-2(105)	NER113242	Establishment
O'NEILL SOUTHEAST	ER-20-4(124)	NER113289	Establishment
RULO BRIDGE, NEBRASKA APPROACH	BRD-159-7(107)	NER112120	Establishment
RULO BRIDGE REMOVAL	BRD-159-7(109)	NER113699	Construction
PLATTSMOUTH - BELLEVUE, NORTH OF PLATTE RIVER	NH-75-2(172)	NER112834	Construction
PLATTSMOUTH - BELLEVUE, PLATTE RIVER & SOUTH	NH-75-2(173)	NER112735	Construction
PLATTEVIEW INTERSECTION	NH-34-7(124)	NER112089	Establishment
BELDEN EAST BRIDGE	NH-20-6(109)	NER114185	Not started
IN NORFOLK	DPS-35-3(107)	NER111489	Construction
NORFOLK NORTHEAST	DPS-35-3(108)	NER113442	Construction
KEARNEY EAST BYPASS INTERCHANGE	DPS-10-2(114)	NER112599	Construction
KEARNEY EAST BYPASS, 11TH ST. - 56TH ST.	DPS-STP-10-2(116)	NER114217	Not started
KIMBALL NORTH & SOUTH	RD-71-2(1014)	NER112918	Establishment
STAMFORD WEST	STPD-89-2(109)	NER113243	Establishment

APPENDIX D: CURRENT RESEARCH PROJECTS

Research Topic	Description	Status	2013 Expenditure
Feasibility of Integrating Natural and Constructed Wetlands in Roadway Drainage System Design	This research project will collect and analyze data on roadway pollutant discharges and the effectiveness of selected established stormwater BMPs. In addition, it will provide improved design guidelines for future BMP applications considering specific suites of roadway pollutants and constraints such as space and safety. The results of this study will be useful for planning, design, construction, and operation of Nebraska's transportation infrastructure and for implementing BMPs so that NDOR can effectively address the requirements of the NPDES Program.	Complete	$0
Establishing Permanent Vegetation after Highway Construction	The objective of this work was to determine the effect of compost blankets and other types of blankets or soil surface treatments on soil movement and establishment of seeding mixtures on roadway shoulders and backslopes. The rapid establishment of the grass mixture on roadway shoulders and backslopes will reduce the likelihood of soil erosion on roadsides. Erosion on roadsides negatively impacts the aesthetics, stability, maintenance costs, and safety of the roadway shoulders and backslopes. The research found that composted yard waste applied at 1 inch depth improved vegetation establishment, and that topsoil, when added in any soil amendment mixture, aids vegetation establishment. NDOR plans to include composted yard waste in the specifications for an upcoming construction project.	100% Complete. Final report received	$0

Research Topic	Description	Status	2013 Expenditure
Fertilizer Effects on Attaining Vegetation Requirements	This project seeks to determine the interacting effects of application rates of N and P on roadside backslopes shaped from fill (with and without mycorrhizae) or stock-piled topsoil on establishment of NDOR's complex seeding mixture(s) (Type A) and soil movement. The expected benefits will be a more thorough understanding of the multiple interactions occurring on the newly installed native species seeding locations; thereby giving NDOR the ability to adjust project inputs as needed for soil types, project location, and season of installation to best insure the success of the vegetation establishment. Results indicate that addition of topsoil to cut-slope soils results in better vegetation stands. Also, no benefit was found to native vegetation development when nitrogen or phosphorus fertilizer was applied to the plots.	100% Complete. Draft final report received	$2,410
Development and Evaluation of BMPs for Highway Runoff Pollution Control	The goal of this research is to develop and evaluate BMPs that rely on bioretention, infiltration, and slow conveyance of stormwater, to ultimately provide improved water quality. The first objective is to find the combinations of native plant species and growth media that will be sustainable (cost and maintenance effective), while treating the first 0.5" Water Quality Volume. The second objective is to test the feasibility of using shredded tires as an available porous media in structural stormwater treatment BMPs such as infiltration and bioretention systems (BRSs), as well as aggregate media.	100% Just completed	$42,825

Research Topic	Description	Status	2013 Expenditure
Passive Stormwater Samplers for Sampling Highway Runoff from BMPs: Feasibility Study	The objective of this research is to provide an overview and recommendation of samplers that would be optimal for the parameters of this project.	100% Just completed	$21,757
Stormwater Pollution Treatment BMP Discharge Structures	The objective of the proposed work is to identify an effective outlet structure design for stormwater treatment BMPs (detention BMPs). This objective will be achieved by (1) and extensive review of literature on detention based BMPs and BMP outlet structures, and (2) laboratory testing of structures that are not sufficiently documented but hold promise for being effective. The effectiveness of each structure is assessed based on efficiency for removing suspended solids, long-term reliability and susceptibility to obstruction by debris and long-term maintenance requirements.	98% complete	5,280
Diamond Grinding Slurry	Diamond grinding of highway surfaces is a one-time maintenance operation to extend the highway surface life. Concrete grinding residue (CGR) is the byproduct of diamond grinding and has high pH, calcium, potassium, magnesium, and sodium concentrations and small particle size. Disposal of CGR in Nebraska in 2012 changed from unregulated roadside discharge to needing a National Pollutant Discharge Elimination System (NPDES) permit. NDOR needs information regarding the application rates of CGR to roadsides that will maximize the weight applied to a given area, thus minimizing transportation costs for disposal, without causing detrimental impacts to soils properties (chemical and physical) or roadside vegetation.	In progress 65% completed	$12,812
Study of Bridge Deck Runoff from NDOR Highways	The objective of this research is to evaluate the quality of bridge deck runoff, and to determine the effects of bridge deck runoff on surface water bodies in Nebraska by evaluating both water and sediment chemistry as well as effects on aquatic life. The goal of this research project is to identify the potential environmental impacts of bridge deck runoff on receiving streams, and to determine design criteria that can be used by NDOR or regulatory agencies to identify when structural controls for bridge deck runoff may be necessary to protect in-stream water quality and aquatic life.	Phase I complete Phase 2 at 30% complete	$44,244

Research Topic	Description	Status	2013 Expenditure
Improving Wildflower Longevity in Roadside Seeding Areas	This study will test different strategies for establishing and maintaining wildflowers in roadside vegetation stands. Wildflower establishment techniques will be tested in areas of new construction, and wildflower persistence will be tested by seeding into established stands of roadside vegetation and applying management practices such as mowing and interseeding. Drought conditions prevented installed plots from being successful in 2012 and 2013. New sites are being selected for the 2014 growing season.	5% Project is on hold	$16,522

APPENDIX E: NDOR ANNUAL MS4 BUDGET

	2013 Expended	2014 Budgeted
Education and Public Involvement	NDOR Staff: $24,000 MS4 Consultant: $124,000	NDOR Staff: $25,000 MS4 Consultant: $100,000
Illicit Discharge	NDOR Staff: $22,000	NDOR Staff: $23,000
Construction Stormwater	NDOR Staff: $52,000 MS4 Consultant: $90,000 On-Call Consultants: $146,000	NDOR Staff: $53,000 MS4 Consultant: $90,000 On-Call Consultants: $150,000
Post-construction Stormwater	NDOR Staff: $24,000 MS4 Consultant: $55,000 Research: $152,000	NDOR Staff: $25,000 MS4 Consultant: $50,000 Research: $200,000
Good Housekeeping	NDOR Staff: $11,000 MS4 Consultant: $43,000	NDOR Staff: $12,000 MS4 Consultant: $40,000
Program Management	NDOR Staff: $14,000 MS4 Consultant: $55,000	NDOR Staff: $15,000 MS4 Consultant: $50,000
Total MS4 Program Cost	**$812,000**	**$833,000**