

DESIGN-BUILD COSTING PLAN REVIEW INSPECTION REPORT

PI No.: 0010782, District 7
PROJECT NUMBER: N/A

Design-Build – Installation of Variable Speed Limit Signs on I-285

INSPECTION DATE: August 2, 2012
REPORT DATE: August 10, 2012
RESPONSE DATE: August 16, 2012

This inspection was requested by Darryl D. VanMeter, P.E., State Innovative Program Delivery Engineer. The Project Manager is Andrew Hoenig.

This project was approved by the Chief Engineer for Design-Build delivery on February 9, 2012. The Specifications and Special Provisions were prepared by HNTB Corporation.

The NEPA document was approved August 10, 2012.

This report is being distributed via E-mail. This Report will be provided as information only to proposing Design-Build Teams.

The Costing Plans were reviewed at the Traffic Management Center in Atlanta, Georgia.

The main purpose for this meeting is to discuss the scope of the Design-Build project with emphasis on Special Provision 999 and the Variable Speed Limit Sign Specification. The current schedule is for the Request for Proposal (RFP) package to be advertised on September 21, 2012 and let on October 19, 2012.

All comments marked with an arrow symbol (⇒) should be addressed with a written response by the Project Manager.

This project is to be designed and constructed using all current Manuals, Policies, Standards and Details – current means as of September 21, 2012. Any substandard features that cannot be complied with due to project restraints will require the submission of a design exception/variance to the State Design Policy and Support Engineer.

PROJECT DESCRIPTION

The proposed project is to install Variable Speed Limit Signs on I-285 from I-20 to I-20 on the northern section located within Cobb, DeKalb, and Fulton Counties. In addition, install new static speed limit signs on I-285 from I-20 to I-20 on the southern section located within Clayton, DeKalb and Fulton Counties.

CONCURRENCE: Carlos F. Figueroa, P.E.
Federal Highway Administration

8/29/2012
Date

FHWA's Comments for Special Provision's review, I-285 Variable Speed Limit Sign project, PI 0010782

Section 999:

Page 3:

⇒ **Bullet #6. Include "2009 MUTCD".**

- All references to dates have been removed and indicated current at time of advertisement.

Page 9, Table 4.1.:

- ⇒ Under Comments for “Schedule”, add “Provide a courtesy copy of the schedule to FHWA” since the required schedule will use CPM.
 - Spec will be revised
- ⇒ Move “Final Plans, Schematics and Details” submittal to just above the “Schedule” submittal.
 - Spec will be revised
- ⇒ Under Comments for the Construction Traffic Control Plan, add “FHWA to perform concurrent review of Construction Traffic Control Plan” since this is part of the MOT and TMP of the project and they require FHWA approval.
 - Spec will be revised
- ⇒ Add a submittal for “As Built Plans and Arc GIS files”.
 - Spec will be revised
- ⇒ The Formatting of the footer changes between pages 8 and 9. Please make it uniform.
 - Spec will be revised

Page 18,

- ⇒ Bullet “c”. Why is SUE not required for this project? Why did we pursue a SUE waiver?
 - Due to the minor impacts of this project, SUE was determined to not be a cost effective way to avoid utilities. Special Provision 105.06 – Cooperation with Utilities has been included to minimize the potential for utility impacts.
- ⇒ Ensure all typographical misspellings and errors are corrected.
 - Spec will be revised

Appendix A:

- ⇒ Page 2, Bullet 6c, CPM stands for Critical Path Method. Please revise accordingly.
 - Spec will be revised.
- ⇒ Page 3, Bullet 8d. A total of 14 days for repairs and adjustments after testing the VSLS seems like a lot of time. Consider reducing this time.
 - The Department recommends reducing this time to five days and revising Operational and Performance testing response time to five days to maintain consistency.
- ⇒ Page 4, Bullet 12b. Add “2009” in front of the MUTCD.
 - All dates have been removed and reference current adopted version at time of advertisement.
- ⇒ Page 10, Bullets 16b and 16e. Consider modifying the requirement of having GDOT’s Final Acceptance as the starting point for the one-year warranty. The starting point for the one-year warranty should be when the punchlist has been completed by the contractor and accepted by GDOT. FHWA’s concurrence for acceptance of the punchlist completion should be asked if there are outstanding items noted on the punchlist.
 - Will revise as necessary.
- ⇒ Appendix A, Bullet 12.w, Please be more specific on this statement. Are there going to be beacons activated under reduced speed limit conditions? Keep in mind these need to be in compliance with the 2009 MUTCD. Keep in mind 2009 MUTCD color restrictions since it will be used as a complement of a regulatory sign (VSLS). Please keep in mind Section 2A.15 Enhanced Conspicuity for Standard Signs (pages 36 and 37) from the 2009 MUTCD.
 - No beacons are going to be installed; however, IPD will investigate MUTCD for compliance with proposed flashing speed limits.
- ⇒ Ensure all typographical misspellings and errors are corrected.
 - Spec will be revised.

Other Comments:

- ⇒ Add a Special Provision for a CPM Schedule.
 - SP 108.03 CPM has been added.
- ⇒ Consider adding the posted speed limit by road segment (MP to MP or Exit # to Exit#) as part of the information that is currently displayed on the icons shown on the Navigator

website (icons that display traffic incidents, direction of travel, expected clearance time, etc.).

- Information requested can be added to the Navigator website and possibly 511 system. TMC to coordinate with software provider on implementation.
- ⇒ Will the variable speed notification be a prompt or "incident alert" when calling 511 and inquiring information on I-285? In other words, will the 511 service provide information about the variable speed limits and its changes on I-285?
- Information requested can be added to the Navigator website and possibly 511 system. TMC to coordinate with software provider on implementation.
- ⇒ Do we currently have enough CMSs within the corridor to notify the public about the variable speed zone?
- Eight CMSs to be added as part of this contract.
- ⇒ Check with Wyoming DOT to verify the colors they used for the static signs with "Entering Variable Speed Zone". There is a stretch of I-80 in Wyoming where they use VSLs with the static signs described above.
- GDOT to investigate and revise.

ENVIRONMENTAL

LEVEL OF ENVIRONMENTAL ANALYSIS: Programmatic Categorical Exclusion approved August 10, 2012.

PERMITS REQUIRED: none anticipated

UNDERGROUND STORAGE TANKS: None

HAZARDOUS WASTE SITE(S): None

HISTORICAL SITE(S): None

PARKLAND: None

ARCHAEOLOGICAL SITE(S): None

AIR / NOISE: None

STREAM / WETLAND MITIGATION / RESTORATION: None

ENDANGERED SPECIES: None

ENVIRONMENTAL MONITORING REQUIRED:

ENVIRONMENTAL COMMITMENTS: See Appendix "A" for Green Sheet

GENERAL ENVIRONMENTAL COMMENTS:

- ⇒ The Environmental Resources Impact Table ([Environmental Resources Impact Table](#)) will be coordinated with the project's Environmental Commitments Table and other plan notes to illustrate the restrictions associated with various environmental resources. The responsibility for inserting the table into the plans will rest with the designer, and its content and accuracy will be confirmed by the NEPA analyst who is responsible for environmentally certifying the project. The table shall be included in the General Notes section of all plans beginning with projects that have field plan reviews scheduled for September 1, 2010, and later and/or projects that are scheduled to be let in November 2010

or later. All Environmentally Sensitive Area (ESA) flags on plan sheets shall be changed to read "ESA - See Environmental Resources Impact Table in General Notes for construction restrictions." The ESA notes shall be placed on ALL plan sheets where an ESA exists.

RIGHT OF WAY

NUMBER OF PARCELS: 0 APPRAISED: None

ACQUIRED DEEDS: None

ACQUISITION BY: None

TYPE ACCESS CONTROL: Limited

GENERAL RIGHT OF WAY COMMENTS:

⇒ Project is to be constructed within the existing Right of Way.

DESIGN EXCEPTIONS

DESIGN EXCEPTIONS REQUIRED: None

DESIGN EXCEPTIONS REQUESTED: None

DESIGN EXCEPTIONS APPROVED: None

DESIGN VARIANCES

DESIGN VARIANCES REQUIRED: None

DESIGN VARIANCES REQUESTED: None

DESIGN VARIANCES APPROVED: None

SPECIAL PROVISIONS

SPECIAL PROVISIONS FURNISHED FOR THE INSPECTION:

105.06 – Cooperation with Utilities

105.07 – Cooperation between Contractors

108.08 – Prosecution and Progress (Liquidated Damages (LD) - Failure or Delay in Completing Work on Time)

150.11 – Traffic Control (special conditions)

999 – Design Build Project

Appendix A – VSLs Specifications

ADDITIONAL SPECIAL PROVISIONS REQUIRED:

105.04 – Control of Work (setting SP 999 as the highest order of precedence)

108.03 – Critical Path Method schedule

150 – Traffic Control

153 – Field Engineer's Office

621 – Concrete Barrier

631 – Changeable Message Signs

682 – Electrical Wire, Cable and Conduit

- 925 – Traffic Signal Equipment
- 935 – Fiber Optic System
- 936 – CCTV
- 937 – Video Detection System
- 939 – Communication and Electronic Equipment
- 940 - Integration

ESTIMATED CONTRACT TIME: The Inspection Team recommends 18 total months contract time (6 months Design, and 12 months for construction).

SPECIAL PROVISION 105.06 COMMENTS:

- ⇒ Remove Practice Statement, Practice Description, Uniform Color Code and Guidelines for Excavation Delineation Headings
 - SP will be revised.
- ⇒ Delete Practice Description Language
 - SP will be revised.
- ⇒ Revise language for consistency
 - SP will be revised.
- ⇒ Revise to Office of Utilities
 - SP will be revised.

SPECIAL PROVISION 105.07 COMMENTS:

- ⇒ Add Comprehensive Maintenance of NaviGator ITS Devices Contract as project in the area for necessary coordination.
 - SP will be revised.

SPECIAL PROVISION 108.08 COMMENTS:

- ⇒ Revise ITS System LD to \$1000/hr/component for an individual component and \$10,000/hr/trunk fiber for a conduit that affects multiple devices.
 - SP will be revised.
- ⇒ Add ITS System Contractor Response during Integration and Testing period to \$1000/hr/component for an individual component and \$10,000/hr/trunk fiber for a conduit that affects multiple devices.
 - SP will be revised.
- ⇒ Add ITS System Contractor Response during Operational and Performance Testing period to \$1000/hr/component for an individual component and \$10,000/hr/trunk fiber for a conduit that affects multiple devices.
 - SP will be revised.
- ⇒ Revise ITS System Contractor Response during Warranty Period to \$1000/hr/component for an individual component and \$10,000/hr/trunk fiber for a conduit that affects multiple devices.
 - SP will be revised.

SPECIAL PROVISION 150.11 COMMENTS

- ⇒ Change “Work Hours” to “Lane Closures”
 - SP will be revised.
- ⇒ Delete “Double and Triple lane closures are not permitted” and Replace with “The following are allowable times for Multi Lane and Shoulder Closures: From 12:00 A.M. to 4:00 A.M. Sunday through Saturday”
 - SP will be revised.
- ⇒ Revise ITS System to not limit responsibilities to only cable.
 - SP will be revised.
- ⇒ Delete description of The Work and refer to it only as The Work
 - SP will be revised.
- ⇒ Add Integration Testing period requirements.
 - SP will be revised.
- ⇒ Add Operational and Performance Testing period requirements.
 - SP will be revised.

- ⇒ Delete “Construction activities that result in” from the last paragraph
 - [SP will be revised.](#)

SPECIAL PROVISION 999 COMMENTS:

- ⇒ Correct all typos and ensure all Appendix references are accurate.
 - [SP will be revised.](#)
- ⇒ Revise language to be imperative and consistent where possible.
 - [SP will be revised.](#)
- ⇒ Revise 999.1.C.3 to “Cooperate with the Department and Department’s contractor for the integration of VSLs to the Department’s Transportation Management Center (TMC) using the Department’s NAV2 traffic management software.”
 - [SP will be revised.](#)
- ⇒ Add Hub identification information when describing limits for new conduit and fiber.
 - [SP will be revised.](#)
- ⇒ Add entering VSL Zone sign requirements.
 - [SP will be revised.](#)
- ⇒ Add language requiring warning signs for known portions of I-285 not meeting a 65 mph design speed.
 - [Ken Werho to provide information for required locations.](#)
 - [Language added](#)
- ⇒ Add horizontal clearance and sight distance language from the Signing and Pavement Marking General Notes.
 - [Language added](#)
- ⇒ Add requirement to provide public outreach materials to GDOT communications.
 - [Language added](#)
- ⇒ Revise 999.1.E to reflect the Programmatic Categorical Exclusion (PCE) NEPA document approval and commitments as appropriate.
 - [SP will be revised.](#)
- ⇒ Revise Table 4-1 for requirements for Google Earth and GIS submittals.
 - [SP will be revised.](#)
- ⇒ Revise Table 4-1 for clarity on when the Final Plans are to be submitted and the requirements for field installed VSLs.
 - [SP will be revised.](#)
- ⇒ Revise 999.4 CONSTRUCTION to only include construction items relevant to this contract.
 - [SP will be revised.](#)

SPECIAL PROVISION 999 – Appendix A COMMENTS:

- ⇒ Add language to allow solar powered signs and wireless modems
 - [SP will be revised.](#)
- ⇒ Clarify line of demarcation for turnover of the system to GDOT.
 - [SP will be revised.](#)
- ⇒ 7.a: Revise language for clarity
 - [TMC to provide suggested language.](#)
- ⇒ 11.a: revise the last sentence to reflect 1000’ and add a diagram for clarity
 - [Revised and added diagram for clarity.](#)
- ⇒ 12.u: Add language requiring the return of removed static signs to the District 7 Maintenance yard.
 - [SP will be revised.](#)
- ⇒ 12.y: Remove boring Extra Work language.
 - [SP will be revised.](#)

PERSONNEL PRESENT (Office & Field Participation Denoted in **BOLD**)

Name	Office	GDOT Phone Number / Email Address (Non-GDOT)
David Zoeckler	Engineering Services, Atlanta	(404) 631-1789
Andrew Hoenig	Innovative Program Delivery, Atlanta	(404) 631-1757
Paul Denard	Traffic Management Center, Atlanta	(404) 635-2843
Ken Werho	Traffic Management Center, Atlanta	(404) 635-2859
Yancy Bachmann	Traffic Management Center, Atlanta	(404) 635-2848
Mark Demidovich	Traffic Management Center, Atlanta	(404) 635-2838
Scott Zehngraft	Traffic Management Center, Atlanta	(404) 635-2851
Oscar Carlers	District 7, Area 3	(404) 326-5354
Carlos F. Figueroa	FHWA	(404) 562-4280
Greg Morris	FHWA	(404) 562-3619
Keith McCage	HNTB Corporation	(404) 915-2336
David Hannon	HNTB Corporation	(404) 275-2829

c: Gerald Ross
Russell McMurry
Darryl VanMeter
Rachel Brown
Lee Upkins
Dona Welch
Scott Gibson
Ira Witherspoon
Scott Lee
Mike Lobdell
Jonathon Walker
Shun Pringle
James Harry
Marc Mastronardi
Melissa Harper
Georgene Geary
David Patterson
Eric Pitts
Jeff Baker
Kathy Zahul
Ken Werho
Angela Whitworth
Andy Casey
Ben Rabun
Howard Copeland
Cindy VanDyke
Gail D'Avino
Rich Williams
Glenn Williams
Tommy Slaton
Steve Matthews
Gene McKissick
Eugene Hopkins
David Zoeckler

ENVIRONMENTAL COMMITMENTS TABLE

PI#(s): 0010782 | Counties: Clayton, Cobb, DeKalb, Fulton | Date Updated: August 6, 2012 | Stage: PCE

Date on Plans Reviewed by OES: Plans Not Available

These commitments are feasible.
(must be checked at all stages)

Project Manager (PM) Andrew Spang

PM Signature/Date 08/07/2012

Plans incorporate the commitments.
(must be checked to certify for letting)

Engineer of Record (EOR) _____
EOR Signature/Date _____

Air/Noise _____ Arch _____
Eco _____ Hist _____
NEPA _____

A. Resources to be Delineated on the Plans and/or Listed in the Environmental Resource Impact Table (ERIT)

Resource Name	PI#(s)	Additional Information (refer to the SP, plan note, design feature, permit, variance, commitment, etc...)	Name and Date of Report or Transmittal	Correctly Shown? Plan Sheet	Correctly Shown? ERIT
A-1	None				

B. Special Provisions (Attach all special provisions to the commitments table, if available)

Special Provision	PI#(s)	Purpose	Est. Cost	SP's Latest Date
B-1	None			

C. Plan Notes and Design Features (Description: For plan notes, provide exact wording in "quotes" and approximate location)

Purpose	PI#(s)	Description	Est. Cost	Correctly Shown?
C-1	None			

D. Permits, Buffer Variances and Mitigation Credits

Permit, Variance, etc	PI#(s)	Additional Information (permit details, number of credits needed, etc...)	Est. Cost	Acquired?
D-1	None			

E. Other Commitments or Requirements (Status: Pre- and Post – Complete or Incomplete; During – Signature Req'd)

Pre-, During, or Post	PI#(s)	Commitment	Responsible party	Est. Cost	Status
E-1	0010782	Additional public involvement and an outreach campaign will occur in or prior to the Spring of 2013	Office of Environmental Services	Negligible	Incomplete – anticipated to occur Spring 2013 *
			Total Estimated Cost	\$0	

If Project is Complete or Under Construction, Area or Construction Engineer affirms that all Special Provisions, Plan Notes and During Construction Commitments were or are being adhered to during the project's construction. PI#(s): _____

Please Print Name and Title: _____ Signature: _____ Date: _____ Please provide an explanation if unable to sign.

Public involvement to be completed closer to be date. JCoX 8.10.12