CHAPTER 2A - LOCATION STUDY

SECTION 2A - 1 - PROJECT INITIATION

PRELIMINARY ENGINEERING AUTHORIZATION	2A-1
URBAN PROJECTS	2A-1
INTERSTATE AND PRIMARY PROJECTS	2A-1
CERTIFICATION ACCEPTANCE	2A-2
EARLY PROJECT NOTIFICATION	2A-2
PRELIMINARY SCOPING	2A-2
PROJECT NUMBERS	2A-3
REQUESTING STRUCTURE NUMBERS	
REQUESTING ADDITIONAL PROJECT NUMBER	2A-3
REQUESTING A REVISION TO A PROJECT NUMBER	2A-4
REQUESTING A REVISION TO A PROJECT DESCRIPTION	2A-4
REQUESTING A REVISION TO THE PROJECT SCOPE	2A-4
SECONDARY ROADS (ARTERIAL-COLLECTOR-LOCAL ROADS)	2A-4
PROJECT PROGRESSION	2A-6

SECTION 2A - 2 - ADMINISTRATIVE APPROVAL

AUTHORIZATION FOR LOCATION PUBLIC HEARING	2A-7
BOARD APPROVAL	2A-7

SECTION 2A - 3 - REVIEWING WORK LOAD AND ASSEMBLING DATA

SCHEDULING PROJECT WITH WORK LOAD	2A-8
SETTING UP CORRESPONDENCE FILES	2A-8
SETTING UP ROUTE FILES	2A-8

SECTION 2A - 4 - REQUESTING AND ASSEMBLING ADDITIONAL DATA

PLAN DEVELOPMENT	2A-9
ADDITIONAL AVAILABLE DATA2A	۹-10
R TRAFFIC DATA2A	4-10
PHOTOGRAPHIC COVERAGE/TOPOGRAPHIC MAPPI	NG
	\-11
PHOTOGRAPHS AND MAPPING24	\-11

SECTION 2A - 5 - FIELD REVIEW

ARRANGING FIELD REVIEW (ON-SITE)	2A-12
HOLDING ON-SITE REVIEW	
PREPARATION OF REPORT	2A-12

SECTION 2A - 6 - STUDY OF ALTERNATES

PROJECTING HORIZONTAL ALIGNMENT	2A-13
PROJECTING VERTICAL ALIGNMENT	2A-13
EVALUATING ALTERNATIVES	2A-13

PREPARATION OF REPORT	2A-14
EVALUATING PUBLIC INVOLVEMENT PROGRAM	2A-14
CONTACTING LOCAL GOVERNMENT AND/OR AGENCIES	2A-14

SECTION 2A - 7 - PROJECT SCOPING

POLICY	2A-15
SCOPING GROUP	2A-15
SCOPING PROCESS	2A-15
DESIGN WAIVERS	2A-15
DESIGN EXCEPTIONS	2A-16

CHAPTER 2A - LOCATION STUDY

SECTION 2A - 1 - PROJECT INITIATION

PRELIMINARY ENGINEERING AUTHORIZATION

Projects are initiated and funding requests are submitted according to the system classification. See IIM LD- 183 for the authorization procedure. For a electronic copy of the Funding Allocation/Verification/Submittal Process see L & D. website http://insidevdot/sites/Location and Design/PPQ/default.aspx. *

URBAN PROJECTS

Projects within towns and cities with populations of 3,500 or more (and other selected urban areas under 3,500) are initiated by municipal resolution to the Urban Program Manager stating their desire for VDOT to consider the implementation of a project. Upon receipt of a request the Urban Program Manager/Project Sponsor will work with the District Project Management Office to enter the appropriate information in the "Project Pool" to establish a "New" project, obtain a Temporary UPC number and a Partial state base number. The Project Manager or Project Coordinator will initiate a request for the project to be a "Candidate" in the "Project Pool", obtain a permanent UPC number and a complete state base number. Once the project is included in a "Live" Six Year Improvement Program (SYIP) a Form PD3 will be submitted by the Programming Division to Fiscal Division to authorize preliminary engineering. On Federally Funded Projects the Federal Authorization must be in place to open the project to charges.

INTERSTATE AND PRIMARY PROJECTS

Requests for initiation of projects on the Interstate and Primary Systems originate within VDOT as recommended by the Commonwealth Transportation Board (CTB) and District Administrator in accordance with established schedules, for future planning purposes and in some instances at the request of local governments. The Project Sponsor will work with the District Project Management Office to enter the appropriate information in the "Project Pool" to establish a "New" project, obtain a Temporary UPC number and a Partial state base number. The Project Manager or Project Coordinator will initiate a request for the project to be a "Candidate" in the "Project Pool", obtain a permanent UPC number and a complete state base number. Once the project is included in a "Live" Six Year Improvement Program (SYIP) a Form PD3 will be submitted by the Programming Division to Fiscal Division to authorize preliminary engineering. On Federally Funded Projects the Federal Authorization must be in place to open the project to charges.

^{*} Rev. 1/07

CERTIFICATION ACCEPTANCE

Certification Acceptance (CA) is a form of documentation by VDOT for FHWA (on all Federal - Aid projects except Interstate) showing that all Federal Requirements have been met. The "Project Pool", "Integrated Project Manager" (IPM), PCES, RUMS, CEDAR and the project schedule^{*} should be used to monitor the various stages of project development as well as documenting completion of various stages.

In carrying out operations under certification acceptance (CA), it is imperative that all steps in the project implementation stage be strictly followed. This is particularly the case in transmitting a project at the P.S. & E. stage to the Federal Highway Administration, which cannot be submitted until the environmental document has been cleared. The approval is obtained by the Environmental Division. Environmental documents must receive approval by the FHWA before the work can be authorized. Projects in this category are to be held in Location & Design Division until notification from the Environmental Division has been received that the document has been approved by the FHWA.

EARLY PROJECT NOTIFICATION

Project Early Notification is required as soon as a project has been initiated (PE authorized) in order to provide state environmental resource agencies an opportunity to comment on highway improvements at an early stage of project development. Early Notifications are required on all proposed improvements that disturb previously undisturbed ground (for specifics, see Environmental Division's <u>State Environmental Review Process Manual</u>). Information on SERP is available at http://www.virginiadot.org/projects/environmental-SERP-faq.asp.

Project Early Notification Form <u>EQ-429</u> shall be completed and submitted with a location map on a section of a U.S.G.S. quadrangle sheet to the applicable District Environmental Manager as follows: Interstate and Primary projects - by the project manager as designated in iPM; Urban projects - by the Local Assistance Division; Secondary projects - by the District Construction Engineer through the Local Assistance Division when submitting Form <u>LD-430</u>. The forms and maps are then forwarded to the sixteen environmental resource agencies for review.

Environmental data identified in this early review process by the resource agencies is returned to the District Environmental Manager within thirty days. The district environmental personnel will utilize this data in their Preliminary Environmental Inventory to determine the significance / non-significance of the project.

^{*} Rev. 1/07

PRELIMINARY SCOPING

All projects are to be scoped in the early stages of development once placed in the Six-Year Improvement Program (SYIP), Secondary Six Year Plan (SSYP) or after plan document if locally administrated and Preliminary Engineering funds has been authorized. (See IIM LD- 210)

PROJECT NUMBERS*

Project Managers (PM) or Project Coordinators (PC) will use "Project Pool" and it's features ("Job Number Tab") to set up new projects, delete project numbers, or request additional project numbers (PE, R/W, C, B, or D numbers) and revisions of existing project numbers and descriptions.

REQUESTING STRUCTURE NUMBERS

When a project includes a structure, a "B" or "D" number (See Section 2E-6 PREPARATION OF SUPPLEMENTAL SHEETS) and a 5-digit FMSII/HTRIS Number is required. The Project Manager/Project Coordinator will request a 5 digit number from the District Bridge Engineer and add the job number and Federal Bridge number to the "Project Pool". A Pool Revision is then created in the "Project Pool".

REQUESTING ADDITIONAL PROJECT NUMBER

The Project Manager (PM) must consider the different potential phases of a project that might result in separate contracts associated with the project. This could include advance demolition work, phased construction under different contracts, etc. In requesting the assignment of UPC's for the project, at a minimum, a different UPC must be requested for each anticipated contract. These UPC's should be associated in the Project Pool, on the Miscellaneous Tab, under the section Linked UPC's (Ancestor/Lineage). While a contract can include more than one UPC, no individual UPC can be included in more than one contract. Including a UPC in more than one contract creates adverse impacts throughout VDOT, including invalid information in VDOT applications and processes such as the Dashboard and the cash forecast. Should the situation exist where a UPC was used in more than one contract, the PM must coordinate a request for a new UPC for one of the contracts, transfer the expenditures and the appropriate allocations to cover the expenditures associated with that project. This decision needs to be communicated with the appropriate District Team members in Programming Division prior to initiating the new project. The UPC must also be changed in all corresponding Transport Systems.

On call (District-wide, Region-wide) construction demo contracts should be set up with an administrative construction UPC (that will not have funding associated with it-similar

^{*} Rev. 7/07

to the Administrative Maintenance UPC's used for schedules). This will allow the estimate to successfully go over to FMSII where the charges must be redistributed before the voucher is approved to the original UPC where the construction will occur and where the funding resides.

REQUESTING A REVISION TO A PROJECT NUMBER

To request a revision to a project number (i.e. changing a "C" to an "M", canceling a project number, etc.) the Project Manager will edited the "Project Pool".

REQUESTING A REVISION TO A PROJECT DESCRIPTION

To request a revision to the project description, the Project Manager will use "Project Pool".

When a revision to the project description dramatically changes the scope, length, and/or cost of the project, the Project Manager must adjust the "Project Pool", PCES, and schedule as appropriate. If the length change is a major adjustment a "New" project must be set up by the project manager in the "Project Pool" for the portion not accomplished. Adjustments to the schedule and estimates will be revised by the Programming Division, District Office Project Management Office and the Project Manager in the automated PD1 process in "Project Pool". Minor revisions to the project scope may not warrant a revised scoping form.

REQUESTING A REVISION TO THE PROJECT SCOPE*

To request a revision to the project scope, the Project Manager will use "Project Pool".

When a revision to the project dramatically changes the scope of the project, the Project Manager must submit a revised Scoping Form <u>LD-430</u> to the Programming Division The LD-430 should provide a detailed summary of the revision (including reason for the scope change, new estimated cost, and any changes in the project schedule) and must be signed by the State Location and Design Engineer (or District Administrator). Minor revisions to the project scope may not warrant a revised scoping form.

SECONDARY ROADS (ARTERIAL-COLLECTOR-LOCAL ROADS)

The following procedure is to be adhered to in the preparation of secondary projects for field inspection stage:

1. Secondary projects are initiated by the Residency Administrator in conjunction with a master plan and with approval of appropriate boards of supervisors. Residency Administrator will work with the District Project Management Office to enter the

^{*} Rev. 7/07

- 2. appropriate information in the "Project Pool" to establish a "New" project, obtain a Temporary UPC number and a Partial state base number. The Project Manager or Project Coordinator will initiate a request for the project to be a "Candidate" in the "Project Pool", obtain a permanent UPC number and a complete state base number. Once the project is included in a "Live" Secondary Six Year Program (SSYP) a Form PD3 will be submitted by the Programming Division to Fiscal Division to authorize preliminary engineering. On Federally Funded Projects the Federal Authorization must be in place to*
- 3. Upon receipt of the secondary roads Preliminary Engineering authorization, the State Location and Design Engineer shall request data in accordance with Section 2A-1-PROJECT INITIATION and request historical and archaeological surveys. It is desirable that the information be available to those present at the time of the review. The State Location and Design Engineer shall assist in supplying any mapping or photography which may be required to complete the above.
- 3. After completion of step No. 2, the Project Manager will schedule an Initial Field Review and notify the Local Assistance Division Director, Location and Design Engineer and Right of Way Engineer of the date, time and site. Representatives from the District Environmental, Right of Way, Traffic Engineering, or any other appropriate section(s) may be requested to attend. A scoping team reviews the design at this time for documentation. (See IIM - LD - 210.)
- 4. The results of this Initial Field Review are to be forwarded to the Local Assistance Division Director on Form LD-430. The cost estimate of the project is to include construction estimates by the Location and Design Section. The District Right of Way Section will provide right of way and utility estimates as required. Projects with anticipated right of way donations are to have the donations fully resolved at this time.
- 5. Upon receipt of the Form <u>LD-430</u>, Local Assistance Division Director, shall complete his review and should he concur with the proposed scheme of development, he will so notify the State Location and Design Engineer with a copy to the District Administrator. Upon approval by the State Location and Design Engineer, field surveys will be authorized. Field surveys are not to be made prior to this approval.
- 6. Upon completion of the preliminary design, which will include proposed grades and right of way, prints will be made available to the District Environmental Manager for preparation of the proper environmental document and for permit determination.
- 7. Any major deviation from the agreements reached at the Initial Field Review and indicated in step No. 3 must be evaluated considering cost differential. This information is to be transmitted along with the preliminary plans as indicated in step No. 6 so that any change from the original concept can be included in the decision

^{*} Rev. 1/07

8. For instructions on using the "No Plan" and "Minimum Plan" concept see Appendix A, Section A-7-"No Plan" and "Minimum Plan" PROJECTS.

PROJECT PROGRESSION

The State Location and Design Engineer or his representative for Location will request that the design unit in either the Central Office or the District to which the project has been assigned prepare a preliminary study, if one is warranted. Should a study not be needed, survey will be authorized as noted in Section 2B-1-GROUND SURVEYS^{*}. The Preliminary Engineering Section will participate in any special studies and analyses that may be required by management.

SECTION 2A - 2 - ADMINISTRATIVE APPROVAL

AUTHORIZATION FOR LOCATION PUBLIC HEARING

The State Location and Design Engineer will review the project with the appropriate officials to determine if a Location Public Hearing will be required, taking into account the general complexity of the proposed and anticipated public interest (Location Public Hearings are usually held on all projects involving major environmental changes affecting the community.) Should it be found desirable to hold a Location Public Hearing, authorization will be given and those involved will be advised as to the scheduling of the hearing, corridors to be presented and other pertinent information. (A determination should be made at this time as to whether existing photography is adequate for the preparation of an aerial mosaic. If not, the required coverage should be requested.)

In most cases, a notice of willingness will not be posted on a project with one or more of the following characteristics. <u>http://insidevdot/sites/Location_and_Design/PPQ/default.aspx.</u>These_characteristics_are cause for considerable public concern which necessitates both a Location Public Hearing and a Design Public Hearing:

- 1. A major highway project of four or more lanes on a new location;
- 2. Project impacting the area with significant social, economic or environmental effects;
- 3. Project having two or more feasible solutions under serious consideration;
- 4. A Federal-Aid project identified as a Class I action.

BOARD APPROVAL*

The Public Involvement Section will assist the State Location and Design Engineer in preparing a memorandum to the Chief Engineer requesting consideration by the Board. This memorandum is to cover the proceedings of the public hearing and the resolution of questions and recommendations. The project is then forwarded to the Vice-Chairman of the Board who arranges to have it placed on the agenda for Board action. After the project has been considered by the Board, the Public Involvement Section shall advise the District Administrator of the action taken. The District Administrator advises those who spoke at the hearing or who corresponded with the Department as part of the hearing record of the action taken, including any changes in the proposal presented at the hearing and appropriate responses to the individual's comments or questions. The District Administrator will also advise all other local officials of the action taken. The Public Involvement Section taken. The Public Involvement Section taken. The District Administrator of the bearing and appropriate responses to the individual's comments or questions. The District Administrator will also advise all other local officials of the action taken. The Public Involvement Section taken. The Public appropriate mayor and/or chairman of the Board of Supervisors of the Board's action. The Commonwealth Transportation Board only approves proposed highways on new corridor locations.

SECTION 2A - 3 - REVIEWING WORK LOAD AND ASSEMBLING DATA

SCHEDULING PROJECT WITH WORK LOAD

When a project is received by either the Preliminary Engineering Section or a Design Section, the Section Head will assign it to one of his/her groups. Care must be taken to review existing and possible future construction schedules to assure that the section being assigned the project has sufficient time and manpower. On Preliminary Engineering projects, consideration must be given to long range commitments to assure that the same section will continue the project through the Preliminary Field Inspection stage.

SETTING UP CORRESPONDENCE FILES

The initiation and constant maintenance of correspondence files cannot be overemphasized. A properly maintained file will provide a continuing history of the project and will permit documentation of the various stages of activities. When a project is received by the Engineer to whom it is assigned, every effort should be made to assemble all correspondence relative to this particular project. This will involve a search of the main file, a review of the files of other divisions, and possibly a review of the files of District personnel. All original correspondence is to go to the central files after copies are made. When all available correspondence is assembled, consideration is to be given to the number of files needed and their content. On large projects or those expected to continue for several years, this is very important, as a separation of certain items will provide optimum access.

When a project has been authorized by the Programming Division, the project designer (or coordinator is to set up a file folder labeled "PRELIMINARY ENGINEERING COST" and the file is to <u>only contain</u> data such as the authorization(s), PE cost expenditures, request for additional funds, and backup data for additional PE cost and cost overruns (e.g., reason - for design of a section; additional study for Environmental considerations; etc.).

SETTING UP ROUTE FILES

Route files will contain all rolls, mosaics, old plans, photographs, USGS quadrangle sheets and other available data. Consideration must be given to the size and expected time frame of the project and sufficient space provided for the anticipated accumulation. Items in the route file are to be identified by some method for easy access. As the project progresses, care must be taken to keep only essential items, as an accumulation of unneeded material will waste valuable space.

SECTION 2A - 4 - REQUESTING AND ASSEMBLING ADDITIONAL DATA

PRELIMINARY PLAN DEVELOPMENT

Preliminary Plan Development is intended to provide the basis for scoping, and the guiding document for the development of Field Inspection plans. It is essential that various <u>alternatives</u> be assessed in sufficient detail in order to preclude major modifications during the latter stages of project development.

The following outline is a <u>guide</u> in the development process to assure that adequate control is applied in the early stage of projects:

1. As early as possible, at the inception of a project, photographic coverage is essential. The location of the project determines the coverage required. Rural projects with sparse development and without extremes in topography and development can generally be addressed at a scale of 1" = 200' Imperial (1:2000 Metric). A scale of 1" = 100' Imperial (1:1000 Metric) is preferable, but may limit the band width when relocations or various new alignments are being considered.

Other projects in congested areas may require photography at a scale of 1"= 50' Imperial (1:500 Metric). It is the designer's responsibility to obtain photography at an appropriate scale (ratio).

- 2. If traffic data has not been secured, a request should be submitted at this time on Form <u>LD-104</u>, including the <u>date</u> the information is <u>needed</u>.
- 3. From the photo coverage in step No. 1, a temporary plan base, either in the form of sheets or mosaics, is to be secured. The request should note that the material is to be used as temporary plan base, and photographic screening and/or dodging will be employed to produce a base on which line work will easily be visible.

Studies have shown that these plan bases provide a clearer drawing when the final version is completed. Other annotations can be made more legible by removing the image to provide a "clean" space for descriptions, etc.

4. Depending upon the complexity of the project, the use of title sheets, typical section sheets and other drawings may be used for quantities and details of traffic, intersections, etc. The base photo coverage can be placed on a sheet outline and a set of plans produced.

ASSEMBLING ADDITIONAL AVAILABLE DATA

Quite often there is available data within the Department and other state agencies which proves valuable in determining the location and design of the project. Land use maps, tax maps, soil studies, etc., are available in many instances and should be included in the route file for future use. Transportation studies are available for cities and towns over 3,500 population, as well as for several other urban areas under 3,500, and should be used as a guide.

REQUEST FOR TRAFFIC DATA

Design Year^{*} Traffic data is requested on Form <u>LD-104</u>, <u>except</u> for low volume Local Roads and Rural Collectors with a Current ADT (Current ADT being defined as latest available traffic counts) less than 400 VPD. Design Year Traffic Data is required on Local Roads and Rural Collectors requiring a detailed traffic analysis, such as roads experiencing a higher than normal growth rate of for other reasons that would require some type of traffic forecast.

The designer is to check the appropriate blocks to obtain traffic data required for a particular situation. The design year and speed is to be indicated on the form when submitted by the designer. The design year traffic data being requested is to be based on the criteria shown on Form <u>LD-104</u>. The design year (11 years or 22years) is dependant upon the functional classification of the roadway and the extent of the roadway improvement.

New construction, major improvements or expansion of the facility includes, but is not limited to the following:

- Construction of additional through lanes
- Addition of free-flow ramps to an existing at-grade intersection
- Conversion of an at-grade intersection to a grade separation
- Construction on new location
- Modification of an existing facility that results in some or all of the facility on new location

Reconstruction in kind or minor improvements includes, but is not limited to the following:

- Addition of turn lanes to an existing facility
- Shoulder modifications
- Restoration/maintenance of a roadway that results in a new facility that duplicates the original roadway on the same location
- Minor widening of an existing lane to achieve a standard lane width

^{*} Rev. 7/07

Also see the AASHTO "Green Book", Chapter 6 and AASHTO's "A Guide for Achieving Flexibility in highway Design", Chapter 1.*

Careful consideration must be given to environmentally sensitive locations which would require possible air or noise studies. Where schools, churches, historical structures, playgrounds, etc., are in close proximity to the proposed project, the District Environmentalist should be contacted to determine the extent of traffic analysis required.

REQUESTING PHOTOGRAPHIC COVERAGE/TOPOGRAPHIC MAPPING

On most new locations, it is desirable to request topographic mapping. A review of available data in most cases allows the Engineer to determine the approximate area to be mapped. In some instances it may be necessary to review the area to be mapped in the field. This area can then be shown accurately on a quadrangle sheet. After determining the area to be mapped, the ratio (scale) of mapping is to be determined. Most mapping is prepared at a 1" = 200' scale (1:2400 ratios); however, it is also available at other scales (ratios). When the proper scale (ratios) is determined, the Project Manager will advise the Photogrammetric Engineer who will proceed in the preparation of the mapping. Immediate action on requests for mapping may not always be possible as the flying time necessary for good aerial photography is limited.

ASSEMBLING PHOTOGRAPHS AND MAPPING

After the photographs are secured, mapping is completed. Prints can be made and used as individual sheets or combined as rolls at the discretion of the Engineer. A set of individual photographs is also essential for stereo viewing. A mosaic can be ordered through the Photogrammetric Engineers, should this be found desirable.

^{*} Rev. 7/07

SECTION 2A - 5 - FIELD REVIEW

ARRANGING FIELD REVIEW (ON-SITE)

After all available data is assembled, field review is to be made. Arrangements are to be made with the District Administrator and Residency Administrator (and the Local Assistance Division representative, if applicable) for an on-site review.

HOLDING ON-SITE REVIEW

On the initial field review there are several situations to be investigated. A determination is to be made, with the assistance of the District Administrator, District Construction Engineer and/or Residency Administrator, as to future development which could influence the selection of a corridor. Relative property values should be noted on the prints. Soils, streams and current land use are to be noted. All applicable environmental areas such as parks, historical sites, hazardous waste sites, wetlands, etc., should also be noted. The probable effect on existing roads and entrances should be reviewed. An on-site review should leave the review party with a better understanding or "feel" of the corridors under consideration.

PREPARATION OF REPORT

A report is to be written by the Project Manager^{*}, either to the section supervisor or to the file, outlining the conclusions reached at the on-site review. An appropriate part of this report is a recommendation as to the most desirable manner in which to proceed. This report will also serve as a record of matters considered.

SECTION 2A - 6 - STUDY OF ALTERNATES

PROJECTING HORIZONTAL ALIGNMENT

In projecting horizontal alignment at this stage of development, all practical considerations should be tested, subject to information obtained from the initial field reconnaissance. The alignment should be governed by the Geometric Design Standards in Appendix A, Section A-1, based on the design speed for the Functional Classification of the highway system that is being considered. In corridor selection, any deviation from these standards is to be noted for consideration. Additional information may also be obtained from AASHTO's <u>A</u> Policy on Geometric Design of Highways and Streets and other related publications. As corridors are studied, it is suggested that one baseline be projected for each alternate.

PROJECTING VERTICAL ALIGNMENT

When all horizontal alignments have been selected and shown on the prints, a tentative grade is necessary in order to properly evaluate these alternates. Care must be taken to confirm to applicable standards in regard to gradient and to passing and stopping sight distances on both crest and sag vertical curves. Grades should present a smooth appearance and eliminate the "roller coaster" concept whenever possible.

EVALUATING ALTERNATIVES

In evaluating alternates at this stage of the project development, it should be kept in mind that this is the initial attempt to define a corridor location and the alignment and grades projected are subject to refinement as shown in Section 2B-3-DETERMINATION OF ROADWAY DESIGN*. The basic objective at this time is to eliminate the corridors or alignments which are inferior to others considered within the project area. Ideally, one alignment and grade should appear superior to others considered within a given corridor. The aforementioned items used in considering horizontal and vertical alignment offer the best means of evaluating alternates in addition to any information which was obtained from other sources.

^{*} Rev. 7/06

PREPARATION OF REPORT

After alternates have been reviewed and evaluated, a written report to the section supervisor or file is to be prepared stating the conclusions reached, reasons for retaining or eliminating some corridors or alternates and a recommended procedure to follow as the study progresses. Copies are to be sent to the District Administrator and Residency Administrator^{*} and any division, which is affected by the project. In this manner all involved parties will be kept abreast of the progress of the project and the files will contain sufficient documentation.

EVALUATING PUBLIC INVOLVEMENT PROGRAM

Informing the public about studies in their area in the earliest stages can be very helpful in the later stages of project development. Contact the Public Involvement Section for advice and assistance in setting up a useful public involvement program.

CONTACTING LOCAL GOVERNMENT AND/OR AGENCIES

Cooperation and information are two key words in working with local officials. At this stage of development, contact with the local governing bodies, planning commissions and other elected and/or appointed officials is both proper and desirable. Being in contact daily with their local situation gives these local officials an insight to the area's problems and/or changing conditions. In addition to exchange of ideas and information, contact at this time will give them an opportunity to make a contribution to the overall project development. Contact and arrangements for meeting with local officials in urban areas are to be made by the Local Assistance Division. In other areas, these arrangements are to be made by the District Administrator or his/her designated representative. Meetings of this type also afford the opportunity to bring District personnel up to date on progress of the project.

^{*} Rev. 7/06

SECTION 2A - 7 - PROJECT SCOPING

POLICY

All projects are to be scoped in their early stages of development. See Chapter 1D-1-INTRODUCTION for instructions on appropriate timing.

SCOPING GROUP

The Scoping Group is determined according to the roadway classification. It is an interdisciplinary group.

SCOPING PROCESS

The scoping allows all project participants to define the elements comprising the project, the working budget, schedule for designing and developing the project. The recommended design is presented to the scoping group and after agreement is reached, the appropriate form will document the decisions reached.

Interstate, Primary, Urban and Secondary projects will use Form <u>LD-430</u>.

Copies of these forms are to be sent to all team members.

Prior to the plans being signed for right of way (or construction when no right of way is needed), the Project Manager^{*} will certify that the project is within the original scope, or provide documentation as to the deviations.

The State Location and Design Engineer will use Form <u>LD-404</u> for this purpose.

DESIGN WAIVERS

This Design Waiver Policy is for roadway projects only.

Design Waivers are required when deviations from VDOT's design criteria occur. When design criteria meet or exceed AASHTO minimal design but fall short of VDOT's minimal design, a Design Waiver shall be required Design Waivers will be applicable to all projects regardless of functional classification and funding and shall be documented and approved in accordance with the Design Waiver Request Form LD-448. Please refer to IIM-LD-227 for specific guidelines on obtaining a design waiver.

^{*} Rev. 7/07

DESIGN EXCEPTIONS

If there are geometric values that are below AASHTO minimum guidelines, the Project Manager shall seek to obtain approval of these design exceptions from the State Location and Design Engineer (all projects) and FHWA (if applicable) no later than Public Hearing Stage. Please refer to IIM-LD-227 for specific guideline on obtaining design exceptions.