KENTUCKY TRANSPORTATION CABINET/DIVISION OF ENVIRONMENTAL ANALYSIS AIR QUALITY BASELINE GUIDANCE AND ACCOUNTABILITY FORM

| Baseline Prepared by: Author Firm | | | | |
|-------------------------------------|-----------------|--------------------|--------|-----------|
| County: | | Route: | | Item No.: |
| Description: | | | | |
| Prime Consultant: | | | | |
| Due Date: | Submittal Date: | Submittal Draft #: | Approv | al Date: |

Instructions:

Baseline Prepared by: Name of author/firm that prepared the study. County: Name of county(ies) within which the project is located.

Route: Name of highway for which the project is intended. Include route designation and number as applicable (i.e. US 60, Winchester Rd.)

Item No.: Item number as it appears in the contract and Six Year Plan which corresponds with the project.

Description: Official description of the project as it appears in the Six Year Plan.

Prime Consultant: Name of the Phase I Design and Environmental Consultant (prime contract holder) for the project.

Due Date: Date that the project is due as agreed upon in contract negotiation.

Date of Submittal/Submittal Draft Number: Date of submittal and draft being submitted (1st, 2nd, 3rd) in appropriate sections.

Approval Date: Date baseline is approved by DEA (DEA use only).

For "Required" column: √ indicates all applicable areas of focus (DEA's responsibility).

For "Completed" column: use Y for yes and NA for not applicable as necessary (Consultant's responsibility).

For "DEA" Column: DEA will use √ for all areas that adequately address concerns, and "I" for those that are insufficient in coverage.

"Comment" page: Discuss supplemental information, guidance or instructions, if any, that required deviation from the checklist. Discuss all categories which contain "NA" in the "Complete" columns of this format. Comments regarding the content and format of this form and/or its applicability may also be submitted in the comments section.

"Commitments to be Implemented" page: Identify any commitments that are documented within the study. Specify the nature of the commitment, to whom it was or should be made, when the commitment should be enacted upon, etc.

"Mitigation and Special Issues" page: Identify mitigation measures that are specified within the report, if any. Also, identify any special issues that are addressed within the document that should be considered by the Project Team as it makes decisions regarding the project.

"Signature" page: Signatures of Prime Consultant and KYTC/DEA Environmental Project Manager/Reviewer will attest that the base study meets the requirements set forth in this checklist. Signatures of KYTC Project Manager and District Environmental Coordinator ensure that the findings of the report, including impacts to the project and mitigation measures have been presented to the project development team and are acceptable.

Completed form is to be delivered to KYTC with the document. Previous checklists for the document, or a copy thereof, shall be attached to the current checklist.

Item No: 1

| Required | Complete | DEA | CATEGORY | | |
|----------|-------------------|-----|---|--|--|
| marl | | | Title Fage | | |
| appr | ropriate | е | A. Handifu Dana Chudu | | |
| 1 | | | Identify Base Study. A disconnection of the Atlanta Country Coun | | |
| <u> </u> | | | Author prequalified for Air Quality Studies | | |
| 1 | | | Name of author present. | | |
| √ | | | Project title present. | | |
| 7 | | | Project County/Counties included in description. | | |
| V | | | Item Number included. | | |
| | BASE STUDY FORMAT | | | | |
| 1 | | | Base study written in clear, concise manner, i.e., reviewer able to duplicate results and conclusion from data as presented. | | |
| 1 | | | Correct grammar and spelling present throughout document. | | |
| √ | | | Correct use of metric and English systems present. | | |
| | | | Tables and exhibits correctly labeled. | | |
| | <u> </u> | | PROJECT DESCRIPTION | | |
| 1 | | | Identify the purpose of the project. | | |
| 1 | $\ \cdot\ $ | | Identify project termini and length. | | |
| √ | | | Discuss roadway geometrics of the existing facilities. | | |
| √ | | | Discuss roadway geometrics of the proposed project. | | |
| 1 | | | Exhibits identified in project description agree with location exhibits as presented. | | |
| 1 | | | Discuss alternates to be analyzed. | | |
| 1 | | | Analysis of major through facilities performed for projects involving a bypass. | | |

2 Item No:

| | 1 | ı | |
|--|--|----------------|--|
| Required | Complete | DEA | CATEGORY |
| Insert check mark as appropriate | | | ASSESSMENT METHODOLOGY |
| 1 | | | Correct models identified and utilized. |
| 1 | | | Traffic data presented in tables in agreement with CAL3QHC runs and link-receptor maps for existing, no-build & design alternates. |
| 1 | | | Input data for mobile emissions model consistent with accepted values and procedures. |
| 1 | | | Input data for CAL3QHC runs consistent with accepted values and procedures. |
| 1 | | | Link-receptor maps consistent with accepted standards. |
| | <u> </u> | | MICROSCALE ANALYSIS & CAL3QHC RUNS |
| ٧ | | | Link coordinates consistent with logical termini, i.e., end of one link starting point for next line. |
| 1 | | | Receptors located at same coordinates for existing, no-build, and design alternates. |
| 1 | | | One-hour concentrations listed in table consistent with those listed in CAL3QHC runs. |
| 1 | | | Methodology for conversion of one-hour concentrations consistent with accepted procedures. |
| 1 | | | Eight-hour concentrations correctly calculated (show formula that was used to make calculations). |
| 1 | | | Location of maximum one-hour and eight-hour concentrations correctly identified for existing, no-build, and design alternates. |
| 1 | | | Qualitative discussion summarizes future impacts on all receptors for design and no-build alternates when compared to existing carbon monoxide concentrations. |

| Required | Complete | DEA | CATEGORY | | |
|----------|-------------------------|-----|---|--|--|
| | Insert check mark as | | TOTAL POLLUTANT EMISSIONS | | |
| _ | ropriat | te | | | |
| √ | | | Pollutants for which inventory performed are identified. | | |
| 1 | | | No signalized intersections: free flow emissions calculated correctly and listed as total emissions in table (verified by independent calculation to within ± 0.5% of listed value). | | |
| 1 | | | Signalized intersections: idle emissions calculated correctly using accepted methodologies and listed in separate table (verified by independent calculation to within ± 0.5% of listed value). | | |
| 1 | | | Signalized intersections: free flow emissions performed correctly using accepted methodologies and listed in separate table (verified by independent calculation to within ± 0.5% of listed value). | | |
| ٧ | | | Signalized intersections: total emissions (idle and free flow emissions) summed up correctly and listed in separate table. | | |
| 1 | | | Changes in pollutant emissions expressed in terms of percent change text and agree within ± 0.5% of calculations of percent change derived from total calculations. | | |
| | | | SUMMARY | | |
| 1 | | | Attainment status of county/counties identified. | | |
| √ | | | Impacts on county/counties addressed. | | |
| | | | Discuss regional compliance with National Ambient Air Quality Standards (NAAQS) | | |
| 1 | | | Summary statement with respect to one-hour and eight-hour carbon monoxide standards present. | | |
| | | | Discuss predicted CO levels and their relevance to the NAAQS | | |
| N N | | | Air Quality conformity statement; project must be in conforming Transportation Improvement Plan (TIP). | | |
| ٧ | | | Discuss cumulative and indirect impacts | | |

| Comments: Discuss supplemental information, guidance or instructions that required deviation from the checklist. Discuss all categories which contain "NA" in the "Complete" columns of this format. Comments regarding the content and format of this form and/or its applicability may also be submitted through this section. | | |
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| Commitments to be Implemented: Identify any commitments that are documented within the study. Spec the nature of the commitment, to whom it was or should be made, when the commitment should be enacted upon, etc. | ify |
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| itigation and Special Issues: Identify mitigation measures that are specified within the report, if any. A ntify any special issues that are addressed within the document that should be considered by the Project Team as kes decisions regarding the project. | |
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SIGNATURE PAGE

I have reviewed the project documentation and attest that those responsible for its preparation are familiar with the requirements set forth in the checklist above and that proper management controls were in effect throughout the course of document development to assure that the document is complete, thorough and addresses all applicable checklist components.

| Prime Consultant | Date |
|--|------|
| Recommended for Approval By: | |
| KYTC/DEA Environmental Project Manager/Reviewer | Date |
| Team Review of Commitments | |
| The findings of the report, including impacts to the project an Team and will be considered during the development of this | |
| KYTC/District Environmental Coordinator | Date |
| Project Manager | Date |