POLICIES & SPECIFICATIONS FOR

ROADS & BRIDGES IN THE COUNTY ROAD SYSTEM OR THOSE PETITIONING FOR BECOMING PART OF THE COUNDTY ROAD & BRIDGE SYSTEM WARREN COUNTY, MISSOURI

INTRODUCTION

The following policies and specifications have been developed by the Warren County Commission to help provide a practical, safe and economical transportation system for the County of Warren, State of Missouri.

All policies and specifications relating to the Warren County road and bridge system previously adopted by the County Commission (previously the County Court) that are inconsistent with any provisions of the policies and specifications are repealed to the extent of such inconsistency. To the extent that the provisions of these policies and specifications are the same in substance as previously adopted policies and specifications, they shall be considered as continuations thereof and not as new enactments unless otherwise specifically provided.

Sections 100 - 700 pertain to items that the citizens of Warren County or those interested in any of the transportation system of Warren County may petition the County Commission for infrastructure that is or may become part of the County's Road and Bridge system.

Section 800 pertains to items relating to the County's existing road system.

Sections 900 - 1100 pertains to all of this policy.

SECTION 100.000 NEW ROADS TAKEN INTO THE COUNTY SYSTEM

100.100 Basic Policy

All roads taken into the Warren County Road system must meet the specifications as prescribed in this policy. No road will be accepted into the county road system if it is located on top of a dam or levee.

100.110 New Road Acceptance Policy

This section applies to roads constructed after the adoption of these policies.

All roads petitioned for inclusion into the County system must be constructed and maintained to adopted specifications for one full year at the expense of the petitioner(s).

Roads will not be accepted until these conditions have been met. Compliance with these specifications, of itself will not guarantee acceptance of any road. Each request will be considered in terms of the then existing circumstances and action taken by the County Commission will be in accord with the best interest of the County as a whole.

100.120 Existing Private or Public Road Acceptance Policy

All roads petitioned for inclusion into the County system must be brought up and maintained to adopted specifications for one full year at the expense of the petitioner(s). Roads will not be accepted until these conditions have been met. Compliance with these specifications, of itself will not guarantee acceptance of any road. Each request will be considered in terms of the then existing circumstances and action taken by the County Commission will be in accord with the best interest of the County as a whole.

100.200 Procedure for New Road Acceptance

The following procedure is to be followed for a newly constructed road to be accepted into the county road system. This includes roadways that are to be constructed and accepted into the County road system after the adoption date of these policies.

- 1) A "Petition for Establishment of Public Road" (Appendix A) and "Conveyance of Right of Way" (Appendix B) shall be submitted to the County Commission.
- 2) The required three (3) public notices shall be posted.
- 3) The Warren County Commission shall decide if the petitioned road will be in accord with the best interest of the County as a whole. If the road does not, the County Commission shall notify the petitioner's representative.
- 4) If the County Commission decides that the road will be in accord with the best interest of the County as a whole, the petitioner shall submit plans to the county showing that the road will be constructed in accordance with the Roadway Construction Specifications (Section 400) and the plans must be approved by the County Commission.
- 5) The petitioner shall construct the road equaling or exceeding the specifications of Warren

County at the expense of the petitioner(s).

- 6) During the construction, the county shall be notified of the work in progress. The County has the right to inspect during the construction phase.
- 7) At the completion of construction, copies of all bills shall be submitted to the County showing time and materials used in the construction and lien waivers for said time and materials.
- 8) After inspection of the road by the County, the Warren County Commission shall respond with a written report outlining any roadway items that do not conform to the Roadway Construction Specifications (Section 400).
- 9) The petitioner shall notify the Commission when correction actions are to be performed to allow review of work in progress.
- 10) When all work is complete, an inspection shall be conducted by the County Commission and any items not up to specifications will start over again at # 6 (Section 100.200).
- 11) One year after being constructed and meeting the specifications and requirements, in which time the petitioner is responsible for maintaining the roadway, the Commission will re-inspect the road.

After this inspection:

- a) If the roadway meets the County's specifications and lien waivers submitted for any time or materials expended after the original construction, the Commission will accept the road into the County's system.
- b) If the roadway does not meet the County's specifications, the petitioner will be given three (3) months to correct the deficiencies. If not completed satisfactorily, the petition will be returned to the petitioner and the road will not become part of the County's system.

Note: The entire roadway is subject to complete re-inspection at the discretion of the Commission depending on the timeliness that corrective actions are made.

100.300 Procedure for Existing Private or Public Road Acceptance

This section applies to any road in existence before a petition to become part of the county road system is submitted.

- 1) A "Petition for Establishment of Public Road" (Appendix A) and "Conveyance of Right of way" (Appendix B) shall be submitted to the county commission.
- 2) The required three (3) public notices shall be posted.
- 3) The Warren County Commission shall decide if the petitioned road will be in accord with the best interest of the County as a whole. If the road does not, the County Commission shall notify the petitioner's representative.
- 4) If the County Commission decides that the road will be in accord with the best interest of the County as a whole, the petitioner shall submit to the County Commission details of the history of the road, such as: date constructed, specifications to which the road was constructed and maintenance performed, and the current condition of the road.

- 5) After inspection of the road by the County, the Warren County Commission shall respond with a written report outlining any roadway items that do not conform to the Roadway Construction Specifications (Section 400).
- 6) The petitioner shall notify the Commission when corrective actions are to be performed to allow review of work in Progress.
- 7) When all work is complete and copies of all bills for time and material and lien waivers for the same are submitted to the County Commission, an inspection shall be conducted by the Commission and any items not up to specifications will start over again at #5 (Section 100.300).
- 8) One year after meeting the County's specifications and requirements, in which time the petitioner is responsible for maintaining the roadway, the Commission will re-inspect the road.

After this inspection:

- a) If the roadway meets the County's specifications and lien waivers submitted for any time or materials after originally meeting the specifications and requirements, the Commission will accept the road into the County's system.
- b) If the roadway does not meet the County's specifications, the petitioner will be given three (3) months to correct the deficiencies. If not completed satisfactorily, the petition will be returned to the petitioner and the road will not become part of the County's system.

Note: The entire roadway is subject to complete re-inspection at the discretion of the Commission depending on the timeliness that corrective actions are made.

100.400 Petition for Establishment of a Public Road

The method to request that a private roadway be accepted into the County Road System shall be by petition. The petition shall be submitted only on forms approved by the County. Copies of the approved forms are contained in Appendix A. The applicable section, Section 228.020 of the RSMO, 1994, is contained herewithin.

Petition for establishing road

Application for the establishment of all public road, except state roads, shall be made by petition to the county commission. Such petition shall be signed by at least twelve registered voters of the municipal township or townships through which such proposed road may run, three of whom shall be of the immediate neighborhood, and shall specify the proposed beginning, course and termination thereof, and shall be accompanied by the names of all persons owning land through which such road shall run, with the amount of damages, if any, claimed by them, so far as can be ascertained, and also the names of those who are willing to give the right of way for such proposed road, except that if the proposed road begins or terminates on, or runs along a boundary between the county wherein such petition is filed and an adjoining county, any or all of the petitioners may be registered voters of such adjoining county, and of the municipal township or townships thereof through which the proposed road may run, or in which the proposed road may begin or terminate.

In addition, the intention to establish a public road must be posted at three (3) locations. The applicable section, Section 228.030 RSMO, 1994, is contained herewithin:

Notice of Application for Road

Notice of such intended application shall be given by printed or written handbills put up in three or more public places in such municipal township or townships, one of which shall be put up at the proposed beginning, and one at the proposed termination of said road, at least twenty days before the first day of a regular or adjourned term of the county commission to which the petition is to be presented, which notice shall apply to and be binding upon all persons and corporations whatsoever having any interest in or title to the lands, or any part thereof, over which said proposed road may run.

100.500 Petition for Closing a Public Road

The method to request that a road be vacated shall be by petition. The applicable sections of the Statutes of the State of Missouri shall apply, including but not limited, to Sections 228.110 -228.130 of the RSMO, 2000.

100.501 Petition for Closing a Public Street or Alley

The method to request that a roadway (such as a street or alley) be vacated shall be by petition. The applicable sections of the Statutes of the State of Missouri shall apply, including but not limited to Sections 71.240 -71.260 of the RSMO, 2000.

100.502 Petition for Closing a Street in a Subdivision

The method to request that a roadway (such as a street or alley) be vacated shall be by petition. The applicable sections of the Statutes of the State of Missouri shall apply, including but not limited to Sections 71.270 -71.280 of the RSMO, 2000.

SECTION 200.00 UPGRADING OF COUNTY MAINTAINED GRAVEL ROADS TO HARD SURFACED ROADS

200.100 Upgrading County Maintained Gravel Roads to Hard Surfaced Roads

- 1) The party(s) wishing to upgrade the road shall petition the County Commission.
- 2) The petitioner wishing to upgrade the road shall submit plans and details as to how they will bring the existing road up to the current road standards of this policy. All costs shall be the responsibility of the petitioner.
- 3) The county shall decide if the plans and detail meets the county standards and will accept or reject the petition.
- 4) Upon acceptance, the petitioner shall have all of the right of way transferred to Warren County by way of a General Warranty Deed and such recorded before construction begins. All costs to be paid by the petitioner(s).
- 5) The County shall be notified of the construction in progress and the county shall have the right to make inspections during construction.
- 6) At completion of the project, the petitioner shall submit copies of all bills and lien waivers for time and material.
- 7) After one year of being in compliance with the Roadway Construction Specifications (Section 400), in which time the petitioner is responsible for maintaining the roadway, the Commission will re-inspect the road. Any items that do not meet the specifications must be corrected. If the petitioners do not take corrective action, the county shall make the improvements and bill the petitioners for the costs of time and material.
- 8) Maintaining the roadway in Section 200.100, #7 refers to the driving surface of the road. This would include the patching of the road surface.

SECTION 300.000 ABANDONED, CLOSED OR VACATEÐ OLD COUNTY ROADS

Roads abandoned, closed, vacated and/or not maintained by the County shall be considered as a new road for the purposes of this policy. To become part of the active maintained road system of the County, they must go through the petition process, constructed according to the road specifications and be maintained to the specifications of this policy. See Section 100.00.

SECTION 400.000 ROADWAY CONSTRUCTION SPECIFICATIONS

400.100 Gravel Roads

- 1) A General Warranty Deed issued to the County of Warren for the propose of roadway must be furnished and recorded.
- 2) The minimum deeded right of way shall be sixty (60) feet. Additional right of way may be required depending upon topography. Also drainage easements may be required.
- 3) The roadway surface shall have a minimum width of twenty four (24) feet.
- 4) A turnaround or Cul-de-Sac with a radius of forty two (42) feet minimum shall be provided on all dead ends.
- 5) Excavation and back fill: All debris, roots, grass and topsoil must be removed from the roadway. Fill only with subsoil. The subgrade below the base rock shall be compacted. All portions of the subgrade that will not readily compact when rolled shall be removed and replaced with suitable material. All rock and large boulders in the roadbed area shall be removed or broken off to a depth of under six (6) inches below the surface of the subgrade. Compensate for compaction by overfill.
- 6) The elevation from the bottom of the ditch to the crown of the road centerline shall be a minimum of twenty four (24) inches.
- 7) The minimum depth of the ditch shall be eighteen (18) inches.
- 8) The minimum crown shall be $\frac{1}{2}$ inch per foot of road surface.
- 9) Cut slopes shall not be steeper than 3:1
- 10) Fill slopes shall not be steeper than 3:1
- 11) In slopes shall not be steeper than 2:1
- 12) Maximum grade of roadway shall be 10%.
- 13) All driveways and culverts shall be in place. The minimum length of culvert for single residence or single owner driveways shall be thirty (30) feet. The minimum length of culvert for multiple residence, multiple owners or business driveways shall be forty (40) feet.
- 14) The sizing for culverts shall meet at least the standards found in APPENDIX E.
- 15) The culverts must meet the standards of MoDOT and be installed to the specifications of the manufacturer or MoDOT, whichever is more stringent.
- 16) Rock base: There shall be a minimum of six (6) inches of 2 inch clean rock as the base rock. The base rock shall have sufficient compaction.

- 17) Surface rock: There shall be a minimum of four (4) inches of inch clean rock. This may be applied in two applications to allow for compaction. Inch minus rock may be used as a finish layer over this surface rock.
- 18) Newly graded areas shall be protected from traffic and erosion. All disturbed areas not surfaced shall be covered with minimum of one (1) inch of topsoil and then fertilized, limed, seeded and mulched to re-establish vegetative cover.
- 19) Inspection and approval of all work at each stage of completion shall be performed by the County at the option of the County and as it may deem necessary.
- 20) All project costs relating (but not limited to) right of way, engineering, surveying, recording, legal fees and construction must be the responsibility of the landowners (or petitioners).
- 21) All contractors and petitioners shall take all reasonable measures to insure the safety of the public, all workers on the project and all county personnel and inspectors.
- 22) Approval of any road plan will take safety and visibility factors into consideration.
- 23) All new road projects shall be submitted for review and approval of the County Commission before construction begins.
- 24) The maintenance of roads to be accepted into the County Road system must be maintained by the petitioner for a period of one (1) year after construction for gravel roads. This maintenance shall include but not be limited to grading, addition of gravel as needed, snow removal, signage, mowing and other maintenance items.
- 25) Utility easements are only allowed on the outer ten (10) feet strips of right of way except when crossing the road. Utilities crossing a road must bore under the road, not cut the road surface.
- 26) All bridges and box culverts must meet MoDOT specifications and the County specifications as found in Section 400.400.

400,200 Hard Surfaced Roads

- 1) A General Warranty Deed issued to the County of Warren for the propose of roadway must be furnished and recorded.
- 2) The minimum deeded right of way shall be sixty (60) feet. Additional right of way may be required depending upon topography. Also, drainage easements may be required.
- 3) The roadway-driving surface shall have a minimum width of twenty (20) feet with a two (2) foot rock shoulder on each side. The total width being twenty four (24) feet.
- 4) A turnaround or Cul-de-Sac with a radius of forty two (42) feet minimum shall be provided on all dead ends.
- 5) Excavation and back fill: All debris, roots, grass and topsoil must be removed from the

roadway. Fill only with subsoil. The subgrade below the base rock shall be compacted. All portions of the subgrade that will not readily compact when rolled shall be removed and replaced with suitable material. All rock and large boulders in the roadbed area shall be removed or broken off to a depth of under six (6) inches below the surface of the subgrade. Compensate for compaction by overfill.

- 6) The elevation from the bottom of the ditch to the crown of the road centerline shall be a minimum of eighteen (18) inches plus the crown as figured in #8 below.
- 7) The minimum depth of the ditch shall be eighteen (18) inches.
- 8) The minimum crown shall be 2.5% slope per foot of road surface and shoulder.
- 9) Cut slopes shall not be steeper than 3:1
- 10) Fill slopes shall not be steeper than 3:1
- 11) In slopes shall not be steeper than 2:1
- 12) Maximum grade of roadway shall be 10%.
- 13) All driveways and culverts shall be in place. The minimum length of culvert for single residence or single owner driveways shall be thirty (30) feet. The minimum length of culvert for multiple residence, multiple owners or business driveways shall be forty (40) feet.
- 14) The sizing for culverts shall meet at least the standards found in APPENDIX E.
- 15) The culverts must meet the standards of MoDOT and be installed to the specifications of the manufacturer or MoDOT, whichever is more stringent.
- 16) Rock base: There shall be a minimum of four (4) inches, compacted, of 2 inch clean rock as the base rock. The base rock shall have sufficient compaction.
- 17) Surface rock: There shall be a minimum of four (4) inches, compacted, of inch clean rock. This may be applied in two applications to allow for compaction. Inch minus rock may be used as a finish layer over this surface rock.
- 18) Newly graded areas shall be protected from traffic and erosion. All disturbed areas not surfaced shall be covered with minimum of one (1) inch of topsoil and then fertilized, limed, seeded and mulched to re-establish vegetative cover.
- 19) Inspection and approval of all work at each stage of completion shall be performed by the County at the option of the County and as it may deem necessary.
- 20) All project costs relating (but not limited to) right of way, engineering, surveying, recording, legal fees and construction must be the responsibility of the landowners (or petitioners).
- 21) All contractors and petitioners shall take all reasonable measures to insure the safety of the public, all workers on the project and all county personnel and inspectors.
- 22) Approval of any road plan will take safety and visibility factors into consideration.

- 23) All new road projects shall be submitted for review and approval of the County Commission before construction begins.
- 24) The maintenance of roads to be accepted into the County Road system must be maintained by the petitioner for a period of one (1) year after construction. This maintenance shall include but not be limited to patching the driving surface, addition of gravel on the shoulders as needed, snow removal, signage, mowing and other maintenance items.
- 25) Utility easements are only allowed on the outer ten (10) feet strips of right of way except when crossing the road. Utilities crossing a road must bore under the road, not by cutting the road surface.
- 26) All bridges and box culverts must meet MoDOT specifications and the County specifications as found in Section 400.400.
- 27) When more base or surface rock must be added to an existing gravel road before hard surfacing, this material shall be compacted before the hard surface is applied.
- 28) Asphalt specifications; refer to MoDOT Standard Specifications for bituminous surface, Sections 403-409 of MSS. Average Daily Traffic Count, subgrade class and type of road shall determine the thickness of asphalt.
- 29) The centerline of the roadway shall be marked with yellow striping as per MoDOT MSS.

400.400 BRIDGES

All new bridges and box culverts; bridges and box culverts on roads being accepted into the county road system; and bridges and box culverts on county gravel roads being upgraded to hard surface shall have a twenty six (26) foot clear roadway width and be designed to meet BRO standards as set out in the 1999 edition of MSS.

400.500 ROADS ON A COUNTY LINE

Any road that lies on a county line will be considered with the adjoining counties input.

SECTION 500.000 DUST SUPPRESSION

In an effort to help the citizens of Warren County suppress the dust on the county roads located near their residence, the Warren County Commission may make available a dust suppression program. The experience in the past with a dust suppression product shows that the dust suppression decreases with time and traffic. Each application of the product has an added effect to the extent that after several years of application, a year may be skipped.

Citizens can apply for the dust suppression program at the Warren County Clerk's Office in Warrenton at the Administration Building during normal business hours. The citizens will be responsible for paying for the dust suppression product and its application at the rate per foot (to be determined from time to time) of continuous roadway at the time of application. A minimum of 200 foot of roadway per application will be required.

After the County has received enough requests within a reasonable geographical area (with payment) to equal a load of product, the checks for the program will be deposited. The length of road to be sprayed will be marked by the applicant and checked by the Warren County Road Department. If the applicant does not mark the road, the Road Department will mark the road. Warren County will prepare the road surface for the application.

Warren County does not warranty the effectiveness of the dust suppression program.

SECTION 600.000 NEIGHBORHOOD IMPROVEMENT DISTRICT ROADS

Any road which is part of the county's system or any road which is being petitioned into the county road system and which is being financed by NID, will meet the same standards as stated in this policy.

SECTION 700.00 SPEED LIMITS

The Warren County Commission has established a procedure for implementing speed limits on county roads. This will be done on a "road by road" basis and in some instances for only a given section of a road.

The first step in the procedure is for a petition to be filed with the County Commission for the establishment of a speed limit for a County Road. The petitioners are required to secure the signatures of a majority of the residents that reside contiguous to that section of the road. The records of the Assessor's and County Clerk's Office will be used to verify that the signers are residing contiguous to the road.

If enough signatures are secured, the Commission will determine if it is in the best interest of the County to establish a speed limit (other than that established by state statute) for the road and what that speed limit shall be.

Upon the establishment of a speed limit, the Commission will enact an ordinance to that effect, notify those required by statute and post the road with signs before enforcement begins.

The pages to be used for the petition can be found in Appendix D. Only one copy of the first page is required with each petition. The second page may be reproduced as needed.

SECTION 800.00 EXISTING ROAD AND BRIDGE SYSTEM POLICIES AND SPECIFICATIONS

800.100 Maintenance, General

- 1) Driveway and field entrance culverts are the responsibility of the landowner.
- 2) Mailboxes, the County will repair those mailboxes damaged by the County in its normal course of maintenance, if notified by the owner.
- 3) Mowing, the County will make at least one pass (mower width) with the mower in the first part of the spring or summer. As time allows, another pass will be made possibly covering a wider area.
- 4) Mowing will include the full width of the County's road system.
- 5) Brush and trees, for safety and maintenance reasons, trees and brush may be cut to the limits of the right of way.
- 6) Signage, the County will mark those roads that are part of the County's system with sign designating the name of the road. Vandalism and theft are the biggest problem with the road signs. Please report any vandalism or theft.
- 7) Snow and ice, priority will be given to the following roads during time of inclement weather.
 - a) School bus routes
 - b) High traffic volume roads
 - c) Connecting roads
 - d) Emergency situations

800.200 Maintenance, hard surfaced roads

- Hard surface roads will be patched from time to time. Normally all hard surfaced roads are patched during the early summer. Other times of the year they are done on an as needed basis.
- 2) From time to time as funds are available, the County may overlay a hard surfaced road with a hot mix overlay. The selection of which road(s) will be over laid will be based upon condition of the road, traffic count of the road, length of road and if the road is a through connecting road verses a dead end road.
- 3) Roads that have hot mix overlay will be striped with single yellow markings.

800.300 Maintenance, gravel roads

- 1) Grading, County roads will be graded on an as needed basis.
- 2) Gravel will be hauled to the roads on an as needed basis.
- 3) Type of gravel applied will be dependent upon availability, quality of rock, condition of road and traffic volume.

800.400 Improvements to existing county system

The County may from time to time improve the existing county road and bridge system, These improvements will be dependent upon funding available at the time, safety conditions, traffic volumes, availability of donated right of way, type of road and any other factors at the time.

800.410 Gravel roads

- 1) Where possible, a General Warranty Deed issued to the County of Warren for the propose of roadway must be furnished and recorded.
- 2) Where possible, the minimum deeded right of way shall be sixty (60) feet. Additional right of way may be required depending upon topography. Also drainage easements may be required.
- 3) Where the right of way allows, the roadway surface shall have a minimum width of twenty four (24) feet.
- 4) Where the right of way allows, a turnaround or Cul-de-Sac with a radius of forty two(42) feet minimum shall be provided on all dead ends.
- 5) Excavation and back fill: All rock and large boulders in the roadbed area shall be removed or broken off to a depth of under six (6) inches below the surface of the subgrade. Compensate for compaction by overfill.
- 6) The elevation from the bottom of the ditch to the crown of the road centerline shall be a minimum of twenty four (24) inches.
- 7) The minimum depth of the ditch shall be eighteen (18) inches.
- 8) The minimum crown shall be ½ inch per foot of road surface.
- 9) Cut slopes shall not be steeper than 3:1
- 10) Fill slopes shall not be steeper than 3:1
- 11) In slopes shall not be steeper than 2:1
- 12) Maximum grade of roadway shall be 10%.
- 13) The County will replace driveway culverts damaged by the County as part of the improvement. Where the existing culvert does not meet standard specifications, the landowner will be asked to supply the culvert with County doing the installation' The minimum length of culvert for single residence or single owner driveways shall be thirty (30) feet. The minimum length of culvert for multiple residence, multiple owners or business driveways shall be forty (40) feet.
- 15) The sizing for culverts shall meet at least the standards found in APPENDIX E.
- 16) The culverts must meet the standards of MoDOT and be installed to the specification of

- the manufacturer or MoDOT, whichever is more stringent.
- 17) Rock base: There shall be a minimum of six (6) inches of 2 inch clean rock as the base rock. The base rock shall have sufficient compaction.
- 18) Surface rock: There shall be a minimum of four (4) inches of inch clean rock. This may be applied in two applications to allow for compaction. Inch minus rock may be used as a finish layer over this surface rock.
- 19) Newly graded areas shall be protected from traffic and erosion. All disturbed areas not surfaced shall be covered with minimum of one (1) inch of topsoil and then fertilized, limed, seeded and mulched to re-establish vegetative cover.
- 20) All bridges and box culverts must meet MoDOT specifications and the County specifications as found in Section 400.400.

800.420 Improving gravel to hard surfaced

- 1) A General Warranty Deed issued to the County of Warren for the propose of roadway must be furnished and recorded.
- 2) The minimum deeded right of way shall be sixty (60) feet. Additional right of way may be required depending upon topography. Also drainage easements may be required.
- 3) The roadway-driving surface shall have a minimum width of twenty (20) feet with a two (2) foot rock shoulder on each side. The total width being twenty-four (24) feet.
- 4) A turnaround or Cul de Sac with a radius of forty-two (2) feet minimum shall be provided on all dead ends.
- 5) Excavation and back fill: All debris, roots, grass and topsoil must be removed from the roadway. Fill only with subsoil. The subgrade below the base rock shall be compacted. All portions of the subgrade that will not readily compact when rolled shall be removed and replaced with suitable material. All rock and large boulders in the roadbed area shall be removed or broken off to a depth of under six (6) inches below the surface of the subgrade. Compensate for compaction by overfill.
- 6) The elevation from the bottom of the ditch to the crown of the road centerline shall be a minimum of eighteen (18) inches plus the crown as figured in #8 below.
- 7) The minimum depth of the ditch shall be eighteen (18) inches.
- 8) The minimum crown shall be 2.5% slope per foot of road surface and shoulder.
- 9) Cut slopes shall not be steeper than 3:1
- 10) Fill slopes shall not be steeper than 3:1
- 11) In slopes shall not be steeper than 2:1
- 12) Maximum grade of roadway shall be 10%.
- 13) The County will replace driveway culverts damaged by the County as part of the

improvement. Where the existing culvert does not meet standard specifications, the landowner will be asked to supply the culvert with County doing the installation. The minimum length of culvert for single residence or single owner driveways shall be thirty (30) feet. The minimum length of culvert for multiple residence, multiple owners or business driveways shall be forty (40) feet.

- 14) The sizing for culverts shall meet at least the standards found in APPENDIX E.
- 15) The culverts must meet the standards of MoDOT and be installed to the specifications of the manufacturer or MoDOT, whichever is more stringent.
- 16) Rock base: There shall be a minimum of four (4) inches, compacted, of 2 inch clean rock as the base rock. The base rock shall have sufficient compaction.
- 17) Surface rock: There shall be a minimum of four (4) inches, compacted, of inch clean rock. This may be applied in two applications to allow for compaction. Inch minus rock may be used as a finish layer over this surface rock.
- 18) Newly graded areas shall be protected from traffic and erosion. All disturbed areas not surfaced shall be covered with minimum of one (1) inch of topsoil and then fertilized, limed, seeded and mulched to re-establish vegetative cover.
- 19) Any road plan will take safety and visibility factors into consideration.
- 20) All road projects shall be submitted for review and approval of the County Commission before construction begins.
- 21) Alt bridges and box culverts must meet MoDOT specifications and the County specifications as found in Section 400.400.
- 22) When more base or surface rock must be added to an existing gravel road before hard surfacing, material shall be compacted before the hard surface is applied.
- 23) Asphalt specifications; refer to MoDOT Standard Specifications for bituminous surface, Sections 403-409 of MSS. Average Daily Traffic Count, subgrade class and type of road shall determine the thickness of asphalt.
- 24) The centerline of the roadway shall be marked with yellow striping as per MoDOT MSS.

800.500 Utility easements

Utility easements are only allowed for publicly and privately owned utility companies. Developers and individuals may install utilities on the right of way but only if a utility company assumes ownership upon completion of the installation. The easements shall be on the outer ten (10) feet strips of right of way except when crossing the road. Utilities crossing a hard surfaced road must bore under the road, not by cutting the road surface. Utilities crossing a gravel road may bore if they desire, but if cut they are required to fill the cut and replace any settling.

800.600 Road names and changes

Those roads that are part of the county maintained system are named by the Warren

County Emergency Services. The Warren County Commission will review any request for a name change of an existing county maintained road and make a recommendation to Warren County Emergency Services. The Warren County Commission desires to maintain continuity and a sense of the history of Warren County and thus will only recommend a change in the name of a road when such a change brings continuity in the name of a road (such as along a county line) or when there is duplication or confusion with an existing road in the county.

SECTION 900.000 VARIANCES

Upon requests, the County Commission may issue a variance for any section or part of a section of this policy and specifications due to a geological, topographical or other factor(s) having an influence upon the ability of a parry(s) to meet or exceed these policies and/or specifications.

SECTION 1000.000 AMENDMENTS

Amendments may be made to these policies and specifications by the County Commission at any time. Their consideration shall be posted in accord with the "Sunshine Law". Any section, subsection, sentence, clause, phrase or other portion of this policy and specification document that references State Statutes or Missouri Department of Transportation (MoDOT) specifications shall reflect the most recent version or edition of the Statutes or MoDOT specifications.

SECTION 1100.000 SEVERABILITY

If any section, subsection, sentence, clause, phrase or other portion of this policy and specification document is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions hereof.

APPENDIX A Petition for Establishment of a Public Road

STATE OF MISSOURI COUNTY OF WARREN	IN THE COUNTY COMMISSION,	TERM,
citizens of said County, at le named, three of whom resi proposed road, respectfully described is	ommission of Warren County, Missouri: We east twelve registered voters of the municipal in the immediate neighborhood of the forepresent and aver that the proposed public situated in the municipal township(s) of	pal township(s) hereinafter ollowing described
	s of sufficiently great utility to the general nning, courses, and termination thereof, wi road are as	
aver that this petition is acceptated which said proposed each of them so far as can the right of way for said proposed application, not less than the up in not less than three (3 township(s), one at the proposed road, and more than twenty days befapplication is presented, to day a duplicate original copy of hereon, and that by said m	aid public road is entirely practicable and a companied by the names of all resident and ed public road shall run, with the amounts be ascertained, and also by the names of apposed road. And we further aver that as a aree (3) printed or written handbills were be distinct, separate, and independent public posed beginning of said public road, one at one at or the first day of the regular term of said one of said public notices is herewith filed eans public notice of this application has be at the subject matter.	d other persons owning land of damages claimed by all who are willing to give and for public notice of this by said petitioners duly put ic places in said municipal at the proposed termination in said township(s) in said County, d County Commission at which this the maintained to this date, and that with return thereof duly entered een duly given, and said

and that the facts herein justify the establishment of said public road. And we further aver that said public road will be maintained to adopted County standards for one (1)				
year, after establishment by the said County Commission, with no expense to said County. And we further aver that we have read the POLICIES & SPECIFICATIONS FOR ROADS & BRIDGES IN THE COUNTY ROAD SYSTEM OR THOSE PETITIONING FOR BECOMING PART OF THE COUNTY ROAD & BRIDGE SYSTEM WARREN COUNTY, MISSOURI and accept and apply them to this petition.				
Wherefore, said pe	Wherefore, said petitioners pray an order for the establishment of said proposed			
	ty thisday and proper signatures.	of	, as witness our respective	
Petitioners: Print Full Name	Proper Signature	Address	Township Residing	
· ·	oove signatures were a	•	nce of their own free will.	
* Fix the beginning them.	g, intermediates and te	rmination by US S	urvey, so that a surveyor can find	
Names of all resident persons and others owning land through which said proposed road will run				

Names and addresses of persons who will give Right of Way (Dollars) Names and addresses of person who claim damages

Damages claimed (Dollars)

STATE	OF	MI	SSC	DUR	Ι
COLINT	Υ (٦F ۱	Λ/ΔΙ	RRF	N

STATE OF MISSOURI COUNTY OF WARREN	IN THE COUNTY COMMISSION OF WARREN COUNTY Term,		
	being duly sworn cert		
	that he/she is a competent adult citizen, that is not interested		
	kin to any petitioner, or any land holder herein, or to any intere		
herein, and that he/she is	s a competent witness herein, and that at the County of Warren	i, in the	
State of Missouri, on the	day of, eparate public places, printed or written handbill notices as follo	there was posted and	
put up in at least three se	parate public places, printed or written handbill notices as follo	ws, to-wit:	
One at the proposed begi	nning of said public road, one at the proposed termination of sa	aid	
public road, and one at _		in the municipal	
township of	and that the same w	as done by said,	
	more than twenty days before the	ne first day of the	
regular term of said			
County Commission of Wa	arren County, to-wit, before and on	the day of	
	·		
Witness my hand and pro	per signature this day of		
, Subscribe	per signature thisday ofday ofday ofday of		
, at witne	ss my hand and official signature with the seal of Warren Coun	ty	
Signature	Clerk of the County Commission	on	
Road			
PETITION FOR ESTABLIS	HMENT		
OF PUBLIC ROAD	THE INT		
OF FOREIC ROAD			
Filed in the office of the C	Clerk of the County Commission of Warren County, Missouri,		
This da	y of		
Clerk of the County Comm	nission		
•			
Ву			
Deputy			

9/20/02

APPENDIX B Conveyance of Right of Way

	day of,
, by and between	
of the County ofand the first part, and the County of Warren in the	d the State of party(ies) of State of Missouri, party of the second part,
by these present REMISE, RELEASE AND FORE	rst part, in consideration of the sum of one t, the receipt of which is hereby acknowledged, do VER WARRANTY DEED unto the said party of the second part ituated in the County of Warren and State of Missouri, to wit:
TO HAVE AND TO HOLD THE SAME, with all the appurtenances thereto belonging. Unto the sa establishing and maintaining a Public Road on the same of the	d party of the second part, for the purpose of
IN WITNESS WHEREOF, The said partv(ies) of	the first part has/have hereunto set his/her/their hand.
SIG	<u>SNATURES</u>
ATTEST:	
7.1112011	
	Dates

9/20/02

APPENDIX C

DUST SUPPRESSION APPLICATION

NAME:	DATE:
ADDRESS:	
PHONE:	
LOCATION:	
LENGTH OF ROAD TO BE TREATED:	
COST PER FOOT:	TOTAL COST:
CHECK #:	
SIGNATURE:	

9/20/02

APPENDIX D

Speed Li	mit Petition for
We, the undersigned, petition th	e Warren County Commission to establish a speed limit for
	, a County Road, between
and	
Name printed	Signature
Address	
City	
Name printed	Signature
Address	
City	
Name printed	Signature
Address	
City	
Name printed	Signature
Address	
City	
I,the above signatures were freely	(print name of person acquiring signatures) certify that given in my presence.

	Signature	Date
	Speed Limit Petition for _	
Name printed		Signature
Address		
City		
Name printed		Signature
Address		
City		
Name printed		Signature
Address		
City		
Name printed		Signature
Address		
City		
I, the above signatur	es were freely given in my pres	(print name of person acquiring signatures) certify sence.
	Signature	Date

APPENDIX E

CULVERT SPECIFICATONS

Areas drained by culverts

Full Circle	Opening in	Mountainous	Rolling
Diameter	Square Feet	Country	Country
(Inches)	(Area)	(Acres)	(Acres)
15"	1.2	1	6
18"	1.7	2	9
21"	2.4	3	14
24"	3.1	5	20
30"	4.9	8	36
36"	7.0	14	59
42"	9.6	20	89
48"	12.5	29	125
54"	15.9	40	175
60"	19.6	55	230
66"	23.7	70	295
72"	28.2	85	375

POLICIES & SPECIFICATIONS

FOR

ROADS & BRIDGES IN THE COUNTY ROAD SYSTEM OR THOSE PETITIONING FOR BECOMING PART OF THE COUNTY ROAD & BRIDGE SYSTEM WARREN COUNTY, MISSOURI

Adopted by the Warren County Commission on this 16th day of September, 2002.

Presiding Commissioner

Arden Engelage

Southern District Commissioner

Ken McLaughlin

Northern District Commissioner

Attest:

Clerk of the County Commission

Future items:

- Utility permits
 Classification of roads