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STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

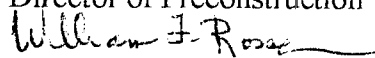
MICHAEL F. EASLEY  
GOVERNOR

May 20, 2008

LYNDO TIPPETT  
SECRETARY

MEMORANDUM TO: Steve Varndoe, PE  
Chief Engineer-Operations

Debbie Barbour, PE  
Director of Preconstruction

FROM:   
William F. Rosser, PE  
State Highway Administrator

SUBJECT: Accommodations of Pedestrians within Work Zones

The maintenance of pedestrian traffic has become an issue on several projects that were either under construction or late in the design phase of project development. In response, I requested Stuart Bourne, State Work Zone Traffic Engineer, to establish a committee from different units and branches within the Department and Federal Highway Administration to address this issue. The committee's goal was to review all current procedures and check the compliance of these procedures with the requirement of the Manual on Uniform Traffic Control Devices (MUTCD).

Subsequently, the committee has been meeting to address the "needs and control" of pedestrians, including persons with disabilities, during construction in accordance with the requirements of Chapter 6 of the MUTCD. The committee determined that NCDOT already has the necessary policies to comply. However, existing procedures will need to be revised to ensure that pedestrian needs are dealt with early in the project development process.

The committee has provided a list of recommended changes to better address pedestrian impacts during construction. Attached are the recommended changes and a *Guide for Temporary Pedestrian Accommodations*. The *Guide* includes the following:

- Flowchart to determine accommodation of pedestrians in work zones
- Description of how the consideration of pedestrian needs will be integrated into the project development process
- Pedestrian Task Force Considerations

**These documents are to be distributed to all applicable personnel within your area and changes should be implemented immediately on all highway projects.**

MAILING ADDRESS:  
NC DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATOR  
1536 MAIL SERVICE CENTER  
RALEIGH NC 27699-1536

TELEPHONE: 919-733-7384  
FAX: 919-733-9428

WEBSITE: [WWW.DOH.DOT.STATE.NC.US](http://WWW.DOH.DOT.STATE.NC.US)

LOCATION:  
TRANSPORTATION BUILDING  
1 SOUTH WILMINGTON STREET  
RALEIGH NC

Steve Varnedoe, PE & Debbie Barbour, PE

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Also, to facilitate the implementation of these changes, a Pedestrian Task Force has been formed to:

- Act as consultant for the Planning staff using the "Guide to Determine Accommodation of Pedestrians in Work Zones",
- Assist Design and Operation staff in addressing any concerns pertaining to providing pedestrian accommodations during construction, and
- Address issues on projects under construction or beyond the planning phase on a project by project basis.

Stuart Bourne will lead the Pedestrian Task Force. The Task Force will consist of a representative from the Project Development and Environmental Analysis Branch, Roadway Design Unit, Construction Unit, Division of Bicycle and Pedestrians, and the Division.

Additionally, the committee is in the process of developing a plan to educate the Department on pedestrian needs during construction and the requirements of Chapter 6 of the MUTCD. The initial focus of this broader education plan will target appropriate personnel for instruction on recognizing and resolving deficiencies in pedestrian safety, accessibility, and mobility in construction work zones.

Please contact Stuart Bourne in the Work Zone Traffic Control Unit at 919-250-4159 if you have any questions.

WFR/jlp

Attachments

cc w/attachments: Susan Coward  
Lacy Love, PE  
Jon Nance, PE  
Tom Norman  
Stuart Bourne, PE

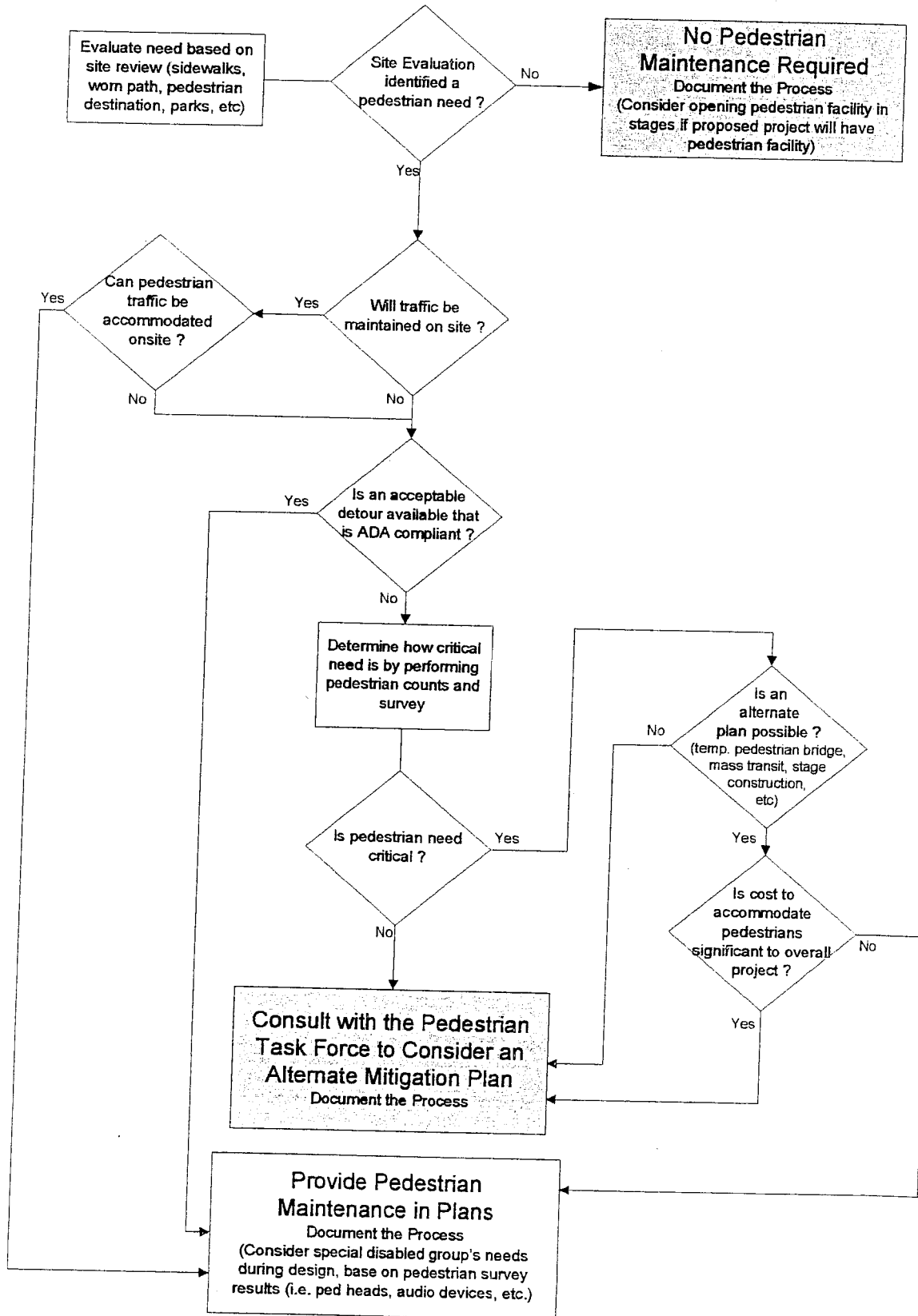
**RECOMMENDED CHANGES TO BETTER ADDRESS TEMPORARY PEDESTRIAN IMPACTS**  
 Updated May 2008

Action Items	Responsible Unit	Committee Contact	Status
1. Add a bullet in the Feasibility Studies Unit Scoping Procedures to Flag Pedestrian Issues	Feasibility Studies Unit	Joseph Ishak	Completed
2. Review existing procedures and develop a new procedure to address temporary pedestrian accommodations in the project development process	PDEA	Jennifer Evans	In progress
3. Review and revise Community Studies Community Characteristics Report (CCR) and Community Impact Assessment (CIA) guidance procedures and the CIA site visit checklist structure, where it is deemed to be necessary.	PDEA	Tris Ford	In progress
4. Revise Minimum Criteria Checklists	Roadside Environmental	Jennifer Evans/Charles Cox	In progress
5. Arrange training ADA/504 Training for PDEA staff	ADA Coordinator	Walt Thompson	TBD
6. Revise signal recommendation letter	Traffic Engineering Branch	Bucky Galloway	Completed
7. Add question in Combined Field Inspection, Final Design Field Inspection, and Pre-Let Field Inspection Checklist	Roadway Design Unit	Jay Bennett	Completed
8. Revise Chapter 28, Sidewalks, Pedestrian Policy Guidelines, of the Policy and Procedure Manual	Alternative Delivery Unit	Mitch Hendee	In progress
9. Pedestrian Policy Task Force will integrate work zone issues	Pedestrian Task Force	Jeff Cox	TBD
10. Review encroachment agreement to possibly include language to better address temporary pedestrian impacts	State Road Maintenance Unit	Ron Hancock Joseph Ishak	In progress July 2008

# GUIDE FOR TEMPORARY PEDESTRIAN ACCOMMODATIONS

## MAY 2008

### Flowchart to Determine Accommodation of Pedestrians in Work Zones



# GUIDE FOR TEMPORARY PEDESTRIAN ACCOMODATIONS

## MAY 2008

### INTEGRATING IMPACTS INTO THE PROJECT DEVELOPMENT PROCESS

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#### **Feasibility Study – Feasibility Studies Unit**

A project may be identified for potential pedestrian issues during construction. This information will be provided to PDEA as background information at the project initiation meeting. Mostly urban projects will be identified for possible measures for accommodation of pedestrians within the work zone.

#### **Project Initiation Meeting – Project Development and Environmental Analysis**

Six to eight months prior to scoping meeting, a project initiation meeting will be held to begin collecting information about the proposed project. Among the items to be discussed, potential detour routes and temporary pedestrian impacts should be included. After the meeting the PDEA engineer should request the Community Characteristics Report as stated in the PDEA Scoping Procedures.

#### **Community Characteristics Report – Human Environment Unit**

This report is a broad look at the key characteristics of the study area. Alternatives have not been formally developed at this time. As part of the preparation of the Community Characteristics Report, the Planner should consider the potential temporary impacts to pedestrians and should include a brief discussion within the report to help identify the issue at Project Scoping. This report should be completed prior to the Project Scoping Meeting.

#### **Project Scoping Meeting – Project Development and Environmental Analysis**

Within the items to discuss at the Project Scoping Meeting, the potential of temporary impacts to pedestrians during construction should be included. This should tie in with the discussion of alternative routes/detour routes and community features.

#### **Alternative Development – Project Development and Environmental Analysis**

As alternatives are developed, the potential temporary impacts to pedestrians should be considered. The engineer should refer to the *Flowchart to Determine Accommodation of Pedestrians in Work Zone Flow* to establish the need to accommodate pedestrians in work zone. Once alternatives are established the Community Impact Assessment is requested.

#### **Community Impact Assessment – Human Environment Unit**

Planner should look closely at items such as community cohesion, demographics, mobility and access, etc. and assess the potential impacts to pedestrians during the construction stage. During the field visit, the planner should note existing facilities, perceived use of existing facilities and pedestrian generators. Pedestrian activity should be observed and noted. These items should be included as a discussion in the final report and used to aid in selection of the build alternative.

#### **Citizen Informational Workshop – Human Environment Unit**

If a Citizen Workshop is conducted, the engineer should present information on any potential impacts and try to solicit comments from the project stakeholders. The newsletter mailing could assist in solicitation of comments about temporary pedestrian impacts.

#### **Corridor Design Public Hearing – Human Environment Unit**

If temporary pedestrian impacts are identified for alternatives, these impacts should be presented at the hearing. Comments from the public should be solicited and factored into the selection of the build alternative. The newsletter mailing could assist in solicitation of comments.

# GUIDE FOR TEMPORARY PEDESTRIAN ACCOMODATIONS

## MAY 2008

### **Selection of Build Alternative – Project Team**

The temporary pedestrian impacts should be included in the discussion of alternatives and should factor into the build alternative decision. Evaluate the build alternative to determine the level of impact that accommodating pedestrians during construction will have on that decision. The Project Team should consult with the Pedestrian Task Force if needed.

### **Environmental Document – Project Development and Environmental Analysis**

The findings from the Community Impacts Assessment, workshop and hearing concerning temporary pedestrian impacts should be discussed in the appropriate document. Mitigating measures should also be addressed in the document. Any commitments required should be included on the project greensheet.

### **Design Public Hearing – Human Environment Unit**

Build alternative and impacts from the alternative are presented to the public. The newsletter mailing could assist in presentation of temporary pedestrian impacts.

### **Plan Development – Highway Design**

Commitments and accommodations discussed during planning will be incorporated into the plans.

### **Field Inspection – Highway Design and Division**

Plans will be reviewed with the Division Construction Engineer and the field inspection checklist will include a question to ensure that pedestrian issues have been incorporated into project and that there are not any associated constructability issues.

### **Project Construction – Division**

Implement pedestrian accommodations as per plans and the planning document.

# GUIDE FOR TEMPORARY PEDESTRIAN ACCOMODATIONS

## MAY 2008

### PEDESTRIAN TASK FORCE CONSIDERATIONS

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When a project is submitted to the Pedestrian Task Force for review, it will be the responsibility of the Task Force to review the decision making process used by the project team before recommending a course of action. During this review, the Pedestrian Task Force will consider the following:

- Whether the existing population, travel, and attractors indicates an absence of need for accommodations
- Whether environmental or social impacts outweigh the need for accommodations
- Whether safety would be compromised
- Whether total cost of pedestrian accommodations to the appropriate system (i.e., interstate, primary, secondary, or urban system) would be excessively disproportionate to the need for the facility
- Whether purpose and scope of the specific project facilitates the provision of accommodations
- Whether pedestrian travel is allowed by state or federal laws
- Impacts to the overall project time and project completion