

**ENVIRONMENTAL MANAGEMENT PLAN**  
STATEWIDE  
SCOPE OF WORK

*Agreement between CH2M HILL hereinafter called the "Firm", and the North Carolina Department of Transportation, hereinafter called the "State", describing the work to be performed for the development of a statewide Environmental Management Plan.*

**BACKGROUND AND PURPOSE**

The purpose of this project is to develop an environmental management plan for the State. Currently, there is no environmental management/strategic plan that provides specific environmental goals, strategies and performance measures for NCDOT. The North Carolina Department of Transportation adopted its *Strategic Plan for Transportation*<sup>1</sup> in 1999, which identifies several objectives that embrace environmental stewardship. In 2002, NCDOT adopted the *Environmental Stewardship Policy*<sup>2</sup>, which encourages every employee to be environmental stewards in their day-to-day responsibilities. In addition, several offices within NCDOT have embraced the *Environmental Stewardship Policy* by implementing environmental considerations into work plans and unit objectives. The Division of Highways (DOH) began the development of a business plan in January 2004. DOH's plan includes a subsection on environmental excellence that lists environmental performance goals and measures specific for each of its divisions. As part of the environmental permit process improvement initiative (Merger 01), a multi-agency team was chartered to develop environmental performance measures. The team was active throughout 2002-03, and developed a list of about 150 possible environmental performance measures. While some selection criteria was developed to narrow down and select a short list of environmental performance measures, the team stopped work due to workload issues. In 2005 the department also initiated the development of strategic business plans for all units/divisions/offices, which included a subheading on environmental excellence.

Throughout the past decade the importance of consideration of both the natural and human environments has become more prevalent in the daily operations of NCDOT. Environmental interests, whether required by law or initiated voluntarily, have been a critical element in establishing NCDOT as a national leader in the considerations of environmental issues during transportation planning, design, construction, maintenance and operations. However, even though some internal practices have set a high environmental standard there has been no strategic plan and few, if any, metrics and systems implemented to measure environmental performance. It is anticipated that a department-wide Environmental Management Plan will establish measurable environmental strategies applicable throughout the department, across all functions and transportation modes.

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<sup>1</sup> <http://www.ncdot.org/planning/StrategicPlan/SPBROCHURE.pdf>

<sup>2</sup> [http://www.ncdot.org/environment/download/environmental\\_policy.pdf](http://www.ncdot.org/environment/download/environmental_policy.pdf)

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**DESCRIPTION OF WORK**

NCDOT will develop and adopt an Environmental Management Plan that identifies specific objectives, goals and measures that institutionalizes an environmental ethic throughout the department. The Environmental Management Plan will integrate and compliment the *Strategic Plan for Transportation* and the *Environmental Stewardship Policy*. In addition, the Environmental Management Plan will incorporate the Division of Highway's business plan and any other environmental related guidance documents or strategic plans that may be revealed during scoping, stakeholder involvement, and management plan development. It is key that the Plan be developed through a collaborative internal approach that allows individual ownership from all employees, including but not limited to managers, engineers, administrative personnel, maintenance workers, equipment operators, planners, etc. The Plan *may* involve a highly selective group of external partners during the stakeholder involvement and development stages. The development phase of the Environmental Management Plan will be the first of two phases. The second phase, implementation, will occur in 2006. It will be critical that an implementation plan be developed for institutionalization of the Environmental Management Plan by NCDOT in 2005. The implementation plan should include a recommended methodology for reporting progress on the overall Environmental Management Plan, including a system for gathering and analyzing performance; a communication strategy for implementation; and a process for updating the Plan.

The Environmental Management Plan will be a comprehensive, industry-leading strategic plan that will serve as a framework to:

- Integrate all current environmental initiatives within the NCDOT,
- Identify and communicate specific environmental objectives, goals and measures for all of NCDOT,
- Cost effectively measure successes and continual improvement in environmental initiatives, and
- Promote, reinforce and continue to institutionalize the already strong environmental ethic throughout the NCDOT.

The Plan will identify unique objectives, goals, and measures that will allow the department to focus on its customer needs, identify opportunities for improvement, and recognize when success has been accomplished. The Plan will clearly define specific environmental goals, set a framework to determine results, and drive the department toward overall environmental stewardship. The Plan must also be achievable, workable, and realistic. Most notably, the Plan should support the institutionalization of the *Environmental Stewardship Policy*.

- A. All parties understand that the work consists of providing professional strategic planning services to the Department of Transportation.

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- B. The Firm shall provide neutral facilitators that have expertise in strategic planning, change management, communication strategies and team facilitation, and experience working with career government employees and senior leadership in large, complex organizations. The Firm shall also have experience with developing environmental performance measures and associated tracking systems.
- C. The Firm shall conduct appropriate scoping in order to gain a thorough understanding of stakeholder needs and expectations, as well as perceptions of State's performance, relative to environmental management and stewardship.
- D. The Firm's staff shall guide discussions with career government employees and senior leadership to formalize commitment to development and implementation of the Plan, as well as a change management/implementation plan to ensure that the commitment leads to changes in behaviors and actions, as indicated by improvements in overall performance indicators.
- E. The Firm shall provide all administrative support for meetings including, but not limited to, establishing the agendas for meetings, recording discussion content, providing debriefs, conducting overall meeting planning, convening and leading large and small group briefings and discussions, and preparing draft and final meeting reports for dissemination.
- F. The Firm shall provide all project documentation and the final project report in writing to Ms. Julie Hunkins, Director, Office of Environmental Quality with copies to Mr. Ehren Meister, Project Manager, Office of Environmental Quality. The Firm shall prepare all reports in accordance with applicable State and Federal regulations and policies.
- G. The State's Project Manager and the Contract Administrator will collaborate with the Firm to identify the project's milestones and expected completion dates. The project expectations and milestones will be separated into three Tasks (Statement of Work One, Two, and Three) that will identify the specific deliverables, schedule, and itemized costs associated with each task. Each Task/Statement of Work will coincide with the deliverables and schedule identified in the project Scope of Work. The Firm shall prepare each Task/Statement of Work in accordance with applicable State and Federal regulations and policies.
- H. The State shall provide ready access to relevant project information, including but not limited to historical information from the Project Manager(s) and project files.

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- I. The State will assist the Firm with coordination of the project and review of completed material provided by the Firm in an expeditious manner so as to facilitate preparation and acceptance of the documents.

**APPROACH**

The Firm's project approach is based around the need for effectively developing environmental goals, strategies, and performance measures that are relevant to establish an environmental ethic within and across the State but which is workable, realistic and achievable.

The approach will be to provide State the unique and genuine plan that local conditions and experiences require. At the same time, the Firm will draw upon the similar plan frameworks that were successfully developed in such States as Washington DOT, Idaho DOT, and the Washington State Ferry System. The use of core elements within these successful frameworks will allow the State project to be performed expeditiously and within the desired schedule, and guarantee a base level of quality for the final product.

The Firm will provide the State with a local team, led from Raleigh with key support from Charlotte.

Defined work tasks are provided below:

**TASK ONE – PREPARATION, BACKGROUND, CHARTERING:**

**TASK 1-A: PRE-PROJECT CONFERENCE (CHARTERING/PLANNING WORKSHOP);  
ASSOCIATED WITH DELIVERABLE 1**

Members of the Firm will convene, lead, and participate in a half-day Chartering/Planning Workshop with the core project team members, which includes senior management from State along with other potential partners (Appendix A). One objective of the workshop is to charter the combined project team. The chartering session will ensure that the core project team members have a clear understanding of the purpose, goals, critical success factors, operating guidelines, as well as of the team member roles and responsibilities.

The second objective is to review and validate the work plan. Used by all participants in the project, the project work plan will provide information and guidance on budget monitoring, reporting, quality control, and communications. The project work plan also includes a schedule and procedure to monitor project progress. All tasks with their associated schedule and resource requirements will be clearly defined and endorsed.

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The third objective is to gather input, insight, guidance, and direction from the core project team regarding the work to be accomplished. The topics will include but not be limited to:

- Identification of any existing information to be reviewed by Firm
- Identification of key personnel to be interviewed
- Key topics for interviews with others

The results of this workshop will be documented in the form of a project charter, a finalized work plan, and a summary of the guidance/direction topics listed above.

TASK 1-B: CONSOLIDATE AND INTEGRATE EXISTING INFORMATION; ASSOCIATED WITH DELIVERABLES 2, 3, 4, 5, & 6

The Firm will review existing information that has been provided by state, and any additional information deemed important by the state core project team. This information gathering and review will focus on, but not be limited to, issues associated with the timely delivery of North Carolina's transportation program with environmental excellence.

While all relevant sources of information will be reviewed, the Firm anticipates some of the most relevant data will be found within the Merger 01 Process and Environmental Stewardship and Streamlining documentation. As part of this proposal process and based on previous experience, the Firm's staff has developed some conceptual core environmental goals for initial discussion of the management plan framework. These conceptual goals will be further refined through this phase of the approach.

Firm will also develop a list of open issues and questions that need resolution or clarification. These issues will serve as the basis for the development of interview questions that will be asked of key stakeholders. This information will be reviewed with the core project team.

The Firm will provide a summary of the findings. These findings will be provided to the core project team and will be used in the following workshop.

TASK 1-C: WORKSHOP TO REVIEW DRAFT FRAMEWORK; ASSOCIATED WITH DELIVERABLE 6

Using the information developed in the previous steps, a half-day Strategic Planning Workshop with the Core Project Team will be conducted to review the draft framework. This framework and the previous work will be reviewed and refined as necessary. Listed below are the components of the management plan, all of which will be confirmed, refined or developed in this workshop at an intermediate level:

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1. Vision
2. Mission
3. Values
4. Goals/Objectives
5. Strategies
6. Action plans for the strategies
7. Responsibilities for the strategic action plans
8. Performance Measures

As a result of the workshop, Firm will develop a draft Management Plan document and visuals for stakeholder meetings. Firm will also participate in follow-up discussions to resolve open or unanswered issues.

TASK 1-D: PROJECT STATUS REPORTS; ASSOCIATED WITH DELIVERABLE 11

Firm will provide monthly status reports to State. These reports will include a summary of achievements made during the previous month, any changes to the work plan made in conjunction with DOT, a list of any issues/challenges encountered during the reporting period, and planned activities for the upcoming month.

**TASK TWO – CONTACT, DELIVERY, WORKSHOPS:**

TASK 2-A: FOCUS GROUPS WORKSHOPS TO REVIEW PRELIMINARY FRAMEWORK; ASSOCIATED WITH DELIVERABLES 5 AND 6

To involve and gain commitment from other State personnel along with other stakeholder personnel, Firm will conduct a series of seven focus group workshops.

The focus group workshops will be held at various locations around the state including:

- Division 13 Office in Asheville
- Division 9 Office in Winston-Salem
- Division 5 Office in Durham
- Division 6 Office in Fayetteville
- Division 2 Office in Greenville
- DOT Headquarters in Raleigh (2 sessions)

3-hour sessions will be scheduled at each location. The purpose of these workshops will be to convey information and gather feedback from personnel who may not readily be able to attend meetings in Raleigh. For convenience, these workshops will be open to all interested parties, including but not limited to Ferry Division staff and Division of Highway field staff. Core meeting materials

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for the division workshops will be similar. In these focus group workshops, input and feedback will be obtained for the draft framework. These focus groups will have a cross representation of personnel from the different divisions and branches involved with this initiative. State will identify and invite attendees, and coordinate the scheduling of the workshops. The intent will be to meet the operational needs of the DOT.

Following the seven workshops, a 2-hour meeting with the Core Project Team will be conducted to review the input and feedback obtained from the focus groups for the draft framework. This framework and the previous work will be reviewed and refined as necessary.

TASK 2-B: DEVELOP PERFORMANCE MEASURES AND SYSTEMS FOR  
IMPLEMENTATION/CHANGE MANAGEMENT; ASSOCIATED WITH DELIVERABLES 7  
AND 8

The Firm's experience with similar projects indicates that some work can begin on the performance measures in the early phase of the project. However, the majority of this work is most effectively conducted once a draft plan has been developed. More concisely, it is important to have consensus on the critical components to be measured prior to developing measurement criteria.

The Firm's approach to developing, monitoring, and managing environmental performance measures combines the Firm's knowledge of pre-construction, construction, operations, and maintenance with the Firm's knowledge of management systems. The Firm's approach keeps the implementation of new processes and procedures to the minimum.

To track and monitor environmental performance, Firm develops detailed implementation plans for identified objectives and targets. These environmental action plans include not only new programs to address gaps in performance, but also maintenance of existing programs to assure that operations are conducted in conformance with established standards and practices. The environmental action plans describe how targets will be achieved (i.e., specific actions that will be taken), identify personnel responsible and accountable for achieving the stated objectives and targets, and establish time frames for achievement. A calendar-based system to track completion of items included in the action plans can be developed based on dates included in the action plans. The tracking system, as appropriate, can also include notices to the responsible party and their supervisor if an action item completion date is missed. Completion dates can be modified; however, a reason for the change will be required on the action plan. In keeping with the objective of building on existing systems, Firm will utilize State's information management system to the greatest extent possible when developing the tracking system.

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It is noted that the objective of the project is for a higher level strategic plan with performance measures; it, however, is not a rigorous environmental management system (EMS). An EMS can be developed for each division or sub-division in the future. Firm will build upon any EMS's that are underway, including the Ferry Division.

**TASK 2-C: FOCUS GROUP WORKSHOP TO REVIEW PERFORMANCE MEASURES;  
ASSOCIATED WITH DELIVERABLES 7 AND 8**

To involve and gain commitment from State and other stakeholder personnel, Firm will conduct 1 performance measurement workshop in Raleigh. The Firm will facilitate one 4-hour workshop with selected department representatives. In this workshop, input and feedback will be obtained for the establishing, implementing, and updating environmental performance measures. This focus group will have a cross representation of senior personnel from the different stakeholders involved with this initiative as determined by the core project team (Appendix A).

**TASK 2-D: ALTERNATIVE STAKEHOLDER INPUT TECHNIQUES; ASSOCIATED WITH  
DELIVERABLE 11**

The Firm has experienced the best success with stakeholder input through workshops. Other techniques, such as project web sites, conference calls, CDs, billings and questionnaires have also been utilized.

Per discussions with the State, the use of alternative techniques will not be used. However, the project has a page on the State website. Firm will provide electronic copies of technical memorandums, monthly progress reports and schedules to State. State will update the web page as appropriate.

**TASK 2-E: PROJECT STATUS REPORTS; ASSOCIATED WITH DELIVERABLE 11**

Firm will provide monthly status reports to State. These reports will include a summary of achievements made during the previous month, any changes to the work plan made in conjunction with DOT, a list of any issues/challenges encountered during the reporting period, and planned activities for the upcoming month.

**TASK THREE – FOLLOW-UP, DRAFT PLAN, FINAL PLAN:**

As a result of Task Two, Firm will develop a draft and final Management Plan document. Firm will also participate in follow-up discussions to resolve open or unanswered issues.

**TASK 3-A: DRAFT PROJECT REPORT/PLAN; ASSOCIATED WITH DELIVERABLE 6**

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The Firm's approach is to produce a written summary of all the findings and work related to these tasks. Firm expects to have additional interaction with individual members of the Core Project Team to finalize these written findings.

TASK 3-B: IMPLEMENTATION WORKSHOP; ASSOCIATED WITH DELIVERABLES 6  
AND 9

A half-day Implementation/Integration Workshop will be conducted in Raleigh to develop and integrate the final implementation plans for the strategies. An integrated schedule of these actions will also be developed in this meeting. This workshop will also develop a communication plan focusing on gaining buy-in, commitment, endorsement, and momentum for this initiative. In addition, a change management plan will be developed in advance to address possible changes that may impact this initiative.

Firm will produce the final implementation plan for this initiative as a result of this workshop. This implementation plan will be reviewed with the Core Project Team and final modifications will be made as necessary.

TASK 3-C: FINAL PROJECT REPORT/PLAN; ASSOCIATED WITH DELIVERABLES 6  
AND 10

The final step of the Firm's approach is to produce a written summary of all the findings and work related to these tasks. This would include all deliverables along with the presentations converted in a narrative report format. Firm expects to have additional interaction with individual members of the Core Project Team to finalize these written findings. This written summary of findings will serve as the final deliverable for this project.

TASK 3-D: PROJECT STATUS REPORTS; ASSOCIATED WITH DELIVERABLE 11

Firm will provide monthly status reports to State. These reports will include a summary of achievements made during the previous month, any changes to the work plan made in conjunction with DOT, a list of any issues/challenges encountered during the reporting period, and planned activities for the upcoming month.

**PROJECT SCHEDULE AND DELIVERABLES**

1. Be consistent with and build off of existing departmental environmental-related plans, initiatives and activities.
2. The Plan will take into consideration any departmental environmental-related reports, studies, and information.
3. The Plan will be developed and documented prior to the end of the 2005 calendar year.

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4. The Plan will be developed with the input from internal stakeholders. The input should be meaningful but should be accomplished in a manner that minimizes staff time to the maximum extent possible.
5. The Plan should consider the job responsibility aspects of all DOT employees.
6. The Plan and its documentation will be user friendly and written in a way that is easy to comprehend.
7. The Plan will be developed and documented as an initial phase. The implementation phase of the Plan will begin in the 2006 calendar year.

It is anticipated that the process to develop the Environmental Management Plan will begin in September 2005, and the final Plan will be fully documented by January 31, 2006.

Understanding that the due dates indicated are contingent upon commencement dates, the following chart details the major activities to be performed by the Firm:

Sub Task	Deliverable	2005-06					
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Conduct Pre-project conference chartering/planning workshop	1	◆					
Consolidate & integrate existing information	2, 3, 4, 5, 6	■					
Conduct core team workshop to review consolidated information & draft framework			◆				
Conduct stakeholder meetings to review draft framework (east, west, central)			■				
Establish performance measures	7, 8		■				
Hold performance measures workshops (Raleigh)				■			
Submit draft document to STATE					◆		
STATE reviews					■		
Incorporate comments/finalize document						■	
Submit final document to STATE	9,10					◆	
Conduct implementation/integration meeting						■	
Project management		■					

## Appendix A

### Recommended EMP Core Team

	<b>NCDOT Function</b>	<b>Tentative Senior Level Representative</b>
1	Environmental Quality	Julie Hunkins
2	Project Development & Environmental Analysis	Greg Thorpe
3	Program Development	Calvin Leggett
4	Transportation Planning	Mike Bruff
5	DOH – Field Operations	Bill Rosser
6	DOH – Roadside Environmental	Don Lee
7	DOH – Preconstruction	Debbie Barbour
8	Transit – Rail	Shirley Williams
9	Transit – Aviation	Rick Barks
10	Business & Administration	Michael Deeker
11	vacant	
12	vacant	

### Proposed Focus Group Workshop Teams

<b>NCDOT Location</b>	<b>Tentative Number of Attendees</b>
Asheville Office	15
Winston-Salem Office	15
Fayetteville Office	15
Greenville Office	15
Durham Office	15
Raleigh Headquarters – Transportation Building	20
Raleigh Headquarters – Transportation Building	20

### Proposed Performance Measurement Workshop Team

<b>NCDOT Location</b>	<b>Tentative Number of Attendees</b>
Raleigh Note: Includes core team and selected others	20