To: New York State Department of Transportation

ENGINEERING INSTRUCTION

EI 01-020

Title: Context Sensitive Solutions (CSS)

Distribution:

- Manufacturers (18)
- Main Office (30)
- Local Govt. (31)
- Regions/Agencies (32)
- Surveyors (33)
- Consultants (34)
- Contractors (39)

Approved:

/s/ Paul T. Wells 08/27/01
Paul T. Wells, Chief Engineer,
Office of Engineering

ADMINISTRATIVE INFORMATION:
This Engineering Instruction (EI) is effective immediately. This EI does not supersede any previous issuances. The principles of CSS will be incorporated into updates of the Scoping and Design Procedure Manuals, the Highway Design Manual, Construction Inspection Manual (Murk Part 1B), Construction Supervision Manual and other Department manuals as appropriate.

PURPOSE:
This EI implements the Department’s Environmental policy with respect to Context Sensitive Solutions (CSS) in Department projects to ensure that:

1. Projects developed by the Department reflect the principles of CSS.
2. Department projects incorporate Public Involvement Plans as described below.

BACKGROUND:
When The National Highway System Designation was enacted in 1995 (23 USC 109(c)), the Design Criteria stated that designs may take into account:

- the constructed and natural environment of the area
- the environmental, scenic, aesthetic, historic, community and preservation impacts of the activity and
- access for other modes of transportation.

In 1997, FHWA produced the “Flexibility in Highway Design” document that grew out of FHWA’s strategic objective of providing safe and community friendly transportation projects nationwide.

In response to this national initiative along with its existing environmental ethic, NYSDOT has taken proactive steps to incorporate environmental and community concerns into the Department’s project development process. In 1998, NYSDOT adopted an Environmental Initiative that enabled and encouraged designers to go above and beyond federal and state mandated environmental mitigation requirements. The EI 99-026 Environmental Initiative Guidelines and Procedures (www.dot.state.ny.us/eab/envinit.html) along with the Department Policy titled Environmental Policy dated June 6, 2000, promoted the advancement of Context Sensitive Design in the Department’s project development process. Recognizing that context sensitive principles span well beyond the realm of design, the Department has moved to adopt “Context Sensitive Solutions”.

_______ ( )
PRINCIPLES OF CONTEXT SENSITIVE SOLUTIONS (CSS):
CSS is not a separate process or set of standards. CSS is a philosophy that guides NYSDOT in all phases of project development, from planning through project scoping, design and into construction and maintenance. CSS strives for outcomes that meet transportation service and safety needs, as well as environmental, scenic, aesthetic, cultural, natural resource, and community needs. Context sensitive projects recognize community goals, and are planned, scoped, designed, built and maintained while minimizing disruption to the community and the environment.

CSS is not an aesthetic treatment, rather, CSS involves developing a transportation solution to fit into its context. The purpose of the CSS approach is to identify and address both transportation and project area needs during project development. CSS requires the flexibility to consider alternative solutions that can benefit a broad range of stakeholders, while recognizing the fiscal constraints and the limits of NYSDOT’s mission as a transportation agency. Effective transportation solutions that fit the project’s context, rather than project enhancements, are the purpose of CSS.

CSS maintains safety and mobility as priorities, yet recognizes that these are achieved in varying degrees with alternative solutions. Utilizing the CSS philosophy, DOT design professionals determine which safe solution best fits, given the site’s conditions and context. CSS is about making good engineering decisions.

The decision as to how to best balance competing values remains the responsibility of NYSDOT design professionals. The current procedures include provisions for flexibility in design by allowing design exceptions as non-standard features and/or non-conforming features. As always, it is a requirement to properly justify and document all design exceptions. (See Highway Design Manual Chapter 2)

CSS can affect all design elements; therefore project costs may increase, decrease or be unchanged as compared to the traditional design approach. Cost issues must still be addressed during project development, as is the case with all technical and environmental constraints. CSS adds value to the process by helping the Department identify and work with stakeholders to develop projects that are sensitive to their context. The CSS approach does not imply that there will always be unanimity among stakeholders, nor does it eliminate the Department’s responsibility to exercise engineering judgement in balancing trade-offs.

The cornerstone of successful CSS is Public Involvement (PI). Early, effective and continuous PI fosters meaningful participation and a sense of ownership in the project development process. Effective PI encourages an understanding from both sides, external and internal, of what the issues are. The open collaboration and exchange of information and concerns between NYSDOT and stakeholders can promote consensus for project outcomes and trust among all stakeholders.

All projects need some form of public outreach. On smaller projects, at the very least, facility users should be notified of upcoming projects that will affect their travel patterns. Communities should be coordinated with when determining construction schedules.

Context Sensitive Solutions strive to achieve the following goals:
- The project is in harmony with the community and it preserves or improves the environmental, scenic, cultural, natural resources and economic viability of the area.
- The project addresses both transportation and community needs as developed by a full range of stakeholders e.g.: the Department, local governments, community groups, facility users, and other agencies.
- The project incorporates early and effective Public Involvement.
- The project identifies and addresses community issues through a continuous, structured format as appropriate for information exchange (Citizens’ workshops, Advisory Committees, etc.), and active partnership with municipal or other Federal/State/Local agencies.
- The project incorporates innovative and safe solutions that add value for the user and the community.
- The project is designed, built and maintained with minimal disruption to the community.
CONSTRUCTION AND MAINTENANCE:
Projects should be built and maintained in a manner fulfilling commitments made during Scoping and Design:
C Construction and Maintenance input is integral during project Scoping and Design.
C Maintenance resolutions with local communities may be necessary and should be encouraged for certain project features.
C Information on commitments and constraints developed during Scoping and Design can be transferred to Construction and Maintenance via the Environmental Commitments and Obligations Package (ECOPAC) or other means.
C Projects in Construction may warrant an individual Construction PI plan.

IMPLEMENTATION:
CSS implementation is project or program specific, and details vary depending on the community and the issues. However, CSS projects follow these guidelines:
C Full commitment to the process by NYSDOT management and staff.
C Early establishment of an inter-disciplinary, project team, initiated in the planning stage and continued through construction.
C Development of a Public Involvement plan as described below.
C Identification and involvement of the full range of stakeholders in project scoping. Project area problems are identified and agreed to before determining project objectives and solutions. See Appendix A for a list of possible internal and external stakeholders.
C The landscape, the community and valued resources are understood before scope closure.
C Open and continuous communication exists with all stakeholders, by tailoring the public involvement process to the individual project and community needs.
C A full range of tools is used as appropriate to communicate project information (visualizations, internet, etc.).
C Multiple project alternatives, including community proposals, are fully considered.

PUBLIC INVOLVEMENT (PI) PLANS
The purpose of the PI plan is to ensure that effective public outreach occurs during the project development process. Generally, projects of a lesser scope that do not require a full design report, such as Preventive Maintenance and Safety/Requirement Projects may not warrant a formal PI plan, provided there is public outreach during the project initiation stage. For these projects, the public outreach may be done in coordination with other simple projects. For example, the RPPM or other designated Regional contact could present a list of such proposed projects to appropriate local officials. At that time, the local officials are given the opportunity to review and comment on the proposed projects with regard to any community issues that may be relevant to the scope of the project. If these issues are of significant community interest (villages, scenic byways, recreational areas, etc.) they may warrant project specific PI plans as described in the next paragraph.

Projects of greater scope warrant development of a specific PI plan consistent with their complexity and potential for community concerns. It is at the Region's discretion, but it is recommended that the PI plan be developed by the Project Manager in coordination with the Region's Public Information Officer. PI Plans are developed during the Scoping phase and modified as necessary throughout project development. The PI plan should be submitted with the Project Scoping Report for approval.

PI plans should:
C Identify all stakeholders including community interests, facility users, resource agencies and municipalities.
C Outline the methods that will be used to communicate project information in an understandable way to the public.
C Identify the community outreach and feedback mechanisms to be used during all phases of the project development process, which may include Citizen Advisory Committees.
An example of a PI plan outline is attached as Appendix A. Additional guidance on PI plan development will be incorporated into the Scoping and Design Procedure Manuals and other Department manuals as appropriate.

**ROLES AND RESPONSIBILITIES:**
The Regional Directors, Functional Group Managers, and Main Office Division Directors are responsible for incorporating the principles of CSS and Public Involvement into their project development processes. Regional Public Information Officers are a resource on public outreach for the project team. The Design Division’s CSS/Environmental Initiative Team is responsible for updating guidance and the exchange of best practices information pertaining to CSS and Public Involvement. Every Regional Office has a CSS representative who is available for information regarding CSS and Public Involvement or to offer specific project related guidance.

**TRANSMITTED MATERIALS:**
Public Involvement Plan Checklist (Appendix A to this EI)
Sample Public Involvement Plan (Appendix B to this EI)

**RELATED ISSUANCES and GUIDANCE:**
EI 99-026 - Environmental Initiative Guidelines and Procedures
NYSDOT Environmental Policy dated June 6, 2000
Scoping Procedure Manual
Design Procedure Manual
Highway Design Manual
Public Involvement Techniques for Transportation Decision Making, Federal Highway Administration FHWA, HI-00-025, 1999.

**CONTACT PERSON:**
Questions may be addressed to Philip Bell of the CSS/Environmental Initiative TEAM at (518) 457-4460 or by e-mail to pbell@gw.dot.state.ny.us. For Department staff, more information is available on the CSS IntraDot site at: http://intradot/design/lab/context/css.html.
Context Sensitive Solutions EI 01-020
Appendix A
Public Involvement Plan Checklist

Name of Preparer: ___________________________ Date Prepared: ____________
Preparer’s Functional Area: ___________________________
PIN: ___________________________
Route/Description: __________________________________________________________________________
Municipality (s): __________________________________________________________________________
Current Phase (check one) __Scoping ___Phase I-IV ___Phase V-VI ___Construction ___Other

Project Schedule as of Date Prepared
IPP Approved. . . . . . . : __________
Scoping Approval . . : __________ Design Approval . . . . . : __________
PS&E. . . . . . . . . . . . . . . . : __________
Construction Begins . . : __________ Construction Completion . . : __________

1. IPP update (please attach approved IPP)

List changes that have occurred since IPP:

2. Project Data
Funding . . . . . . . . : ____Fed-Aid NHS  ____Fed-Aid Non-NHS  ____100% State
Check Project Type (s): ___NEPA Class I  ____NEPA Class II  _____NEPA Class III
____SEQR Non-Type II  ____SEQR Type II
Brief Description of Project Work ________________________________________________

____________________________________________________________________________________

NYSDOT person designated as community contact __________________________________________
Public Involvement prior to IPP (y/n) _____________________________________________________
If yes, describe ________________________________________________________________________

Attach relevant correspondence and/or meeting minutes.

Fill out the following as appropriate to current phase:

3. Project Scoping
PI Objectives in Scoping: 1. Identify Stakeholders
2. Inform stakeholders of project and proposed project scope/needs.
3. Gather information on the project context.

3.1 Identify Stakeholders
List Internal Stakeholders: (e. g., Regional Design Group; Regional Structures Group; Regional Landscape/Environmental Group; Regional Traffic and Safety Group; Regional Construction Group; Regional Maintenance Group.)
List External Stakeholders: (e.g., Municipal/County/Legislative Officials, impacted/interested parties, special interest groups, local citizens, traveling public)

3.2 Potential community concerns: __________________________________________________________________________
3.3 Communication Methods to be Used to Inform Stakeholders  (select and describe as appropriate):

Meetings with public officials: ____________________________________________________________

Public information meetings: ____________________________________________________________

<table>
<thead>
<tr>
<th>Is a citizen’s advisory committee necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>If yes, attach description of how it will be organized, list committee make-up and affiliation, and committee objectives.</td>
</tr>
</tbody>
</table>

Other public involvement techniques:

<table>
<thead>
<tr>
<th>Direct mailings</th>
</tr>
</thead>
<tbody>
<tr>
<td>News releases</td>
</tr>
<tr>
<td>Media advertisement</td>
</tr>
<tr>
<td>Kiosks</td>
</tr>
<tr>
<td>Internet</td>
</tr>
<tr>
<td>E-mail or telephone hot line</td>
</tr>
<tr>
<td>Other actions</td>
</tr>
</tbody>
</table>

3.4 Schedule for Public Involvement Activities (list or attach; reference to project milestones)

<table>
<thead>
<tr>
<th>4. Design</th>
</tr>
</thead>
</table>

PI Objectives during Design:

Preliminary Design: Summarize information gained from Scoping. Seek consensus on preferred alternative.

Detailed Design: Update stakeholders on progress, discuss any necessary changes.

4.1 Information

List Internal Stakeholders: (e.g., Design (including Structures and Landscape/Environmental), Traffic and Safety, Construction and Maintenance)

List External Stakeholders: (e.g., Municipal/County/Legislative Officials, impacted/interested parties, special interest groups, local citizens, traveling public)

4.2 Communication Methods to be Used  (select and describe as appropriate)

<table>
<thead>
<tr>
<th>Meetings with public officials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public information meetings</td>
</tr>
<tr>
<td>Meeting formats</td>
</tr>
<tr>
<td>Brochure</td>
</tr>
<tr>
<td>Visualizations</td>
</tr>
</tbody>
</table>

| Other public involvement techniques: |
| Direct mailings |
| News releases |
| Media advertisement |
| Kiosks |
| Internet |
| E-mail or telephone hot line |
| Other techniques |
4.3 Schedule for Public Involvement Activities (list or attach; reference to project milestones)

5. Construction Phase

PI Objective During Construction: Inform and maintain contact with affected Residents/Businesses/other stakeholders concerning construction activity schedule and impacts.

5.1 Issues requiring continued public outreach:
- Maintenance and protection of traffic (MPT)
- Public education for operational features (e.g., roundabout)
- Minimizing community economic impacts during construction
- Post-construction community feedback
- Other issues

5.2 Communication Methods to be Used (select and describe as appropriate)
- Pre-construction public meeting
- Public meetings during construction
- Informational brochure
- Media advertising
- Highway message signs
- Internet
- Other techniques

5.3 Schedule for Public Involvement Activities (list or attach; reference to project milestones)

Notes:
1. Prepare initial PI Plan in Scoping phase, and update as needed during project development.
2. PI activities should be commensurate with project’s magnitude and potential effects.

piplina2.wpd
Context Sensitive Solutions EI 01-020
Appendix B
Sample Public Involvement Plan

Name of Preparer: Joe Designer
Preparer’s Functional Area: Region 12 Design
PIN: 1234.56
Route/Description: Rt 404 - Village of GreenTree to NYS 909, Lemon County

Municipality (s): Village of Greentree; Towns of Redwich and Yellow Hook
Current Phase (check one) _X_ Scoping ___Phase I-IV ___Phase V-VI __Construction ____Other

Project Schedule as of Date Prepared

IPP Approved. . . . . : 8-15-01
Scoping Approval. . . . : 2-21-02 __ Design Approval . . . . : 8-02
PS&E. . . . . . . . . . : 10-03
Construction Begins. . . : 03-04 __ Construction Completion. . : 6-05

1. IPP update (please attach approved IPP)

List changes that have occurred since IPP: Project extended to include culvert replacement at RM 404A - 6789 - 9876. Village of GreenTree requests (through RPPM) creation of off-street parking lot to mitigate expected loss of 7 on-street parking spaces. Estimate increased from 4.5 million to 5.5 million.

2. Project Data

Funding . . . . . . . . : _X_Fed-Aid NHS _X_Fed-Aid Non-NHS ___100% State
Check Project Type (s): _X_NEPA Class I ___NEPA Class II _X_NEPA Class III
_X_SEQR Non-Type II ____SEQR Type II

Brief Description of Project Work _X_ 3R Project with 2 curve realignments and one bridge replacement over the MoneyKill. Project also proposes 300 m of left-turn lane construction in Village of Greentree.

NYSDOT person designated as community contact Joe Designer
Public Involvement prior to IPP (y/n) Yes
If yes, describe RPPM met with town supervisors and village mayor to discuss this and other upcoming projects in the towns/village on 7-25-00.

Attach relevant correspondence and/or meeting minutes.

Fill out the following as appropriate to current phase:

3. Project Scoping

PI Objectives in Scoping: 1. Identify Stakeholders
2. Inform stakeholders of project and proposed project scope/needs.
3. Gather information on the project context.
3.1 Identify Stakeholders
List Internal Stakeholders: Regional Design Group; Regional Structures Group; Regional Landscape/Environmental Group; Regional Traffic and Safety Group; Regional Construction Group; Regional Maintenance Group.

List External Stakeholders: Town of Greentree; Town of Yellow Hook; Village of Redwich; Yellow Hook Central School; Redwich Fire Dept.; Smiths Dairy Farm and Orchards; All residents along project with special attention to 3 owners impacted by proposed curve realignments; Greentree Fish and Game Club; NYSDEC; other fishing groups and clubs; canoeing groups and clubs.

3.2 Potential community concerns:
Impacts of proposed curve realignments on 3 affected residential properties; Impacts of bridge replacement on fishing access and water quality; Possible interest by canoeing community in establishing a canoe launch at bridge; Impacts of drainage ditch and retention basins on adjacent dairy farm/orchard; Dairy farm owner has requested a cattle pass in letter to State Senator; Impacts of construction on school; School has requested a nature trail to connect with athletic fields and Moneykill.

3.3 Communication Methods to be Used to Inform Stakeholders (select and describe as appropriate):
Meetings with public officials: Will schedule a meeting with town supervisors and village mayor as a followup to the 7/00 meeting held by Planning. Will also invite school district representative.

Public information meetings: Will hold PIM in Phase I after majority of potential impacts can be identified. PIM format to include PowerPoint show, project brochure with comment form; Visualizations to be included at curve realignments; Advertisement for PIM will include mailing of notices to all residents, landowners, governments, emergency services, school district, NYSDEC (with request that they forward to canoe and fishing interest groups), Friends of the Moneykill. Will also place VMS sign along Rt 404 one week prior to PIM.

Is a citizen’s advisory committee necessary? Not anticipated, but will evaluate post-PIM.

If yes, attach description of how it will be organized, list committee make-up and affiliation, and committee objectives.

Other public involvement techniques:
Direct mailings Notice of PIM to be mailed as above.
News releases To be done for PIM in the daily and weekly papers, radio and TV stations
Media advertisement Not at this stage
Kiosks Will leave project brochures at the town halls and village offices
Internet Project brochure and PIM info to be added to NYSDOT website
E-mail or telephone hot line Email and phone of Joe Designer to appear in brochure, in news releases and on Internet
Other actions Will meet with Dairy Farm on cattle pass:

3.4 Schedule for Public Involvement Activities (list or attach; reference to project milestones)
Meet with town supervisors, village mayor and school dist rep - October 2001
Hold Public Info Meeting - November 2001
Meet with Dairy Farm and other owners, as needed - December 2001-January 2002
4. Design

PI Objectives during Design:
Preliminary Design: Summarize information gained from Scoping. Seek consensus on preferred alternative.
Detailed Design: Update stakeholders on progress, discuss any necessary changes.

4.1 Information
List Internal Stakeholders: (e.g.: Design (including Structures and Landscape/Environmental), Traffic and Safety, Construction and Maintenance)

List External Stakeholders: (e.g.: Municipal/County/Legislative Officials, impacted/interested parties, special interest groups, local citizens, traveling public)

4.2 Communication Methods to be Used (select and describe as appropriate)
- Meetings with public officials
- Public information meetings
  - Meeting formats
  - Brochure
  - Visualizations
- Other public involvement techniques:
  - Direct mailings
  - News releases
  - Media advertisement
  - Kiosks
  - Internet
  - E-mail or telephone hot line
  - Other techniques

4.3 Schedule for Public Involvement Activities (list or attach; reference to project milestones)
5. **Construction Phase**

**PI Objective During Construction:** Inform and maintain contact with affected Residents/Businesses/other stakeholders concerning construction activity schedule and impacts.

5.1 **Issues requiring continued public outreach:**
- Maintenance and protection of traffic (MPT)
- Public education for operational features (e.g., roundabout)
- Minimizing community economic impacts during construction
- Post-construction community feedback
- Other issues

5.2 **Communication Methods to be Used** (select and describe as appropriate)
- Pre-construction public meeting
- Public meetings during construction
- Informational brochure
- Media advertising
- Highway message signs
- Internet
- Other techniques

5.3 **Schedule for Public Involvement Activities** (list or attach; reference to project milestones)

Notes:
1. Prepare initial PI Plan in Scoping phase, and update as needed during project development.
2. PI activities should be commensurate with project’s magnitude and potential effects.