

Utilities Field Training

CIT Program

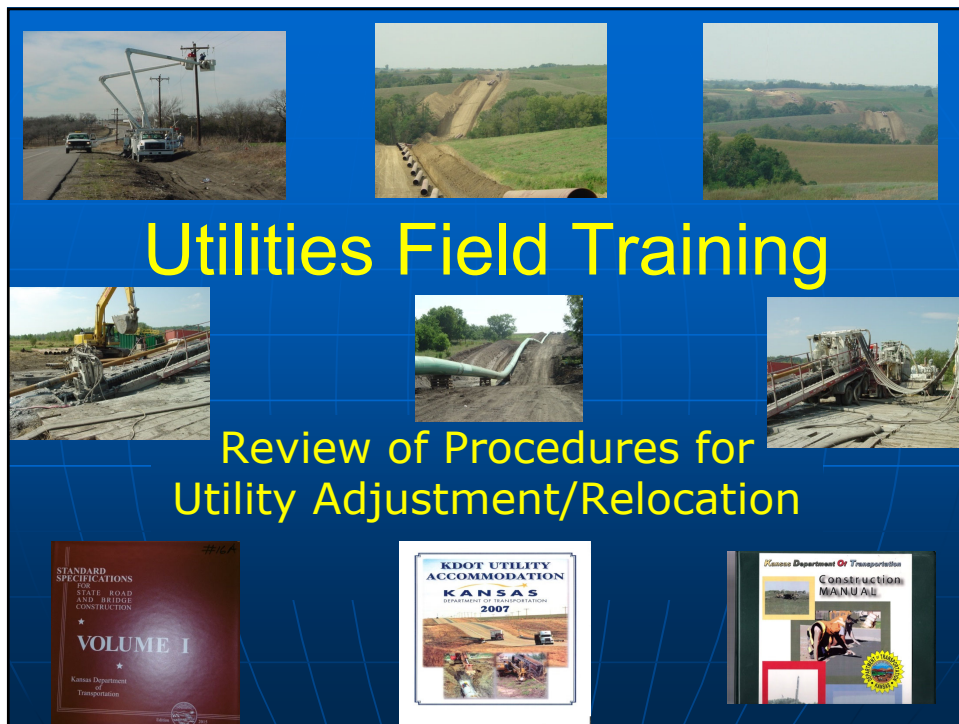


Utilities Field Training Workbook

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Hopefully the information provided in this class will better prepare you in the processes of relocating utilities, in accordance with KDOT specifications, so that it does not affect construction progress.

2

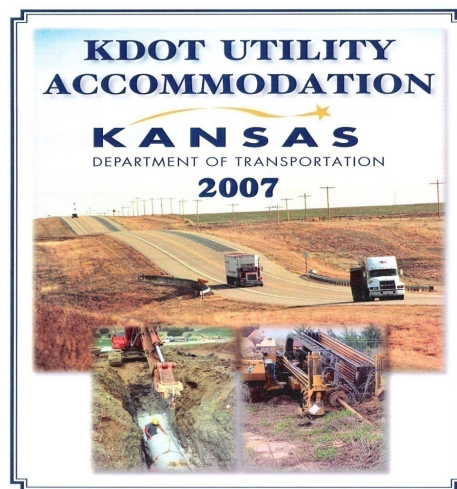
Utility Class Outline

- **Five areas that will be emphasized in this class.**

- Utility Accommodation Policy (UAP)
- S.O.M.
- Construction Manual
- 2015 Construction Specifications
- Inspection

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Utility Accommodation Policy (UAP)



4

U.A.P.

- The Utility Accommodation Policy is KDOT's guidelines for obtaining the permits and proper procedures for locating or moving utilities on KDOT Right-of-way.

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U.A.P. Intro.

- **INTRODUCTION**
- I encourage anyone involved with utilities to read this Policy in its entirety. We will try to hit the highlights without becoming painful.
- Authority to regulate by this policy is granted by several statutes; K.S.A. 68-404 & K.S.A. 68-415 and also K.S.A. 17-1901 & K.S.A. 17-4604. If you would like to read these statutes, you can access them online.

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U.A.P. sections

- The Utility Accommodation Policy has four sections.
 - General Policy
 - Utilities on Permitted Highways
 - Utility Accommodation Policy for fully controlled access highways (interstates)
 - Attachments to bridges and other structures.

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Calvin and Hobbs



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UAP General Policy

- Policy application
 - This policy consists of the relocation construction and maintenance of all utilities located in KDOT right of way.
 - A permit is required to perform any of this work but does not constitute any permanent right for such use (a permit is not permanent easement).
 - **Private** lines such as water, gas, & oil production lines are not allowed on KDOT right of way except when necessary to cross the highway.

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UAP General Policy cont.

- If a subcontractor is used to perform the construction work the utility company is responsible for the subcontractor to be in compliance with this policy.
- Approved-signed copy of the highway permit "304" must be on the premises before and during the period any work is performed.

10

HIGHWAY PERMIT

KANSAS DEPARTMENT OF TRANSPORTATION
Bureau of Construction and Maintenance

Permit No. _____
Route _____
Co. _____
State Highway ☐
City Conn. Link ☐
City _____

Emergency Contact (247) _____

THIS AGREEMENT, made and entered into, between the Secretary of Transportation of the State of Kansas, referred to as "Secretary" and _____ (Name of Firm or Individual) _____ (Firm Name) _____ (City) _____ referred to as "Petitioner" and the City of _____ (City Name) _____ referred to as "City".

Secretary has jurisdiction over highway right-of-ways within the State Highway System of Kansas, and Secretary and City believe it is in the interest of the Citizens of the State of Kansas to permit certain work or projects to be performed upon Highway right-of-ways, and

Petitioner requests permission and authority from Secretary (and City) to perform certain work, described as follows:

Said work is located on public right-of-way in, upon or along State Highway Route _____ Reference Point _____ (or City Connecting Link Route _____ on _____ St.) in Sec. _____ TWP. _____ Range _____ County, _____ Miles(km) _____ (direction) from _____ (Jct. or county line) and _____

Secretary has delegated full and complete authority to the District Engineers of the Kansas Department of Transportation (KDOT) to execute Highway Permit Agreements, referred to as "Permits," for and on Secretary's behalf.

In consideration of the permission granted by the Secretary (and City) to utilize Highway right-of-ways in the manner described above, the following terms and conditions are mutually agreed to by the Petitioner, the Secretary (and the City).

1.0. PLANS: Petitioner shall furnish five (5) sets of comprehensive plans or sketches, 8 1/2" x 11" or 11" x 17", of the proposed work.

1.1. Plans for utility installations must include a description of the size, type, and method of installation for the proposed facilities to be located within highway right-of-ways, and adequate sketches to indicate the location of the proposed installation with respect to the traveled way of the highway, the right-of-way lines and, where applicable, the control of access lines.

1.2. An accurate "As Built" Construction Plan shall be provided for deviation from the approved Plan.

2.0. MATERIAL AND METHOD: All requests to perform work in, upon or along Highway right-of-ways must be approved by the District Engineer (and City). No work shall be done without additional Permit, as required by City.

2.1. The Petitioner shall furnish all materials, do all work and pay all costs for the work described on this Permit.

2.2. All utility installations shall comply with the conditions and applicable requirements of the KDOT (and City) Accommodation Policy, current edition, which is incorporated by reference in its entirety and City standards when they exceed those of KDOT.

2.3. Change structure requirements shall be determined by Petitioner, but requirements are subject to review and approval by the District Engineer (and City).

2.4. All materials and construction methods used on work within the limits of the right-of-way shall meet or exceed the requirements of the "Standard Specifications for State Road and Bridge Construction," current edition. The Standard Specifications are available at www.kdot.org.

3.0. INITIATION AND COMPLETION OF WORK: Petitioner agrees to notify the District Engineer (and City) of their duty authorized KDOT representative before work is initiated and again when the work is completed.

3.1. An approved signed copy of this Permit shall be on the premises at the place and during the period any work is performed.

3.2. All work, including right-of-way restoration, shall be completed within _____ calendar days of APPROVAL DATE, otherwise this Permit is rescinded. If work has not been started within the completion time, this Permit becomes null and void.

4.0. INSPECTION: Petitioner will be responsible for supervising construction to insure compliance with KDOT (and City) policies and standards.

5.0. ACCEPTANCE: (Check One) KDOT ☐ City ☐ will be responsible for acceptance of restored right-of-way.

6.0. RIGHT-OF-WAY: Except for authorized changes, Petitioner shall restore the right-of-way to a condition equal to or better than existed prior to approval of the work described on this Permit.

6.1. Any soil, debris or trees destroyed by this work shall be replaced as directed by the District Engineer (and City).

6.2. The right-of-way shall be kept free from parking, advertising signs or any other commercial activity.

BACKSIDE OF PERMIT

7.0. OBSTRUCTION OF TRAFFIC: Petitioner shall ensure highway (and connecting link) traffic will be free of interference unless specifically provided for as a part of this Permit. All temporary traffic control devices and their installation and maintenance shall comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) for streets and highways which has been adopted by the Secretary. Whenever the temporary Traffic Control Standards conflict with the MUTCD, the Standards shall govern. Workers shall wear approved safety vests according to 23 CFR Part 634, Worker Visibility.

8.0. MAINTENANCE: All utility installations shall be maintained or caused to be maintained by Petitioner.

9.0. PERMIT RELOCATION: In lieu of bond, Secretary may revoke the permit and remove any work performed. The Petitioner shall reimburse the Secretary for any cost incurred by Secretary to restore the right-of-way. The Secretary will not authorize any other highway permits until Petitioner has either reimbursed Secretary or restored the right-of-way.

10.0. LIABILITY: Petitioner shall indemnify and hold harmless Secretary from personal injury and property damage claims arising out of any act or omission of Petitioner. If Secretary defends a third party's claim, the Petitioner shall indemnify Secretary for personal injury damages, property damages and related expenses Secretary incurs arising out of Petitioner's act or omission. For purposes of this provision, the term Petitioner includes Petitioner's employees, agents, subcontractors (at any tier), suppliers (at any tier), successors, and assigns.

10.1. INSURANCE: Liability Insurance: Petitioner shall carry "General Liability" insurance under an occurrence policy that has a minimum combined single limit of \$2,000,000 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Premises-Operation, Underground Hazard, Products-Completed Operations Hazard, Contractual Insurance, Broad Form Property Damage, Independent Contractors, and Personal Injury. Worker's Compensation: Petitioner shall carry Worker's Compensation and Employer's Liability insurance that complies with Kansas Statute, Automobile Liability: Petitioner shall carry "Automobile Liability" insurance under an occurrence policy that has a minimum combined single limit of \$1,000,000.00 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Owned, Hired, and Non-Owned.

10.2. "Certificate of Insurance": This permit shall not take effect unless Petitioner provides Secretary a "Certificate of Insurance" confirming Petitioner carries insurance in the amounts and type this section requires. Petitioner shall obtain insurance only from insurers on the approved Federal Treasury List and authorized by the Kansas Commissioner of Insurance. The "Certificate of Insurance" shall include a clause requiring the insurer to notify Secretary thirty (30) calendar days in advance of a change in or cancellation of the insurance contracts.

10.3. Petitioner shall maintain the insurance required in Section 10.1 until the District Engineer releases the Petitioner from any Permit obligation.

11.0. DAMAGE TO UTILITIES: KDOT shall not be liable for damage to any utility not installed in the location authorized by any permit or agreement issued pursuant to the Utility Accommodation Policy.

12.0. PIPELINE LIABILITY: For attachments to bridges or other structures and for roadway crossings of PIPELINES CARRYING PETROLEUM, HAZARDOUS AND/OR CORROSIVE PRODUCTS, Petitioner shall solely assume all risk and liability for accidents and damages that may occur to persons, property or natural resources by reason of the operation of the pipeline attached to said bridge, structure or crossing of roadway.

12.1. Petitioner shall maintain the insurance required in Section 9.0 for as long as the pipeline remains attached to the bridge or other structure or for as long as the pipeline crosses the roadway. The insurance contract shall cover claims for such length of time as the law permits such claims.

13.0. ENVIRONMENTAL LIABILITY AND INDEMNIFICATION: Petitioner shall comply with all applicable federal, state, and local statutes, regulations and ordinances relating to environmental protection, and health and safety in Petitioner's acts on, or occupation of, the Highway right-of-way(s). Petitioner assumes all risk and liability for or resulting from any environmental condition on, at, or leaving the Highway right-of-way(s) caused by or arising out of Petitioner's, or its agents or contractors' acts, omissions, or occupations, in whole or in part, of the Highway right-of-way(s). Petitioner shall not harm and indemnify the Secretary against all liability, cost, expense, and time incurred by or levied against the Secretary under any federal, state or local environmental law, regulation, or ordinance resulting from Petitioner's breach of this paragraph or as a result of Petitioner's acts or occupation of the Highway right-of-way(s) pursuant to this Permit. For purpose of this provision, the term Petitioner includes Petitioner's employees, agents, subcontractors (at any tier), suppliers (at any tier), successors and assigns.

14.0. HIGHWAY IMPROVEMENTS AND/OR MAINTENANCE: If Secretary makes any alteration or improvement along or upon the highway right-of-way within the scope of this Permit, Petitioner shall hold Secretary harmless for any and all damage or injury to Petitioner's facilities, whether finished or unfinished, as well as damage or injury to Petitioner's equipment, materials, employees, agents or contractors. Petitioner shall conduct all work approved on this permit in such a manner as not to interfere with construction or other work being performed by the KDOT (or City) or its contractors in the vicinity of Petitioner's work or project.

14.1. Within a reasonable time after receiving written notice from Secretary that Petitioner's facilities are in conflict with KDOT's new construction or major maintenance operations, Petitioner shall alter, change location or move their construction work or facilities without cost or expense to the Secretary. If Petitioner fails to relocate their facilities within a reasonable time, KDOT may move the facilities. Except for Rural Water Districts meeting the requirements of K.S.A. 65-415(c), Petitioner shall reimburse KDOT for the costs of relocating the facilities upon receipt of a itemized statement. (See, K.S.A. 65-415). Petitioner shall reimburse KDOT for any construction costs, claims or expenses KDOT incurs as a result of Petitioner's failure to timely relocate the facilities.

14.2. Written notice will not be required for KDOT's normal maintenance.

15.0. ABANDONED OR RETIRED IN PLACE: Petitioner shall notify Secretary when the facilities will be abandoned or retired in place and shall submit a plan for abandonment or retirement to the District Engineer or designer for review and approval. Petitioner shall remove or abandon the facilities in place in accordance with the approved plan. Petitioner shall pay all costs associated with removal of abandoned or retired in place upon highway right-of-way facilities.

This Permit is hereby accepted and its provisions agreed to by the Parties.

APPROVED: _____ PETITIONER: _____
CITY OF _____ (Name applicable) _____ Signature _____
_____ Printed Name _____
_____ Street Address (City, State, Zip Code) _____
☐ Mayor ☐ City Mgr. ☐ City Supr. _____
_____ Agent _____ Lessa _____ Contractor _____
_____ City Clerk _____ Street Address (City, State, Zip Code) _____
_____ Creation Email _____

RECOMMENDED BY: _____
PERMIT APPROVAL: _____
BY: _____ SECRETARY OF TRANSPORTATION OF THE STATE OF KANSAS _____
_____ District Engineer _____ Date _____

UAP General Policy

- The Utility company and subcontractor are responsible for contacting Dig Safe and securing additional permits, (i.e. permits for crossing railroad right-of-way and/or pipeline easement)
- But remember not all utility owners are members of Dig Safe, like KDOT, so they will need to be contacted directly

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UAP General Policy...

- Unsatisfactory work not remedied in a reasonable time period as determined by the appropriate KDOT engineer will be rejected and result in permit revocation and may result in denial of future permits to that company.

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UAP General Policy.....

- Fee
 - There is no fee for processing and issuing a permit.
- Bond
 - In lieu of bond, the petitioner agrees the Secretary may revoke the permit and remove any work performed. The petitioner agrees to reimburse the Secretary for any costs incurred to restore the right-of-way. The Secretary will not authorize other permits until the petitioner has either reimbursed the Secretary or restored the right-of-way.

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UAP General Policy---

- Liability
 - Liability Insurance will be required to protect the secretary of transportation from all liability and is outlined in the Dot form 304 section 10 and DOT form 310 section 9.
 - Utility owners are at risk for any damages resulting from KDOT construction and maintenance work on the right of way.

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ATTACHMENT PERMIT

KANSAS DEPARTMENT OF TRANSPORTATION
Bureau of Maintenance
HIGHWAY PERMIT
ATTACHMENTS TO BRIDGES
AND OTHER STRUCTURES OR INSTALLATIONS
NEAR RETAINING WALL SYSTEMS

Permit No. _____
State _____
County _____
City or Sub-Area _____
By: Sec. No. _____
B/M Permit No. _____
(to work under the SDOT)

TIES AGREEMENT, made and entered into this _____ day of _____, 20____, by and between the Secretary of Transportation of the State of Kansas, referred to as "Secretary," and _____, referred to as "Owner," and _____, referred to as "Agent," and _____, referred to as "Contractor,"

Secretary has jurisdiction over and control of all bridges and other structures on the State Highway System of Kansas, and Secretary believes that it is in the interest of the Citizens of the State of Kansas to allow public or private utilities to utilize bridges or other structures on the State Highway System under certain circumstances, and
Permittee requests permission and authority from Secretary to construct and maintain a _____

_____ on Highway Route _____ in _____ County, Kansas

at Reference Point _____, a part of the State Highway System, and
Secretary has delegated full and complete authority to the District Engineers of the Kansas Department of Transportation (KDOT) to execute Highway Permit Agreements, referred to as "Permits," for and on Secretary's behalf.

In consideration of the permission granted by Secretary to utilize a bridge or structure or installation near a retaining wall system in the manner described above, Permittee agrees to the following terms and conditions:

1.0 PLANS: Permittee shall furnish two (2) sets of comprehensive plan sets or detailed drawings 11" x 17", under electronic pdf copy of the proposed work. Sketches, cut sheets, and/or documentation may be submitted as 8 1/2" x 11". Plans or detailed drawings must indicate the size, type, and nominal weight of the proposed installation, and include details of the location, method of attachment and type of retaining facilities or method of foundation as applicable.

2.0 DESIGN FOR ATTACHMENTS: A check in the amount of \$ _____ dollars, made payable to the Kansas Department of Transportation is required from Permittee for payment of additional insurance cost to support the Utility Installation.

3.0 MATERIAL AND METHODS: Permittee shall furnish all material, do all work, and pay all costs for the work described on this Permit.

3.1 All proposals for Utility Installations and other attachments to bridges or structures or installations near a retaining wall system must be pre-approved in writing by the Bureau of Design, Bridge Section and the District Engineer.

3.2 All attachments to bridges or other structures or installations near retaining wall systems shall comply with the conditions and requirements of the "Utility Accommodation Policy for KDOT", current edition which is hereby incorporated by reference to its entirety.

3.3 All materials and construction methods used on work within the limits of the right-of-way shall be equal to or better than that required by the Standard Specifications for State Road and Bridge Construction, current edition.

4.0 OBSTRUCTION OF TRAFFIC: Permittee shall ensure highway (and connecting links) traffic will be free of interference unless specifically provided for as a part of the Permit. All temporary traffic control devices and their installation and maintenance shall comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) for streets and highways which has been adopted by the Secretary. Wherever the Temporary Traffic Control Standard conflict with the MUTCD, the Standard shall govern. Workers shall wear approved safety vests according to 21 CFR Part 604, Worker Visibility.

5.0 Right-of-Way: Permittee shall restore the right-of-way to the condition existing prior to approval of the work described on this Permit.

5.1 Any sod, shrubs or trees damaged by this work shall be replaced as directed by the District Engineer.

5.2 The right-of-way shall be kept free from parking, advertising signs or any other commercial use.

6.0 MAINTENANCE: All Utility Installations shall be maintained or caused to be maintained by Permittee.

7.0 PERMIT REVOCATION: In the event of non-compliance with the terms of this Permit, the Secretary may revoke the Permit and remove any work performed. Permittee shall reimburse the Secretary for any cost incurred by Secretary to remove the right-of-way. Secretary will not authorize any other highway permits until the Permittee has either reimbursed the Secretary or restored the right-of-way.

8.0 INTENTION AND COMPLETION OF WORK: Permittee agrees to notify the District Engineer (and City) of their duty authorized KDOT representative _____ before work is initiated and again when the work is completed.

8.1 An approved signed copy of this Permit shall be on the premises at the start and during the period any work is performed.

8.2 All work, including right-of-way restoration, shall be completed within _____ calendar days of APPROVAL DATE, otherwise this Permit is null and void. The District Engineer or his duly authorized representative may grant an extension of time upon request of Permittee. Any such request must be submitted in writing and state the reasons for delay in completing the work.

9.0 LIABILITY: Permittee shall indemnify and hold harmless Secretary from personal injury and property damage claims arising out of any act or omission of Permittee. If Secretary is found to be a third party's claim, Permittee shall indemnify Secretary for personal injury damages, property damages, and related expenses. Secretary incurs arising out of Permittee's act or omission. For purposes of this provision, the term Permittee includes Permittee's employees, agents, subcontractors (if any), suppliers (if any), successors, and assigns.

9.1 INSURANCE: Liability Insurance. Permittee shall carry "General Liability" insurance under an occurrence policy that has a minimum combined single limit of \$2,000,000 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Premises-Operations, Underground Hazard, Products/Completed Operations Hazard, Contractual Insurance, Broad Form Property Damage, Independent Contractors, and Personal Injury. Worker's Compensation. Permittee shall carry "Worker's Compensation and Employer's Liability" insurance with Kansas state law. Automobile Liability. Permittee shall carry "Automobile Liability" insurance under an occurrence policy that has a minimum combined single limit of \$1,000,000.00 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Owned, Hired, and Non-Owned.

9.2 "Certificate of Insurance" This Permit shall not take effect unless Permittee provides Secretary a "Certificate of Insurance" confirming Permittee carries insurance in the amounts and type this Permit requires. Permittee shall obtain insurance only from insurers on the approved Federal Treasury List and authorized by the Kansas Commissioner of Insurance. The "Certificates of Insurance" shall include a clause requiring the insurer to notify the Secretary thirty (30) days in advance of cancellation of the insurance contract.

10.0 DAMAGE TO UTILITIES: KDOT shall not be liable for damage to any utility not installed in the location authorized by any permit or agreement issued pursuant to the Utility Accommodation Policy.

11.0 PIPELINE LIABILITY: For attachments to bridges or other structures and for roadway crossings of PIPELINES CARRYING PETROLEUM, HAZARDOUS AND/OR CORROSIVE PRODUCTS, Permittee shall solely assume all risk and liability for accidents and damages that may occur to persons, property or natural resources by reason of the operation of the pipeline attached to the bridge or structure or crossing the roadway.

11.1 Permittee shall maintain the insurance required in Section 9.0 for as long as the pipeline remains attached to the bridge or other structure or for as long as the pipeline crosses the roadway. The insurance contract shall cover claims for such length of time as the law permits such claims.

12.0 ENVIRONMENTAL LIABILITY AND INDEMNIFICATION: Permittee shall comply with all applicable federal, state and local statutes, regulations and ordinances relating to environmental protection, and health and safety in Permittee's acts on, or occupation of, the Highway right-of-way(s). Permittee assumes all risk and liability for, or resulting from, any environmental condition on, at, or leaving the Highway(s) caused by or arising out of Permittee's, or its agent's or contractor's acts, omissions, or occupation, in whole or in part of the Highway right-of-way(s). Permittee shall hold harmless and indemnify the Secretary against all liability, cost, expense, and fees incurred by or levied against the Secretary under any federal, state or local environmental law, regulation, or ordinance resulting from Permittee's breach of this paragraph or as a result of Permittee's act or occupation of the Highway right-of-way(s) pursuant to this Permit. For purpose of this provision, the term Permittee includes Permittee's employees, agents, subcontractors (if any), suppliers (if any), successors and assigns.

13.0 HIGHWAY IMPROVEMENTS: If Secretary makes any alteration or improvement along or upon the highway right-of-way which is the subject of this Permit, Permittee agrees to hold Secretary harmless for any and all damages or injury to said Permittee's construction, whether finished or unfinished, as well as damage or injury to Permittee's equipment, materials, employees, agents or contractors. Within a reasonable time after receiving written notice from Secretary that Permittee's facilities are in conflict with KDOT's new construction or major maintenance operations, Permittee shall alter, change location or move their construction work or facilities without cost or expense to the Secretary. If Permittee fails to relocate their facilities within a reasonable time, KDOT may designate a time which is not arbitrary or capricious for moving the facilities. Permittee shall reimburse KDOT for the costs of relocating the facilities upon receipt of an itemized statement. (D.S.A. 68-115). In the alternative, Permittee shall reimburse KDOT for any damages or liabilities or costs to accidents it may incur as a result of Permittee's failure to timely relocate the facility.

13.1 Work approved on this Permit will be conducted in a manner as not to interfere with construction work being performed by KDOT or its contractors in the vicinity of Permittee's work or project.

14.0 CANCELLATION: This Permit may be terminated or cancelled by either party upon thirty (30) days written notice to the other party and all rights and privileges accorded to Permittee under the terms of this Permit shall cease forever, and upon termination or cancellation of this Permit Permittee shall remove the attachments to the bridge or structure without damage or injury to the bridge or structure. Permittee shall reimburse the Secretary for any and all damages or injury which results from the removal of attachments to the bridge or structure within thirty (30) days of receipt of an itemized statement of damages.

15.0 ABANDONED OR RETIRED IN PLACE: Permittee shall notify Secretary when the facilities will be abandoned or retired in place and shall submit a plan for abandonment or retirement in place to the District Engineer or designed for review and approval. Permittee shall remove or abandon the facilities in place in accordance with the approved plan. Permittee shall pay all costs associated with removal of abandoned or retired in place upon highway right-of-way facilities.

This Permit is hereby accepted and its provisions agreed to by the parties.

Signature _____
Printed Name _____
Owner _____
Street Address (City, State, Zip Code) _____
Agent _____
Street Address (City, State, Zip Code) _____
Recommended _____
Approved _____
Permit approved this _____ day of _____, 20____.

Emergency Contact (24/7)
Phone _____
Date _____
Title _____
Contact Email _____
Consent/Memo (Eng. / Area Super / Utility Coord.) _____
Bureau of Design-Bridge Section
SECRETARY OF TRANSPORTATION
OF THE STATE OF KANSAS
BY _____
District Engineer

Rev. 12-18 D.O.T. Form No. 210

BACKSIDE OF ATTACHMENT PERMIT

9.1 INSURANCE: Liability Insurance. Permittee shall carry "General Liability" insurance under an occurrence policy that has a minimum combined single limit of \$2,000,000 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Premises-Operations, Underground Hazard, Products/Completed Operations Hazard, Contractual Insurance, Broad Form Property Damage, Independent Contractors, and Personal Injury. Worker's Compensation. Permittee shall carry "Worker's Compensation and Employer's Liability" insurance with Kansas state law. Automobile Liability. Permittee shall carry "Automobile Liability" insurance under an occurrence policy that has a minimum combined single limit of \$1,000,000.00 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Owned, Hired, and Non-Owned.

9.2 "Certificate of Insurance" This Permit shall not take effect unless Permittee provides Secretary a "Certificate of Insurance" confirming Permittee carries insurance in the amounts and type this Permit requires. Permittee shall obtain insurance only from insurers on the approved Federal Treasury List and authorized by the Kansas Commissioner of Insurance. The "Certificates of Insurance" shall include a clause requiring the insurer to notify the Secretary thirty (30) days in advance of cancellation of the insurance contract.

10.0 DAMAGE TO UTILITIES: KDOT shall not be liable for damage to any utility not installed in the location authorized by any permit or agreement issued pursuant to the Utility Accommodation Policy.

11.0 PIPELINE LIABILITY: For attachments to bridges or other structures and for roadway crossings of PIPELINES CARRYING PETROLEUM, HAZARDOUS AND/OR CORROSIVE PRODUCTS, Permittee shall solely assume all risk and liability for accidents and damages that may occur to persons, property or natural resources by reason of the operation of the pipeline attached to the bridge or structure or crossing the roadway.

11.1 Permittee shall maintain the insurance required in Section 9.0 for as long as the pipeline remains attached to the bridge or other structure or for as long as the pipeline crosses the roadway. The insurance contract shall cover claims for such length of time as the law permits such claims.

12.0 ENVIRONMENTAL LIABILITY AND INDEMNIFICATION: Permittee shall comply with all applicable federal, state and local statutes, regulations and ordinances relating to environmental protection, and health and safety in Permittee's acts on, or occupation of, the Highway right-of-way(s). Permittee assumes all risk and liability for, or resulting from, any environmental condition on, at, or leaving the Highway(s) caused by or arising out of Permittee's, or its agent's or contractor's acts, omissions, or occupation, in whole or in part of the Highway right-of-way(s). Permittee shall hold harmless and indemnify the Secretary against all liability, cost, expense, and fees incurred by or levied against the Secretary under any federal, state or local environmental law, regulation, or ordinance resulting from Permittee's breach of this paragraph or as a result of Permittee's act or occupation of the Highway right-of-way(s) pursuant to this Permit. For purpose of this provision, the term Permittee includes Permittee's employees, agents, subcontractors (if any), suppliers (if any), successors and assigns.

13.0 HIGHWAY IMPROVEMENTS: If Secretary makes any alteration or improvement along or upon the highway right-of-way which is the subject of this Permit, Permittee agrees to hold Secretary harmless for any and all damages or injury to said Permittee's construction, whether finished or unfinished, as well as damage or injury to Permittee's equipment, materials, employees, agents or contractors. Within a reasonable time after receiving written notice from Secretary that Permittee's facilities are in conflict with KDOT's new construction or major maintenance operations, Permittee shall alter, change location or move their construction work or facilities without cost or expense to the Secretary. If Permittee fails to relocate their facilities within a reasonable time, KDOT may designate a time which is not arbitrary or capricious for moving the facilities. Permittee shall reimburse KDOT for the costs of relocating the facilities upon receipt of an itemized statement. (D.S.A. 68-115). In the alternative, Permittee shall reimburse KDOT for any damages or liabilities or costs to accidents it may incur as a result of Permittee's failure to timely relocate the facility.

13.1 Work approved on this Permit will be conducted in a manner as not to interfere with construction work being performed by KDOT or its contractors in the vicinity of Permittee's work or project.

14.0 CANCELLATION: This Permit may be terminated or cancelled by either party upon thirty (30) days written notice to the other party and all rights and privileges accorded to Permittee under the terms of this Permit shall cease forever, and upon termination or cancellation of this Permit Permittee shall remove the attachments to the bridge or structure without damage or injury to the bridge or structure. Permittee shall reimburse the Secretary for any and all damages or injury which results from the removal of attachments to the bridge or structure within thirty (30) days of receipt of an itemized statement of damages.

15.0 ABANDONED OR RETIRED IN PLACE: Permittee shall notify Secretary when the facilities will be abandoned or retired in place and shall submit a plan for abandonment or retirement in place to the District Engineer or designed for review and approval. Permittee shall remove or abandon the facilities in place in accordance with the approved plan. Permittee shall pay all costs associated with removal of abandoned or retired in place upon highway right-of-way facilities.

This Permit is hereby accepted and its provisions agreed to by the parties.

Signature _____
Printed Name _____
Owner _____
Street Address (City, State, Zip Code) _____
Agent _____
Street Address (City, State, Zip Code) _____
Recommended _____
Approved _____
Permit approved this _____ day of _____, 20____.

Emergency Contact (24/7)
Phone _____
Date _____
Title _____
Contact Email _____
Consent/Memo (Eng. / Area Super / Utility Coord.) _____
Bureau of Design-Bridge Section
SECRETARY OF TRANSPORTATION
OF THE STATE OF KANSAS
BY _____
District Engineer

Rev. 12-18 D.O.T. Form No. 210

UAP General Policy cont.

- Replacing or updating of existing utility lines will require a new permit.
- Each KDOT District shall be notified in writing when utilities change names, addresses, and new owners.
- KDOT shall be notified when lines are abandoned or retired.

19

UAP General Policy cont'd

- Highway Construction Projects
 - Utilities must be relocated six (6) weeks prior to project bid lettings.
- Non-Compliance
 - Non-Compliance with any aspect of the Utility Accommodation Policy or the Highway Permits will be cause to shut down operations until compliance is assured. The permit may also be revoked. The State may remove any non-compliant work and bill the petitioner for costs.

20

UAP Part II

Utilities Permitted on Highways

21

UAP Part II ...

- Location
 - Utility installations are to be located to minimize need for later adjustment to accommodate future highway improvements and to permit servicing such lines with minimum interference to highway traffic and highway maintenance operations.

22

UAP Part II cont..

- Location (cont'd)
 - Utilities shall be located where they will not be a hazard to highway users.
 - Parallel installations are to be located on uniform alignment within 7 feet or less of the right-of-way line to reduce impacts on operations and preserve space for future highway improvements or other transportation purposes.

23

UAP Part II cont'd

- Location (cont'd)
 - To the extent reasonable, utility lines crossing of highway right-of-way are to be installed perpendicular to the highway alignment.
 - The horizontal and vertical location of utility lines within the highway right-of-way is to conform to the dimensions outlined in Sections II and III.

24

UAP Part II (continued)

- Location (Cont'd)
 - Attachments to bridges and structures must be in accordance with this policy as outlined in Part Four- "Attachments to Bridges and Other Structures".

25

UAP Part II (Trenching)

- Trenching and Backfill
 - Trenches should have two vertical faces with a maximum of outside diameter of pipe plus two feet. Trenches should follow OSHA regulations.
 - Bedding should be six inches in depth or half the diameter of the pipe whichever is the least. Bedding material shall be free of lumps, clods, stones and frozen material.

26

UAP Part II (Pipes)

- Pipeline installations
 - Pipeline installations are to specify the type and class of material maximum working pressures and test and design pressure.
 - Vents shall be located at the high end of short casing and at both ends of the casing longer than 150 feet and where they will not interfere with the highway maintenance.

27



28

UAP Part II (Pipes cont.)

- Pipeline installations (cont'd)
 - The utility company shall place readily identifiable and suitable markers at the right-of-way where it crosses the highway except in those cases where a vent serves as a marker.

29

UAP Part II (Wells)

- Monitoring wells



30

UAP Part II (Wells cont.)

- Monitoring wells
 - Wells shall be located outside of the highway clear zone. Wells shall not be located in the toe of the slope.
 - Wells shall be installed and monitored in accordance to KDHE permit and KDOT standards.

31

UAP Part II (wells cont'd)

- Monitoring wells (cont'd)
 - The Petitioner shall:
 - During maintenance and construction mark wells as needed.
 - Use approved traffic control procedures in accordance with the MUTCD.
 - Park equipment beyond the twilight (clear) zone. (30 feet)

32

UAP Part II (Above Ground)

- Above ground Installations
 - Above ground utilities crossing the right-of-way shall be perpendicular to the highway alignment. Where a utility crosses over or under a Fully Controlled Access Highway, the Utility is to be serviced without access from the roadway or ramps.

33

High Line



34

UAP Part II (Above Ground Installations)

- Above ground installations
 - The preferred location of poles is within two feet of the right-of-way line.
 - Above ground utility installations in rural areas are to be located within two feet or less of the right-of-way line.
 - Facilities shall not be allowed closer to the paved traveled way than the "Clear Zone".
 - Suburban areas with speeds 45 MPH or lower utility poles shall be located at least 15 feet from the edge of the traveled lane.

35

UAP Part II(Above Ground Installations..)

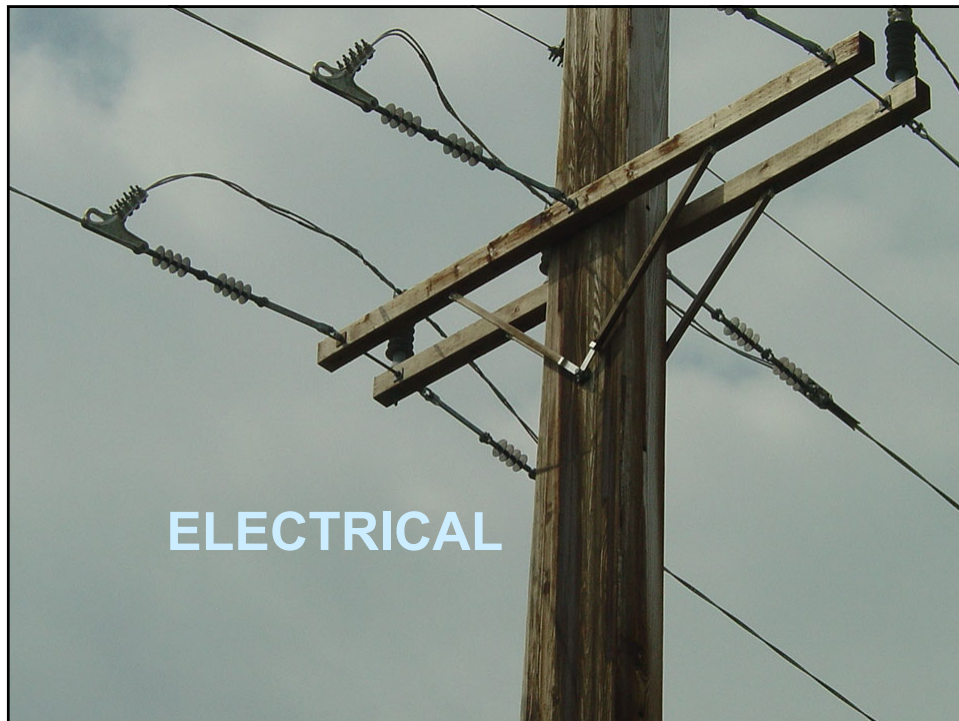
- Above ground Installations (cont'd)
 - Curbed sections, poles should be located at least six feet from the back of the curb, eight feet is desirable.
 - At interchange areas above ground installations are to be located near the right-of-way but in no case closer than the clear zone.

36

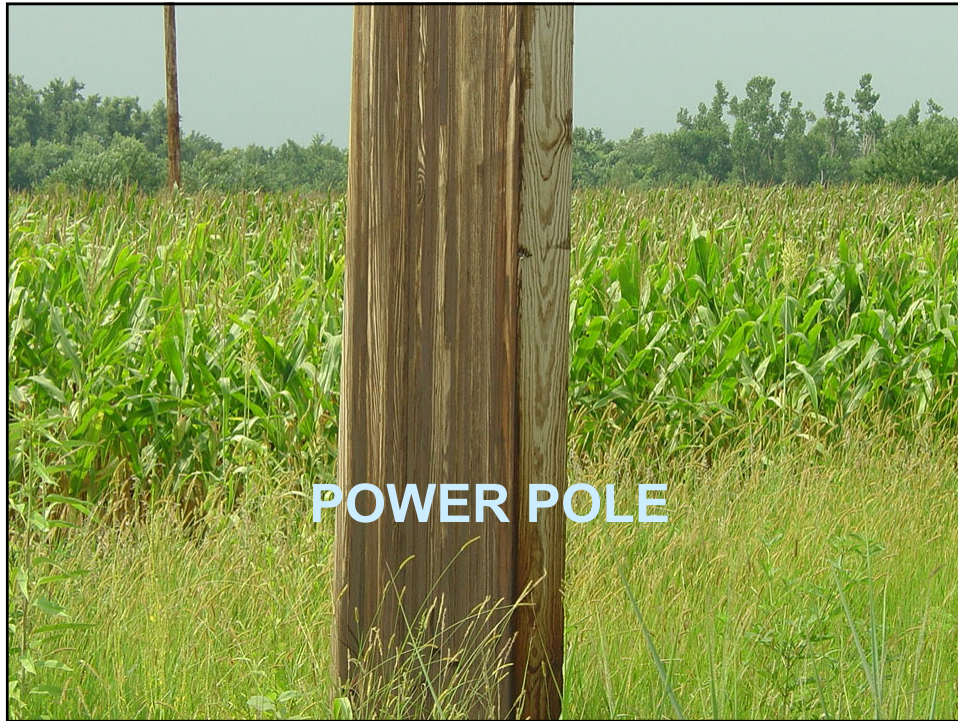
UAP Part II (More Above Ground)

- Above ground Installations (cont'd)
 - Poles, guys, and anchors shall not be located in travel way, shoulder slopes, ditches, back slopes, medians, at drainages structure openings or on roadway shoulders.
 - All poles, guys, anchors shall be located to minimize interference with maintenance operations of KDOT.
 - Installations should be limited to single poles and joint use is encouraged.

37



38



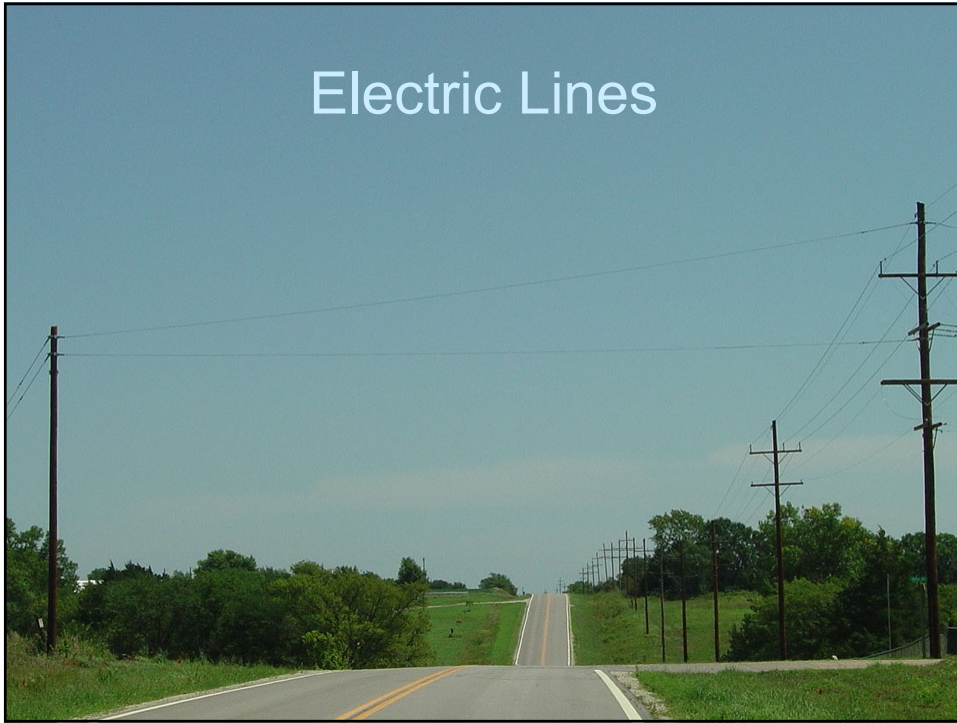
39

UAP Part II (Additional above Ground)

- Above ground Installations (cont'd)
 - Service lines (those that run from the primary lines in KDOT right-of-way to a house) should utilize a "Slack" line configuration. The "Slack" line configuration will eliminate the need for additional guy anchors extending on the right-of-way, congesting the utility corridor.
 - *Video says "stack" but "slack" is correct.*

40

Electric Lines



41

UAP Part II (Clearances)

- Above ground Installations (cont'd)
 - Minimum vertical clearance
 - 18 feet 0-750 volts
 - 20 feet 750-22,000 volts
 - Increase general clearance 0.4 inch for each 1000 volts of the excess over 22,000 volts
 - For 50,000 volts, the additional clearance specified shall be increased 3% for each 1,000 feet in excess of 3,300 feet above sea level.

42

UAP Part II (Clearances Cont.)

- Underground Installations
 - Should be located within 7 feet or less of the right-of-way line, or the utility corridor and should minimize interference with KDOT maintenance operations.
 - Will not be permitted in the traveled way, median shoulder, shoulder slope, ditch or back slope except in extenuating circumstances which required approval by the District Engineer.
 - All utility appurtenances above ground surface shall be located outside the clear zone in the 7 feet utility corridor at the right-of-way line.

43

UAP Part II (MSE)

- Mechanical Stabilized Earth (MSE) Walls
 - Utilities located within a distance of two times the height measured from the back face of the MSE wall or one times the height in front face of the wall. A DOT form 310 for MSE walls shall be completed. This will be explained in part IV.

44

UAP Part II (MSE cont.)

- Underground Installations (cont'd)
 - Should be installed at a minimum depth of 3 feet but may be required to go deeper at streambeds, side roads and major entrances.
 - If can not reach minimum depth line can either be re-routed or will need approval of the District Engineer, but contact local Area Office.

45

UAP Part II (underground)

- Underground Installations (cont'd)
 - Manholes shall not be located in a bridge deck, traveled way, median, shoulder, shoulder slope, ditch or back slope.
 - Any above ground structures shall be marked by a post higher than the surrounding vegetation located at the outer limits of the right-of-way.

46



Pipe Installation

47

UAP Part II (Underground cont.)

- Underground Installations (cont'd)
 - Buried electrical lines
 - Electrical cable lines shall be a minimum depth of 48 inches
 - Tape must be placed 12 inches below grade to mark the cable
 - Must be cased when it crosses any roadway

48

UAP Part II (Buried lines)

- Underground Installations (cont'd)
 - Buried electrical lines
 - The utility will be required to mark buried cable with above ground markers a minimum of four times per mile
 - Electrical lines crossing state highways must be marked with an aboveground marker on each side of the right-of-way.

49

UAP Part II Underground Cont.

- Underground Installations (cont'd)
 - Utility lines parallel to highway right-of-way require casings at crossing of side roads and major entrances.
 - All plastic pipes shall have trace wire for ease of locating.
 - Private and public utility lines will not be permitted to be attached and or routed through drainage structures and cattle passes

50

UAP Part II more underground

- Underground Installations (cont'd)
 - Fiber optic lines shall be buried at a depth of 42 inches and have a trace wire for ease of locating.
 - Buried vaults larger than a hand hole (3 foot x 4 foot) shall be located on private right-of-way. Above ground equipment cabinets other than splitter posts shall be located on private right-of-way.

51

UAP Part II additional underground

- Underground Installations (cont'd)
 - Point of Presents (POP) Buildings are to be approved by the KDOT Engineer. POP buildings typically are located at interchanges.
 - POP Buildings shall be located beyond the clear zone and shall not interfere with the line-of-sight geometrics of the interchange.

52

Point of Presents Building (POP)



53

UAP Part II (crossings)

- Underground Installations Crossing Right-of-Way
 - Minimum depth of 5 feet below crown grade or 3 feet below ditch grade (proposed plan grade elevation) whichever shall govern.
 - Minimum depth not possible line shall be re-routed or protected with casing or other appropriate means or approved by KDOT Engineer

54

UAP Part II Crossings Cont.

- Underground Installations Crossing Right-of-Way (cont'd)
 - Locations that are undesirable should be avoided these include deep cuts, bridge footings, and in wet or rocky terrain where it will be difficult to obtain minimum depth.

55

UAP Part II more on crossings

- Underground Installations Crossing Right-of-Way (cont'd)
 - Open trenching may be used from the right-of-way line to the open toe of the fill slope in fill sections and the toe of the shoulder slope and cut sections.
 - The remainder will be tunneled, augered, or dry bored through the roadway and will generally require casing.

56

UAP Part II Encasement

- Encasement of Utilities
 - Casings are oversized load bearing conduits or ducts through which a utility is inserted.
 - Reasons for requiring casing
 - To provide for repair without interfering with highway traffic
 - To protect the pipe from external loads or shock
 - To convey leaking fluids or gases away from area beneath traveled way.

57

UAP Part II more on encasements

- Casing Requirements for Utilities Crossing the Right of Way
 - Exceptions that do not require casing
 - Open trench construction
 - Small bores
 - Pipelines that are continuous (seamless) without joints

58

UAP Part II (form 308)

- Casing Requirements for Utilities Crossing the Right of Way
 - Exceptions that do not require casing
 - Certain gas lines designated using the National Gas Instituted Guidelines
 - Direct buried telephone and communications cable
 - Fill out Form "308"

59

FORM 308	CASED UTILITY LINE WAIVER REQUIRED COMPLIANCE FOR WAIVER OF CASED LINE CERTIFICATION
	The undersigned, in applying for joint use of highway right-of-way, has requested the waiver of cased lines as required by the Kansas Department of Transportation Utility Accommodation Policy (UAP). The undersigned acknowledges that approval of this waiver by the Kansas Department of Transportation (KDOT) is conditioned upon the undersigned's execution of this certification. I hereby certify that I am a duly authorized representative of the _____ _____ (Utility), and the Utility and I represent that the line qualifies for a waiver of casing as the line complies with the conditions and provisions contained in the items below: a. Welded steel pipelines. b. Cathodically protected. c. Coated in accordance with accepted industry standards. d. Meet requirements of the Pipeline Safety Regulations--Code of Federal Regulations--Title 49--Transportation (Part 191 and 192-natural Gas) or (Part 195 Liquid Petroleum Gas) with respect to wall thickness. e. Designed for operating stress levels in accordance with Federal Pipeline Safety Regulations. I acknowledge that this certificate, which is factual and reliable, is furnished to KDOT in connection with this request for joint use of highway right-of-way and is subject to State and Federal laws, both criminal and civil. BY: _____ Name of Utility: _____ Address: _____ Date: _____ Permit or Agreement No. _____ Distribution Const./Maint. Petitioner District Area 5-21 D.O.T. FORM 308

60

UAP Part II (Crossing R/W)

- Casing Requirements for Utilities Crossing the Right of Way (cont'd)
 - All utilities must be clearly marked by the owner.
 - Underground electric service lines must be placed in conduit or casing from right-of-way line to right-of-way line
 - Underground fiber optic lines must be placed in schedule 40 PVC, HDPE, or equivalent from right-of-way line to right-of-way line.

61

UAP Part II (Casing)

- Casing Requirements for Utilities Crossing the Right of Way (cont'd)
 - Hazardous or corrosive products need not be cased provided they are
 - Welded steel
 - Need to be cathodically protected
 - Coated in accordance with industry standards
 - Meets industry wall thickness standards and federal safety regulations
 - Natural gas distribution and service lines which have an inside diameter of two inches or less and a max pressure of 60 psi.

62

UAP Part II Crossing Cont.

- Casing Requirements for Utilities Crossing the Right of Way (cont'd)
 - Sanitary sewer lines crossing the right-of-way must be encased from right-of-way line to right-of-way line. An exception shall be made for gravity flow lines placed prior to highway construction, properly bedded, and constructed of heavy duty cast or ductile iron pipe with suitable mechanical and /or restraint joints and seals.

63

UAP Part II Casing Cont.

- Casing Requirements for Utilities Crossing the Right of Way (cont'd)
 - Water lines must be cased, from toe to toe of back slope in ditch sections or toe to toe of fill slope in fill sections.
 - Copper, Steel, or Plastic anything less than 2" shall not be cased.

64

UAP Part II Crossing R/W Cont.

- Casing Requirements for Utilities Crossing the Right of Way (cont'd)
 - All plastic pipe with an inside diameter greater than two inches must be cased from the right-of-way line and meet minimum ASTM specifications and all applicable laws and codes.
 - In certain instances, minimum casing may be allowed requiring encasing from toe of back slope to toe of back slope in ditch sections, and from toe of fill slope to toe of fill slope in fill sections.

65

UAP Part II Boring

- Boring
 - Pits for boring, tunneling or jacking will not be permitted in the highway median or closer to the roadway than the toe of fill in fill sections or toe of shoulder slope in ditch sections.

66



67

UAP Part II (Boring Cont'd)

- Boring (cont'd)
 - Casing and pipeline installations should be accomplished by dry boring or other approved methods
 - Water under pressure or puddling will not be permitted
 - When unstable soil conditions exist, boring or tunneling operations shall be conducted in such a manner as not to be detrimental to the roadside being crossed.
 - Remedial action shall be taken when the hole is bored to large as approved by the KDOT engineer

68

- UAP Part II (More on Boring)
- Boring (cont'd)
 - All abandoned holes cased by boring or jacking are to be filled by pressure grouting
 - The hole diameter shall not exceed the outside diameter of the utility pipe, cable or casing
 - By 1.5 inches on pipes with an outside diameter of 12 inches
 - By two inches on pipes with an inside diameter greater than 12 inches

69



70

UAP Part II Casing Material

- Casing Material
 - The following is approved material
 - Welded steel pipe, smooth wall in sound condition
 - Corrugated metal pipe
 - Reinforced concrete pipe meeting KDOT specifications

71

UAP Part II Casing Material Cont.

- Casing Material
 - The following is approved material
 - Vitrified clay pipe meeting KDOT specifications
 - PVC pipe meeting or equivalent that meets KDOT specifications
 - Cast iron pipe meeting ASTM specifications
 - Electric conduits may be of non-metallic material such as PVC, high-density polyethylene, transite, or vitrified clay

72

PROBLEM 1

How high do the following voltage lines need to be?

45,000 volts

15,000 volts

500 volts

73

Problem 1 (solution)

How high do the following voltage lines need to be?

■ 45,000 volts $45000 - 22000 = 23000 / 1000 = 23$
 23×0.4 (remember in inches) = 20 feet + 9.2 inches

■ 15,000 volts
20 feet

■ 500 volts
18 feet

74

UAP Part III

UAP Policy for Fully Controlled Access Highways

75

Calvin and Hobbs



76

Fully controlled Access Highway (Interstate or Turnpike)

- Full-access control means that the authority to control access is exercised to give preference to through traffic by permitting access to the main roadway only at interchange location

77

UAP Part III

- General
 - UAP parts I and II applies to all installations except longitudinal installation for utilities
 - This policy disallows utility attachments to bridge structures on Fully Controlled Access right-of-way except when adverse economic impacts can be documented to the Secretary

78

UAP Part III (general)

- General (cont'd)
 - For partial access control, see Part II, Section I of this UAP
 - This policy does not apply to existing utility installations, except when there is a major replacement of current utility facilities.

79

UAP Part III (length of installation)

- Length of Installation
 - The minimum installation length in rural areas is twenty-five miles and shall be limited in urban areas to facilities which do not start and terminated within the same urbanized area. Exceptions will be considered on a case by case basis.

80

UAP Part III (Guidelines)

- Installations and Maintenance Guidelines
 - Utility Requirements
 - The secretary shall establish a utility corridor along the outer edge of the right-of-way **only on one side**
 - Limited maintenance will be permitted on the underground facility from within the utility corridor
 - When placing the utility future highway improvements will be taken into consideration when placing utility

81

UAP Part III – cont'd.

- Utility Requirements (cont'd)
 - Planned or likely improvements in the utility corridor may qualify under this policy
 - Permanent aboveground utility shall not be placed in access control facility except for documented hardship conditions or installations at rest areas
 - No part of the facility shall be placed in the clear zone unless approved by the Secretary

82

UAP Part III – cont'd ..

- Utility Requirements (cont'd)
 - When installing conduit it will be installed at a depth of at least 42" conduit shall be dry bored only and upon completion will be backfilled, compacted, and seeded to its original condition

83

UAP Part III- cont'd ...

- Utility Requirements (cont'd)
 - The utility may not remove or prune any trees without approval of the Secretary and the design will protect environmentally sensitive areas
 - Fiber optic or other telecommunication utilities, the Secretary may require two conduits in addition to those proposed by the utilities. These conduits shall be PVC or polyethylene and inside diameter of 4"

84

UAP Part III- cont'd

- Utility Requirements (cont'd)
 - The installation of the conduit shall include manholes or all appurtenances to permit the pulling of extra cables without further excavation
 - Utilities may be installed, serviced or maintained by direct access through roadway or connecting ramps

85

UAP Part III – cont'd

- Utility Requirements (cont'd)
 - When necessary a Traffic Control Plan shall be developed and shall be in accordance with the MUTCD and all materials shall meet 350 compliant spec.
 - Utility shall mark its underground facilities in accordance with industry standards and these shall not interfere with highway operations
 - The utility shall maintain records and provide As-Built plans

86

UAP Part III – cont'd

- Utility Requirements (cont'd)
 - There shall be no service lines in the Controlled Access without approval of the Secretary
 - The Utility needs to have an agreement and all necessary approvals before installation

87

UAP Part III- cont'd

- The Secretary's Authorities and Responsibilities
 - Prior to authorizing longitudinal installation
 - The installation will not affect the safety, operation, construction, design, maintenance, and highway expansion

88

UAP Part III- cont'd

- The Secretary's Authorities and Responsibilities (cont'd)
 - The utility shall be placed in a corridor established by the Secretary
 - When a new utility conflicts with an established existing utility the Secretary may allow the new installation provided it is responsible for all damages to the existing utility

89

UAP Part III – cont'd.....

- Utility Permit Agreement
 - Application Procedure
 - The utility company shall request in writing to place their facility on Fully Controlled Access Highways to the Secretary
 - If approved an agreement shall be made between the Secretary and the utility company

90

UAP Part III – cont'd.....

- Utility Permit Agreement (cont'd)
 - Provisions of the Agreement
 - The right to enter the utility corridor for the purpose of conducting surveys and performing preliminary engineering studies and to allow the right of enter or exit to the utility for installation or maintenance from the utility corridor
 - Notify the Secretary of the location and time to perform maintenance to the utility

91

UAP Part III – cont'd.....

- Utility Permit Agreement (cont'd)
 - Provisions of the Agreement
 - The utility company provides liability insurance, bond, notice of work starting, completion, and traffic control provisions
 - Provisions for payments if any by the Secretary. This provision does not mandate that the Secretary shall not be liable for any costs accrued in the development of the utility plans

92

UAP Part III – cont'd.....

- Utility Permit Agreement (cont'd)
 - Provisions of the Agreement
 - Clauses specifying the condition by the Secretary to terminate the agreement in the event of default non compliance under the agreement

93

UAP Part III – cont'd.....

- Utility Permit Agreement (cont'd)
 - Provisions of the Agreement
 - A penalty for non compliance of the terms of the agreement
 - A clause to determine the ownership of the facility in the event that it is abandon the Secretary may require removal.
 - Maintenance and any cost to relocate due to expansion will be the utilities responsibility

94

UAP Part III – cont'd.....

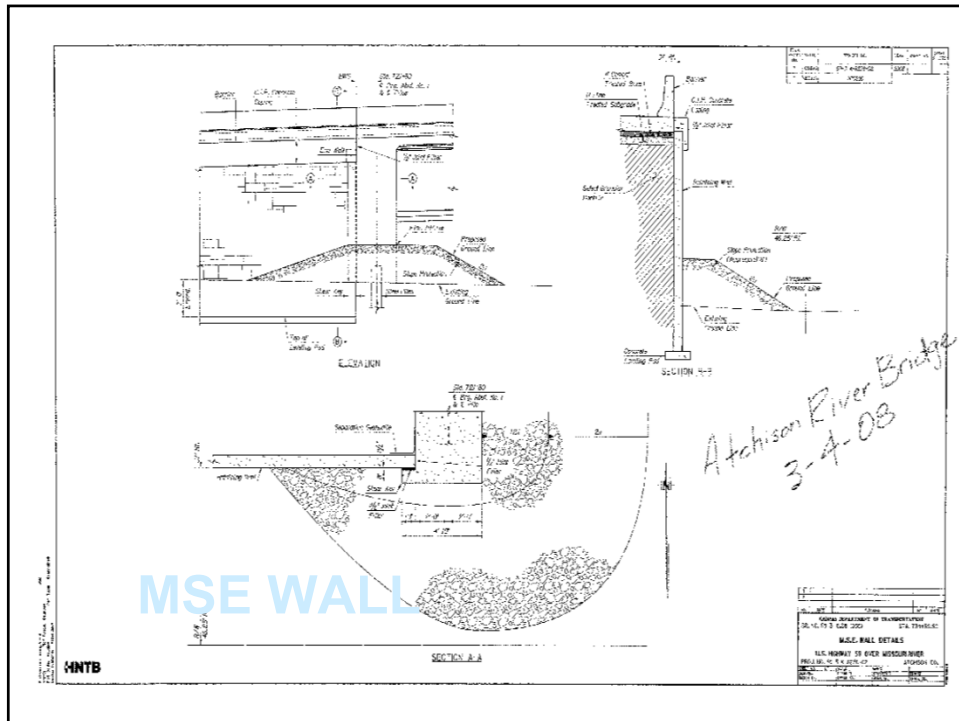
- Utility Permit Agreement (cont'd)
 - Provisions of the Agreement
 - If seeding is unsuccessful or in need of repair the utility will be responsible for its repair
 - It is the responsibility of the utility performing installation or maintenance work to locate and protect the facilities of other utilities. The Secretary shall be held harmless and indemnified for any and all causes of action arising from the installation or maintenance of the facilities

95

UAP Part IV

UAP for Policy Attachment to Bridges and Other Structures

96



97

Another MSE Wall



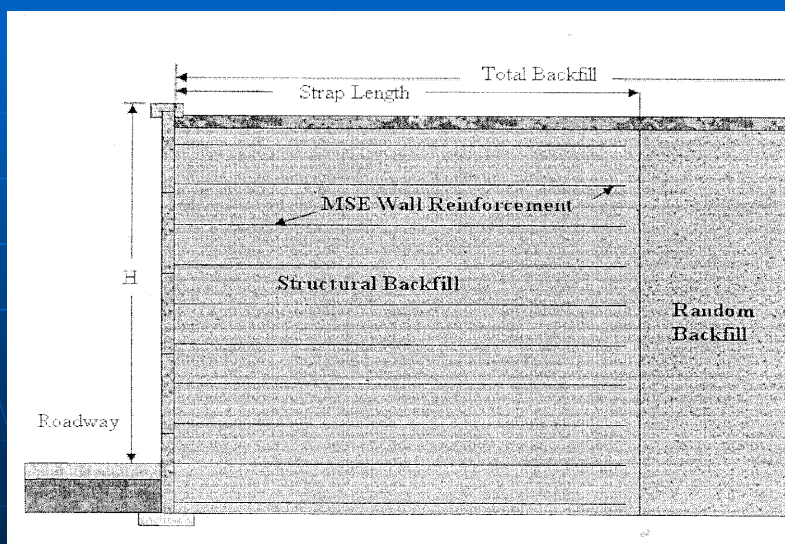
98

MSE Wall back



99

MSE Wall plan page



100

UAP Part IV – cont'd

- General Provisions
 - Highway Permit
 - Applications for attachments to bridges or near a (MSE) wall shall be authorized by filling out form "310"
 - Permit requirements regarding, but not limited to, liability insurance are included in the Highway Permit-Attachment to bridges and other structures (Form "310")

101

PERMIT MSE WALL

KANSAS DEPARTMENT OF TRANSPORTATION
Bureau of Maintenance
HIGHWAY PERMIT
ATTACHMENTS TO BRIDGES
AND OTHER STRUCTURES OR INSTALLATIONS
NEAR RETAINING WALL SYSTEMS

Permit No. _____
Route _____
Co. _____
Br. Sec. No. _____
B/W Permit No. _____
(the work area width of bridge)

THIS AGREEMENT, made and entered into this _____ day of _____, 20____, by and between the Secretary of Transportation of the State of Kansas, referred to as "Secretary," and _____, referred to as "Owner," and _____, referred to as "Agent," and _____, referred to as "Contractor,"

Secretary has jurisdiction over and control of all bridges and other structures on the State Highway System of Kansas, and Secretary hereby that it is in the interest of the Citizens of the State of Kansas to allow public or private entities to utilize bridges or other structures on the State Highway System under certain circumstances, and Contractor requests permission and authority from Secretary to construct and maintain a _____

(Structure, structure or installation near a retaining wall system)

attached to (Bridge, Structure) Serial No. _____ on Highway Route _____ in _____ County, Kansas

at Reference Point _____, a part of the State Highway System, and Secretary hereby that it is in the interest of the Citizens of the State of Kansas to allow public or private entities to utilize bridges or other structures on the State Highway System under certain circumstances, and Contractor requests permission and authority from Secretary to construct and maintain a _____

1.0 PLANS: Contractor shall furnish two (2) sets of comprehensive plan sets or detailed drawings 11" x 17", under electronic pdf copy of the proposed work. Sketches, cut sheets, and/or documentation may be submitted on a 12" x 18" Plan or detailed drawings must include the site, type, and material weight of the proposed installation, and include details of the location, method of attachment and type of attaching hardware or method of installation as applicable.

2.0 DESIGN FOR ATTACHMENT: A check in the amount of _____, either made payable to the Kansas Department of Transportation or to the Contractor for payment of additional structure cost to support the Utility Installation.

3.0 MATERIAL AND METHOD: Contractor shall furnish all material, do all work, and pay all costs for the work described on this Permit.

3.1 All proposals for Utility Installations and other attachments to bridges or structures or installation near a retaining wall system must be pre-approved in writing by the Bureau of Design, Bridge Section and the District Engineer.

3.2 All attachments to bridges or other structures or installation near existing wall systems shall comply with the conditions and requirements of the "Utility Accommodation Policy for KDOT", current edition which is hereby incorporated by reference in its entirety.

3.3 All materials and construction methods used on work within the limits of the right-of-way shall be equal to or better than that required by the Standard Specifications for State Road and Bridge Construction, current edition.

4.0 OBSTRUCTION OF TRAFFIC: Contractor shall ensure highway (and connecting links) traffic will be free of interruption unless specifically provided for as a part of this Permit. All temporary traffic control devices and their installation and maintenance shall comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) for streets and highways which has been adopted by the Secretary. Wherever the Temporary Traffic Control Standards conflict with the MUTCD, the Standards shall govern. Workers shall wear approved safety vests according to 23 CFR Part 634, Worker Visibility.

5.0 Right-of-Way: Contractor shall restore the right-of-way to the condition existing prior to approval of the work described on this Permit.

5.1 Any and all checks or notes demanded by this work shall be replaced as directed by the District Engineer.

5.2 The right-of-way shall be kept free from parking, advertising signs or any other commercial activity.

6.0 MAINTENANCE: All Utility Installations shall be maintained or caused to be maintained by Contractor.

7.0 PERMIT REVOCATION: In the event of non-compliance with the terms of this permit, Secretary may revoke the Permit and remove any work performed. Contractor shall reimburse Secretary for any and all costs incurred by Secretary to restore the right-of-way. Secretary will not authorize any other highway permits until the Contractor has either reimbursed the Secretary or restored the right-of-way.

8.0 INITIATION AND COMPLETION OF WORK: Contractor shall notify the District Engineer (and City) or their duly authorized KDOT representative _____ before work is initiated and again when the work is completed.

8.1 An approved signed copy of this Permit shall be on the premises at the start and during the period any work is performed.

8.2 All work, including right-of-way restoration, shall be completed within _____ calendar days of APPROVAL DATE, otherwise this Permit is null and void. The District Engineer or his duly authorized representative may grant an extension of time upon request of Contractor. Any such request must be submitted in writing and state the reasons for delay in completing the work.

9.0 LIABILITY: Contractor shall indemnify and hold harmless Secretary from personal injury and property damage claims arising out of any act or omission of Contractor. If Contractor delays a third party's claim, Contractor shall indemnify Secretary for personal injury damages, property damages, and related expenses Secretary incurs settling out of Contractor's act or omission. For purposes of this provision, the term Contractor includes Contractor's employees, agents, subcontractors (if any), suppliers (if any), contractors, and assigns.

Rev 10-18 KDOT Form No. 310

102

Back of permit
for MSE wall

9.1 INSURANCE: Liability Insurance. Petitioner shall carry "General Liability" insurance under an occurrence policy that has a minimum combined single limit of \$2,000,000 for personal injury and property damage and that contains the following coverage: Comprehensive Fire, Premises-Operation, Underground Hazard, Products/Completed Operations Hazard, Contractual Insurance, Broad Form Property Damage, Independent Contractors, and Personal Injury. Worker's Compensation. Petitioner shall carry "Worker's Compensation and Employer's Liability" insurance that complies with Kansas state law. Automobile Liability. Petitioner shall carry "Automobile Liability" insurance under an occurrence policy that has a minimum combined single limit of \$1,000,000 for personal injury and property damage and that contains the following coverage: Comprehensive Fire, Owned, Hired, and Non-Owned.

9.2 "Certificate of Insurance". This Permit shall not take effect unless Petitioner provides Secretary a "Certificate of Insurance" confirming Petitioner carries insurance in the amounts and type this section requires. Petitioner shall obtain insurance only from insurers on the approved Federal Treasury List and authorized by the Kansas Commissioner of Insurance. The "Certificate of Insurance" shall include a clause requiring the insurer to notify the Secretary thirty (30) days in advance of cancellation of the insurance contract.

9.3 Petitioner shall maintain this insurance until the District Engineer releases Petitioner from any Permit obligation.

10.0 DAMAGE TO UTILITIES. KDOT shall not be liable for damage to any utility not installed in the location authorized by any permit or agreement issued pursuant to the Utility Accommodation Policy.

11.0 PIPELINE LIABILITY. For attachments to bridges or other structures and for roadway crossings of PIPELINES CARRYING PETROLEUM, HAZARDOUS AND/OR CORROSIVE PRODUCTS, Petitioner shall solely assume all risk and liability for accidents and damages that may occur to person, property or natural resources by reason of the operation of the pipeline attached to the bridge or structure or crossing the roadway.

11.1 Petitioner shall maintain the insurance required in Section 9.0 for as long as the pipeline remains attached to the bridge or other structure or for as long as the pipeline crosses the roadway. The insurance contract shall cover claims for each length of time as the law permits such claims.

12.0 ENVIRONMENTAL LIABILITY AND INDEMNIFICATION. Petitioner shall comply with all applicable federal, state, and local statutes, regulations and ordinances relating to environmental protection, and health and safety in Petitioner's acts or, or occupation of the Highway (right-of-way). Petitioner assumes all risk and liability for, or resulting from, any environmental condition on, at, or leaving the Highway(s) caused by or arising out of Petitioner's, or its agent's or contractor's acts, omissions, or negligence, in whole or in part of the Highway right-of-way(s). Petitioner shall hold harmless and indemnify the Secretary against all liability, cost, expense, and fines incurred by or levied against the Secretary under any federal, state or local environmental law, regulation, or ordinance resulting from Petitioner's breach of this paragraph or as a result of Petitioner's acts or omissions of the Highway right-of-way(s) pursuant to this Permit. For purpose of this provision, the term Petitioner includes Petitioner's employees, agents, subcontractors (at any tier), suppliers (at any tier), successors and assigns.

13.0 HIGHWAY IMPROVEMENTS. If Secretary makes any alteration or improvement along or upon the highway right-of-way which is the subject of this Permit, Petitioner agrees to hold Secretary harmless for any and all damages or injury to said Petitioner's construction, whether finished or unfinished, as well as damage or injury to Petitioner's equipment, materials, employees, agents or contractors. Within a reasonable time after receiving written notice from Secretary that Petitioner's facilities are in conflict with KDOT's new construction or major maintenance operation, Petitioner shall alter, change location or move their construction work or facilities without cost or expense to the Secretary. If Petitioner fails to relocate their facilities within a reasonable time, KDOT may designate a time which is not arbitrary or capricious for moving the facilities. Petitioner shall reimburse KDOT for the costs of relocating the facilities upon receipt of an itemized statement (K.S.A. 68-415). In the alternative, Petitioner shall reimburse KDOT for any damages or liabilities or costs to accelerate it may incur as a result of Petitioner's failure to timely relocate the facility.

13.1 Work approved on this Permit will be conducted in a manner as not to interfere with construction work being performed by KDOT or its contractors in the vicinity of Petitioner's work or project.

14.0 CANCELLATION: This Permit may be terminated or canceled by either party upon thirty (30) days written notice to the other party and all rights and privileges accorded to Petitioner under the terms of this Permit shall cease forever, and upon termination or cancellation of this Permit Petitioner shall remove the attachments to the bridge or structure without damage or injury to the bridge or structure. Petitioner shall reimburse the Secretary for any and all damages or injury which results from the removal of attachments to the bridge or structure within thirty (30) days of receipt of an itemized statement of damages.

15.0 ABANDONED OR RETIRED IN PLACE. Petitioner shall notify Secretary when the facilities will be abandoned or retired in place and shall submit a plan for abandonment or retirement in place to the District Engineer or designer for review and approval. Petitioner shall remove or abandon the facilities in place in accordance with the approved plan. Petitioner shall pay all costs associated with removal of abandoned or retired in place upon highway right-of-way facilities.

Emergency Contact (24/7)

This Permit is hereby accepted and its provisions agreed to by the parties.

Signature _____

Printed Name _____

Owner _____ Phone _____ Date _____

Street Address (City, State, Zip Code) _____

☐ Agent ☐ Lessee ☐ Contractor _____ Title _____ Date _____

Street Address (City, State, Zip Code) _____

Recommended _____ Date _____ ☐ Core/Metro Engr. ☐ New Tech ☐ Safety Coord.

Approved _____ Date _____ Bureau of Design-Bridge Section

Permit approved this _____ day of _____, 20____

SECRETARY OF TRANSPORTATION
OF THE STATE OF KANSAS

BY _____ District Engineer

Rev. 12-18 D.O.T. Form No. 310

103



104

UAP Part IV – (Highway Permit)

- General Provisions
 - Highway Permit
 - Structure insurance coverage for damages that may occur by pipelines attachments carrying petroleum, hazardous, or corrosive products will be provided by the utility company in an amount determined for replacement cost for the structure

105

UAP Part IV – cont'd.

- General Provisions
 - Highway Permit
 - A permit allowing a utility owner to attach facility to the structure or near a MSE wall does not constitute permanent rights for attachment or placement, any removal maintenance or relocation will be at no cost to KDOT

106

UAP Part IV – cont'd..

- General Provisions
 - Highway Permit
 - Utilities when permitted are to be maintained and installed without access from the bridge deck or interference to the MSE wall backfill
 - The KDOT Bureau of Bridge-Design will have the right to review and approve the utilities proposal to preserve MSE Wall or structure

107



108

UAP Part IV – cont'd...

- General Provisions
 - Hazardous Material
 - Permit applications for pipelines carrying hazardous materials shall contain names and addresses of company officials and phone numbers to contact on a 24-hour basis in case of an incident causing a dangerous situation the utility company will notify KDOT of any changes in the calling list.

109

UAP Part IV – cont'd....

- Fully Controlled Access Highways
 - Attachments to existing structures crossing or placement near MSE Walls on Fully Controlled Access Highways will be considered on an individual basis as approved by the Secretary

110

UAP Part IV – cont'd.....

- Permitted Highways
 - Design
 - The Utility company is responsible for the design of their facility's attachment to or placement near MSE Walls on a highway structure and shall submit a plan for review and approval

111

UAP Part IV – cont'd.....

- Permitted Highways
 - Design
 - When a new structure or MSE Wall is in the design stage, the Utility company through cooperation with the Bureau of Design-Bridge Section may arrange for conduit and pipeline support systems to be included in bridge or MSE Wall construction plans
 - An additional cost for the design will be submitted and assessed to the utility company along with the form "310"

112

UAP Part IV – cont'd.....

- Permitted Highways
 - Design
 - Utility shall cross the roadway perpendicular to structure
 - Provisions shall be made for temperature differential or expansion on structures
 - Utility lines will not permitted through bridge abutments
 - No manholes shall be located on bridge decks they shall be located beyond the edge of the wearing surface outside edge of roadway

113

UAP Part IV – cont'd.....

- Permitted Highways
 - Location and Method of attachment
 - Bureau of Design Bridge Section may be contacted for recommended location and acceptable types of attachments for various bridges
 - Whenever possible attachments will be placed on down stream side of the bridges

114

UAP Part IV – cont'd.....

- Permitted Highways
 - Location and Method of attachment
 - The following is prohibited on bridges
 - Anchors driven using explosive type driving force method
 - All welding and drilling on steel members
 - Attachment of conduits to bridge handrail and guardrail components
 - Pipelines using bridge members to resist forces generated by fluids in motion

115

UAP Part IV – cont'd.....

- Permitted Highways
 - Excavations
 - Any excavations required in conjunction with a bridge shall be backfilled within 48 hours according to KDOT specifications

116

UAP Part IV – cont'd.....

- Permitted Highways
 - Boring
 - No utilities shall be placed within a distance 2 times the height of the back face of the MSE Wall
 - Trenching may be allowed a distance of 2 times the height away from the back face of the wall upon review of application (DOT Form 310) by KDOT Bureau of Design-Bridge section
 - Trenching may be allowed in front of the wall at a distance greater than 1 times H measured from the front face of the wall.

117

UAP Part IV – cont'd.....

- Permitted Highways
 - Open Excavations
 - No Open excavation shall be allowed within 2 times the height of the back face of the MSE Wall
 - Open excavation may be allowed a distance of 2 times the height away from the back face of MSE wall upon review of application (DOT FORM 310) by KDOT Bureau of Design-Bridge section
 - Open excavations may be allowed 1 times H in front of the MSE Wall to the top of the leveling pad upon review of application (DOT Form 310) by KDOT Bureau of Design-Bridge section

118

UAP Part IV – cont'd.....

- Permitted Highways
 - Materials
 - All attachments to bridges and structures or placement near MSE Walls should be of durable materials designed for long service life expectancy and relatively free from routine servicing and maintenance

119

UAP Part IV – cont'd.....

- Permitted Highways
 - Maintenance
 - Maintenance of the utility is the responsibility of the utility owner and shall be maintained to the satisfaction of KDOT
 - Maintenance of the utility shall not be performed from the bridge deck

120

UAP Part IV – cont'd.....

- Permitted Highways
 - Pipelines
 - Pipelines carrying liquid petroleum, hazardous or corrosive products, will not be permitted to be attached to bridges or structures or placed near MSE Wall unless there are no other options available
 - Pipelines carrying natural gas, liquid petroleum products, or other volatile fluid or gas under pressure will require installation of emergency shut off valves.

121

UAP Part IV – cont'd.....

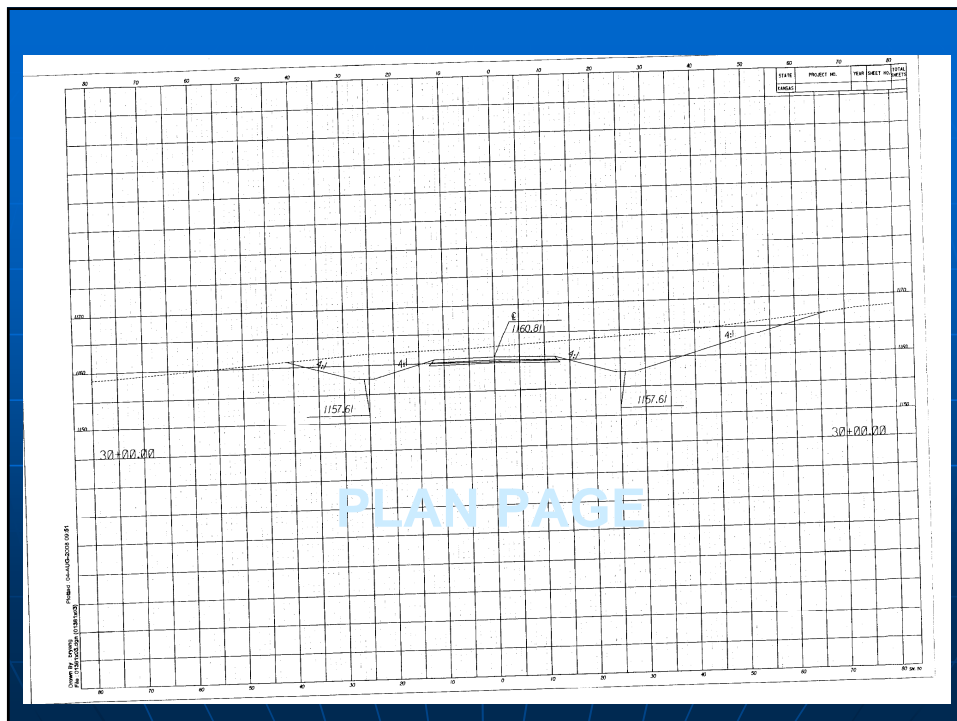
- Permitted Highways
 - Pipelines encased
 - Pipelines shall be encased the length of the bridge/MSE walls beyond the abutments/ end of the walls and vented on each end to detect leakage when carries fluids such as
 - Petroleum, hazardous and or corrosive products, sewage etc.
 - Water lines carried over railroads, streets, other highways, or freeways

122

PROBLEM A

An underground utility is required to cross the road at this location. How deep from the original grade is the utility to be (what elevation)? What are the requirements for this utility if it is (electrical, fiber optic, water)?

123



124

PROBLEM A - SOLUTION

An underground utility is required to cross the road at this location. How deep from the original grade is the utility to be (what elevation)? (5 feet below crown grade) What are the requirements for this utility if it is (electrical 48 inches with tape, fiber optic cased 42 inches with trace wire, water cased 36 inches)?

Ditch grade 1157.61	crown grade 1160.81
- 3	- 5
1154.61	1155.81

Right ditch current elevation 1163

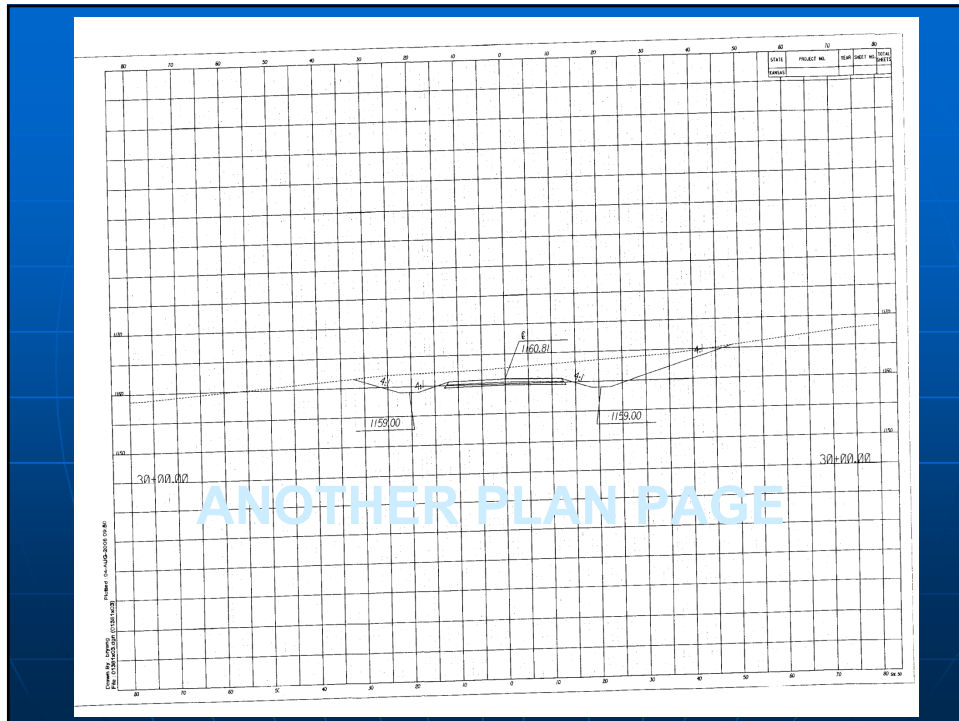
1163	
<u>-1154.61</u>	minus ditch need elevation
	8.39 feet below current right ditch elevation

125

PROBLEM B

An underground utility is required to cross the road at this location. How deep from the original grade is the utility to be (what elevation)? What are the requirements for this utility if it is (electrical, fiber optic, water)?

126



127

PROBLEM B - SOLUTION

An underground utility is required to cross the road at this location. How deep from the original grade is the utility to be (what elevation)? What are the requirements for this utility if it is (electrical, fiber optic, water)?

Ditch grade 1159.0 crown grade 1160.81

- 3

- 5

1156.0

1155.81

Right ditch current elevation 1163

1163

-1155.81 minus CL need elevation

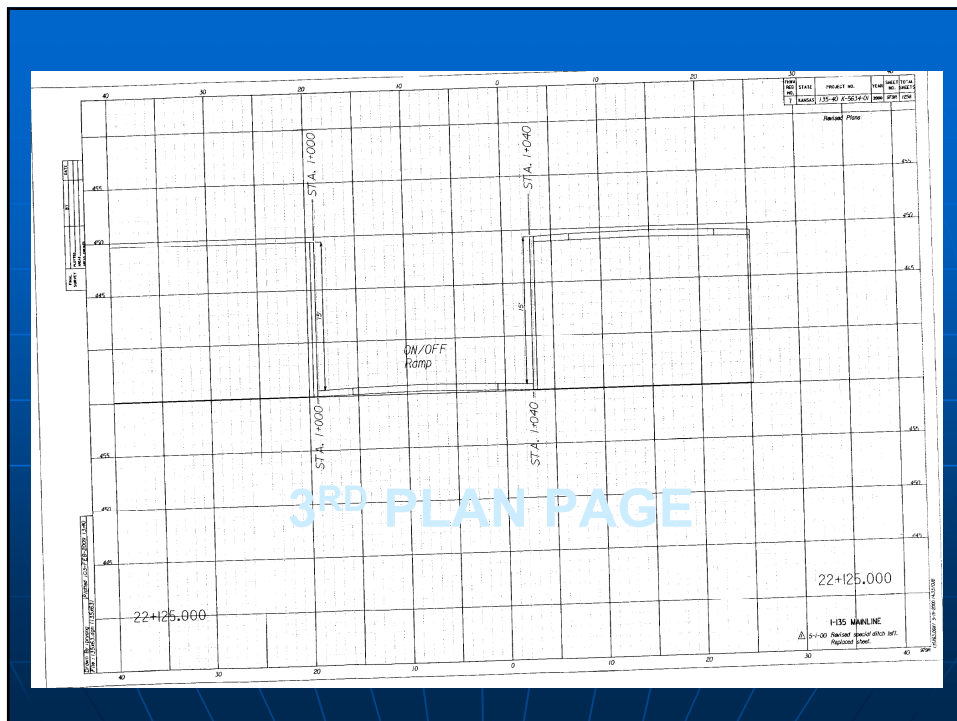
7.19 feet below current right ditch elevation

128

PROBLEM C

An underground utility is required at this location. At what station can this utility be located? Assume the wall is 3 feet thick. What are the requirements for this utility if it is (electrical, fiber optic, water)?

129



130

PROBLEM C- SOLUTION

An underground utility is required at this location. At what station can this utility be located? Assume the wall is 3 feet thick. What are the requirements for this utility if it is (electrical, fiber optic, water)?

Wall height 15 feet

Must be behind the wall

$15 \times 2 = 30$ feet

1+000

or

1+040

- 30

+ 30

- 3 (wall thickness)

+ 3 (wall thickness)

0+967

1+073

(can't because another wall to the right)

131

UAP Appendix

This is supplemental
material for the UAP

132

UAP Appendix – cont'd

- Clear Zone Chart
- Color Codes for Utilities

133

CLEAR
ZONE
TABLE

CLEAR ZONE

Clear Zone Distances (In feet from the edge of the through traveled way)

DESIGN SPEED	DESIGN ADT	U.S. Customary Units					
		FORESLOPES			BACKSLOPES		
		1V:6H or flatter	1V:5H TO 1V:4H	1V:3H	1V:3H	1V:5H TO 1V:4H	1V:6H or flatter
40 mph or less	UNDER 750	7-10	7-10	**	7-10	7-10	7-10
	750-1500	10-12	12-14	**	10-12	10-12	10-12
	1500-6000	12-14	14-16	**	12-14	12-14	12-14
	OVER 6000	14-16	16-18	**	14-16	14-16	14-16
45-50 mph	UNDER 750	10-12	12-14	**	8-10	8-10	10-12
	750-1500	14-16	16-20	**	10-12	12-14	14-16
	1500-6000	16-18	20-26	**	12-14	14-16	16-18
	OVER 6000	20-22	24-28	**	14-16	18-20	20-22
55 mph	UNDER 750	12-14	14-18	**	8-10	10-12	10-12
	750-1500	16-18	20-24	**	10-12	14-16	16-18
	1500-6000	20-22	24-30	**	14-16	16-18	20-22
	OVER 6000	22-24	26-32*	**	16-18	20-22	22-24
60 mph	UNDER 750	16-18	20-24	**	10-12	12-14	14-16
	750-1500	20-24	26-32*	**	12-14	16-18	20-22
	1500-6000	26-30	32-40*	**	14-18	18-22	24-26
	OVER 6000	30-32*	36-44*	**	20-22	24-26	26-28
65-70 mph	UNDER 750	18-20	20-26	**	10-12	14-16	14-16
	750-1500	24-26	28-36*	**	12-16	18-20	20-22
	1500-6000	28-32*	34-42*	**	16-20	22-24	26-28
	OVER 6000	30-34*	38-46*	**	22-24	26-30	28-30

* When a site specific investigation indicates a high probability of continuing crashes, or such occurrences are indicated by crash history, the designer may provide clear-zone distances greater than the clear-zone shown in Table 3.1. Clear zones may be limited to 30 ft for practicality and to provide a consistent roadway template if previous experience with similar projects or design indicates satisfactory performance.

** Since recovery is less likely on the unshielded, reversible 1V:3H slopes, fixed objects should not be present in the vicinity of the toe of these slopes. Recovery of high-speed vehicles that encroach beyond the edge of the shoulder may be expected to occur beyond the toe of slope. Determination of the width of the recovery area at the toe of slope should take into consideration right-of-way availability, environmental concerns, economic factors, safety needs, and crash histories. Also, the distance between the edge of the through-traveled lane and the beginning of the 1V:3H slope should influence the recovery area provided at the toe of slope. While the application may be limited by several factors, the fore-slope parameters which may enter into determining a maximum desirable recovery area are illustrated in Figure 3.2.

134

**DIG SAFE
COLORS**

**KANSAS UNDERGROUND UTILITY DAMAGE PREVENTION
ACT
K.S.A. 66-1801 (DIG SAFE)**

1-800-334-7233 (Dig Safe)

Color Coding for Locating Utility Company Lines

RED	Electric Power Lines, Cables, Conduit and Lighting Cables
YELLOW	Gas, Oil, Steam, Petroleum, or Gaseous Materials
ORANGE	Communication, Alarm or Signal Lines, Cables or Conduit including Cable TV
BLUE	Water, Irrigation and Slurry Lines
GREEN	Storm Drain Lines/Sewer
PINK	Survey Markings
WHITE	Proposed Excavation

Tolerance Zone: The area within 24 inches (600 millimeters) of the outside dimensions in all horizontal directions of an underground facility.

135

Problem 2

What are the clear zone requirements for the following?
Design speed of 45 mph, Design ADT of 1000, and a 4:1
foreslope.

Design speed of 65 mph, Design ADT of 2500, and a 3:1
backslope.

136

Problem 2 - Solution

What are the clear zone requirements for the following?
Design speed of 45 mph, Design ADT of 1000, and a 4:1
foreslope.

16-20 feet

Design speed of 65 mph, Design ADT of 2500, and a 3:1
backslope.

16-20 feet

137

UAP Appendix (Fencing)

■ Fencing

- Used to identify the access control line
- Can be multi-strand barbed wire or woven wire; non-residential areas
- Woven wire: suburban type residential areas (generally where lot sizes are over one acre) and rural residences

138

UAP Appendix – (Fencing)

■ Fencing

- Chain link: adjacent to developed areas, such as schools, churches, playgrounds, residential areas (generally where lot sizes are under one acre), industrial areas etc., and for special screening effect where it is desirable
- Single-wire cable: where aesthetics may be enhanced by fence of lower height

139

UAP Appendix – cont'd.

■ Fencing Procedures

- Location
 - Located 6-12 inches within the R/W line
 - For continuity, some fence may be erected substantially on a continuous line even though there may be some irregular right of way corners outside the fence line

140

UAP Appendix – **cont'd..**

- Fencing procedures
 - Location (cont.)
 - Fence will not be constructed across drainage structure openings where the fence is winged into the wing walls of these structures or carried over the top of the structure

141

UAP Appendix – **cont'd...**

- Fencing Procedures
 - Substitution of Fence
 - Owner may be allowed to do so providing the following
 - Property owner is responsible for all costs associated with the construction of substitute fence (Except when a fence is acquired during acquisition)
 - Located along the R/W line on the owner's property
 - Fence does not present sight obstruction

142

UAP Appendix – cont'd....

■ Fencing Procedures

- Substitution of Fence (cont.)
 - Accomplished during the time of construction of the project. If after construction of the project plan must be approved by District Engineer
 - Ownership and maintenance of the fence is the responsibility of the owner
 - A permit will be required for activity on the R/W

143

UAP Appendix – cont'd.....

■ Fencing Procedures

- Substitution of Fence (cont.)
 - If not completed within the time frame agreed between the landowner and KDOT, KDOT will erect a fence consistent with the policy

144

UAP Appendix – cont'd.....

- Fencing Procedures
 - Intersecting private fence
 - Shall connect all intersecting private fences by placement of an end post assembly
 - When a property owner desires to construct an intersecting fence to existing KDOT fence, property owner shall place an end post assembly at the intersection with KDOT fence.

145

UAP Appendix – cont'd.....

- Fencing Procedures
 - Frontage/Access Roads:
 - Along highways with frontage/access roads within the right of way, the access control fence may be located between the frontage/access road and the through traffic lanes or an interchange ramp

146

UAP Appendix – cont'd.....

- Fencing Procedures
 - Salvage of existing fence
 - Where existing private fence is required, the property owner will be allowed to salvage their fence prior to commencement of construction or utility relocation. If the owner's salvage activities create a need for temporary fence, the owner shall be responsible for its installation

147

UAP Appendix cont'd

- Fencing Procedures
 - Temporary fence
 - When construction activities involve removing existing KDOT fence or fence acquired by KDOT from the owner which the owner chooses not to salvage, the contractor will be responsible for furnishing and installing any necessary temporary fence until such time that the permanent fence is in place

148

UAP Appendix **cont'd.**

■ Fencing Procedures

- Water gaps
 - At locations where the fence is tied into the wing walls of the drainage structure or carried over the top of the structure, the property owner may be allowed to erect fence along the right of way line. Property owner shall install end post assemblies and shall be responsible for the maintenance of fence, so erected by the property owner

149

UAP Appendix **cont'd..**

■ Fencing Procedures

- Fencing for two-lane roadway on four-lane R/W
 - The fence is normally placed at the final right of way or access control lines in accordance with this policy

150

UAP Appendix cont'd...

■ Mailboxes

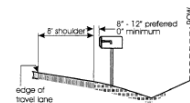
151

Mailboxes in Roadway Right of Way

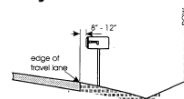
Since mailboxes are normally located within the "clear zone" of the traveled way, crashworthy characteristics of mailboxes and supports are a concern. Also, mailboxes' close proximity to the roadway often results in damage by maintenance equipment. The following information suggests design and placement of mailboxes and supports.

Placement Recommendations

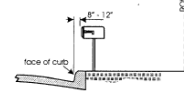
Lateral installation of mailboxes must offer the mail carrier easy access to the box from the delivery vehicle as well as necessary clearance from the traveled way. The following illustrations provide suggested installation locations relative to several road and street situations. (All proposed mailbox placements should be reviewed with the local post office prior to actual installation.)*



Lateral placement with shoulder or turnout

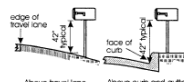


Lateral placement with no shoulder or turnout



Lateral placement with curb and gutter

The height of mailboxes is governed by the United States Postal Service, which recommends an installation height of 42 to 48 inches, again for convenient access by the mail carrier.



Height of the mailbox

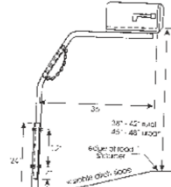
MAILBOXES

*Note: In consideration of uniformity and crashworthy features, some agencies have established programs to furnish and install approved design supports if property owners provide the mailbox.

5.9

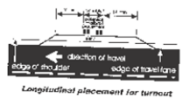
152

One particular support design has been used effectively in some areas to reduce damage from snow plows and other maintenance equipment. This post provides a mailslot support, which places the vertical post section several additional feet from the traveled way. An example of this design is shown below.



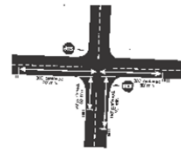
Mailbox support (steel pipe and sign post)

Mail delivery can be made safer and more convenient through the use of turnouts. These designs can be more effective where multiple mailboxes are present requiring the carrier to spend a considerable length of time in one location. An example of a suggested turnout design is shown in the following figure.



Longitudinal placement for turnout

Mailbox installations near intersections also should be studied for the potential safety of road users and mail carrier, as well as convenience of the home owner. Suggested locations for mailbox installations are shown in the following figures.



Mailbox placement at rural intersections where through road speed limit ≥ 55 mph



Mailbox placement at intersections where through road speed limit ≤ 40 mph

S-10

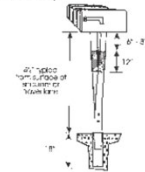
153

Mailbox Supports

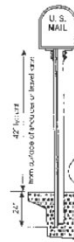
Supports or posts for mailboxes are of two general types: single support and multiple support. Although many existing mailboxes are supported on wood posts or by other means, crash testing has indicated that high metal or plastic are the best materials for meeting crashworthy recommendations.

Support for a single mailbox can be provided by a channel post or a 2 to 3-1/2-inch c/c wall steel pipe. Two small castbolts can be mounted on a single support with the use of a proper scraper plate. Single supported mailboxes should not be placed closer than 2 feet apart, with a maximum of two single supports grouped together to avoid the "pump effect" on vehicle impact. American Association of State and Highway Transportation Officials (AASHTO) guidelines recommend a spacing of 14 feet between supports. The following shows a suggested single mailbox support.

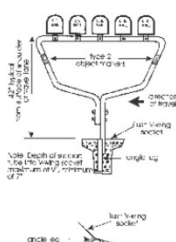
Depending on the size of the mailbox, up to two individual boxes can be installed on multiple support, commonly referred to as a "rosette hanger" design. Adjacent multiple supports should not be placed closer than 4 feet, with no limit on the number of adjacent groups. The following figures show recommended mailbox support designs.



Installation of multiple mailbox support



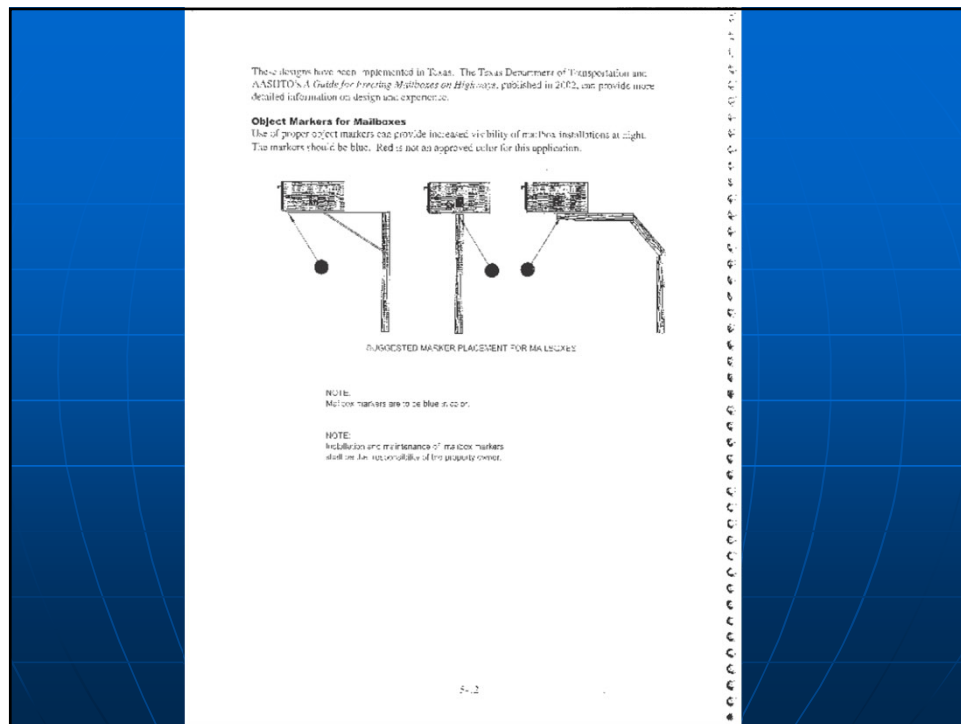
Installation of single mailbox support



Installation of multiple mailbox support

S-11

154

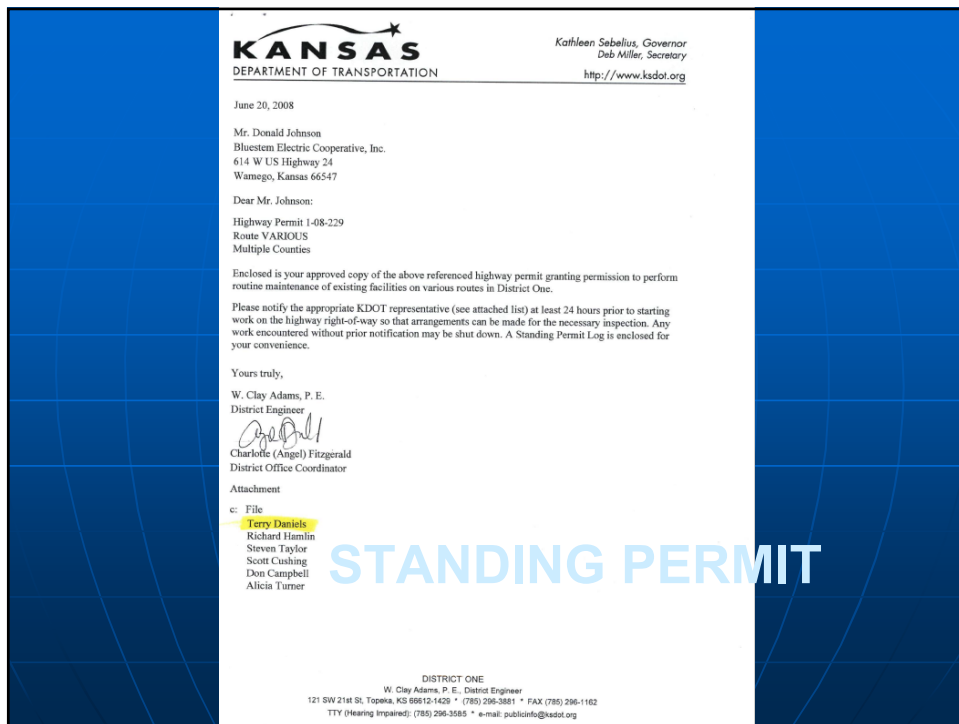


155

UAP Appendix cont'd....

- Standing Permit

156



157

S.O.M. 1.12.4

- This S.O.M. outlines the procedures for how each Bureau/District is to handle utility adjustments

158

S.O.M. 1.12.4 – cont'd

- Specific Responsibilities
 - Bureau of Design (Utilities Section) shall provide District Engineers with the following
 - Preliminary project memoranda
 - R/W prints for utility adjustment
 - Copies of the utility questionnaire form B

159

S.O.M. 1.12.4 – cont'd.

- Specific Responsibilities
 - Bureau of Design (Utilities Section) shall provide Utility Coordinators with the following
 - Notify utility companies of planned highway projects (reply to the form A)
 - Send utility field check plans to District/Area offices with a request to verify/add/delete utility information

160

S.O.M. 1.12.4 – cont'd..

■ Specific Responsibilities

- Bureau of Design (Utilities Section) shall provide Utility Coordinators with the following
 - Contact local utility company representatives for assistance as needed;
 - Revise plans based on information received from the field and from utility companies;
 - Distribute plans to utility companies, providing information to utility companies for submitting the form B relocation plans estimate, and completion date;

161

S.O.M. 1.12.4 – cont'd...

■ Specific Responsibilities

- Bureau of Design (Utilities Section) shall provide Utility Coordinators with the following
 - Send copy of completed form B to District and Area offices
 - Submit plans to companies on private R/W, rural water district, third class cities, companies on public R/W with prior right of ownership/easement to highway for estimated cost of use in preparing a reimbursable agreement

162

S.O.M. 1.12.4 – cont'd....

- Specific Responsibilities
 - Bureau of Design (Utilities Section) shall provide Utility Coordinators with the following
 - Prepare and execute reimbursable utility adjustment agreements
 - Track progress reported by Area office
 - Provide status of utility adjustments to the Bureau of Construction and Materials prior to letting

163

S.O.M. 1.12.4 – cont'd.....

- Specific Responsibilities
 - District Engineer
 - Responsible for designating a Utility Coordinator
 - Assisting in the coordination of all utility relocations within state highway R/W

164

S.O.M. 1.12.4 – cont'd.....

■ Specific Responsibilities

- Field Construction Administration

- The process are outlined in the Construction Manual, such as
 - Review field check plans
 - Transmitting field check reports (DOT 268)
 - Conduct random field inspection
 - Maintain a diary
 - Verify that utilities have been relocated, as built plans constructed, and submit monthly reports (DOT 267)

165

FORM 268

[illegible]

166

KDOT Construction Manual

- **Section 1.12 – Utility Relocation and Adjustment**

- **Section 1.12.01 – General**

- All adjustments or relocations should be accomplished 6 weeks prior to the proposed letting date, when possible.
- Two type of adjustments:
 - Reimbursable (Agreement)
 - Non-Reimbursable (Permit)
- Both types will abide by the Utility Accommodation Policy

169

KDOT Construction Manual – **cont'd**

- Reimbursable Agreement is defined when the lines or facilities to be relocated or adjusted due to highway construction are privately owned, located on the owner's land, devoted exclusively to private use and not directly or indirectly serving the public, as outlined by the FHWA's right-of-way procedures.

170

KDOT Construction Manual – **cont'd.**

- Non-Reimbursable Permit is defined as a permit for a utility located on KDOT right-of-way that is required to be relocated.

171

KDOT Construction Manual – **cont'd..**

- **1.12.02 – Utility Adjustment/Relocation by Permit**
 - Utility Companies submit their proposed plans and permit request for adjustment/relocation to the area office.
 - Generally, the Area office handles these types of adjustment/relocations.
 - A site review may be appropriate to verify adequate clearance of the utility.
 - The permit is then forwarded to the District.
 - The adjustment/relocation should be inspected!

172

KDOT Construction Manual – cont'd...

- Regarding inspection – Please note that the Manual says to inspect the utility adjustment/relocation "... as it is in progress, and also after work is completed."
- This is important to make certain the depth of the utility is adequate and to verify proper compaction techniques.
- If the utility is relocated to an area that will not undergo construction activities, then the utility company should properly finish the area and seed the disturbed ground.

173

KDOT Construction Manual – cont'd....

- **1.12.03 – Adjustment/Relocation by Agreement**
 - Agreements are entered into where the affected utilities are wholly or in part on private right of way. There may be other issues that will create a reimbursable agreement.
 - Generally, this issue will be determined before we get involved.

174

KDOT Construction Manual – cont'd.....

- **1.12.03 – Adjustment/Relocation by Agreement (cont'd)**
 - The reimbursement will be either Lump Sum OR Actual Cost Agreement. We will cover this in more detail later.

175

KDOT Construction Manual – cont'd.....

- Bureau of Design will enter into the Agreement with the utility company
- District and the Area office will receive a copy of the Agreement for files.
- The Area office will begin the permitting process

176

KDOT Construction Manual – cont'd.....

- The Permit process is what is referred to as a “Dummy Permit”
- The Agreement is the actual contract binding the utility company to the stipulations of the UAP.

177

DUMMY PERMIT

Const. Maint. Permittee District Area City or Sub-Area	KANSAS DEPARTMENT OF TRANSPORTATION Bureau of Construction and Maintenance HIGHWAY PERMIT USE OF RIGHT OF WAY	Permit No. <u>1-07-324</u> Route <u>662</u> Co. <u>Nebraska</u> State Highway ☐ City Comm. Link ☐ City _____
--	---	---

THIS AGREEMENT, made and entered into, by and between the Secretary of Transportation of the State of Kansas, hereinafter referred to as the "Secretary" and JBN Telephones, 785.866.2210 418 W 5th & South Hoban, Kansas, 66436 (City), hereinafter referred to as the "Petitioner" and the City of _____ (City), hereinafter referred to as the "City".

WHEREAS, the Secretary has jurisdiction over highway right-of-ways within the State Highway System of Kansas, and

WHEREAS, the Secretary (and City) believe it is in the interest of the Citizens of the State of Kansas to permit certain work or projects to be performed upon Highway right-of-ways, and

WHEREAS, the Petitioner requests permission and authority from the Secretary (and City) to perform certain work, described as follows:

Dummy Permit for utility relocation of JBN Telephone
per agreement # 006082015 for 62-66 KA-D551-01.

Said work is located on public right-of-way in, upon or along State Highway Route 662, Reference Point 1084-1109 (City Connecting Link Route _____ on _____ St.) in Sec. _____ TWP _____ Range _____ County, Nebraska (direction) from K-9 Jct. (City or county line), and

WHEREAS, the Secretary has delegated full and complete authority to the District Engineer or the Kansas Department of Transportation (KDOT) to execute Highway Permit Agreements, hereinafter referred to as "Permits," for and on the Secretary's behalf.

NOW THEREFORE, in consideration of the permission granted hereunder by the Secretary (and City) to utilize Highway right-of-ways in the manner described above, the following terms and conditions are mutually agreed to by the Petitioner, the Secretary (and the City):

1.0 PLANS. Petitioner shall furnish five (5) sets of comprehensive plans or sketches, 8 1/2" x 11" or 11" x 17", of the proposed work located within highway right-of-ways, and adequate sketches to indicate the location of the proposed installation with respect to the traveled way of the highway, the right-of-way line and, where appropriate, the center of section lines.

1.2 An accurate "As Built" Construction Plan shall be provided for deviation from the approved Plan.

2.0 MATERIAL AND METHOD. All requests to perform work in, upon or along Highway right-of-ways must be approved by the District Engineer (and City). In Case the Petitioner will obtain additional Permits, as required by the City.

2.1 The Petitioner shall furnish all material, do all work and pay all costs for the work described on this Permit.

2.2 All utility installations shall comply with the conditions and requirements of the KDOT Utility Accommodation Policy, current edition, and City standards when they exceed those of the KDOT.

2.3 Drainage structure requirements shall be determined by the Petitioner, but said requirements are subject to review and approval by the District Engineer (and City).

2.4 All materials and construction methods used on work within the limits of the right-of-way shall be equal to or better than that required by the "Standard Specifications for State Road and Bridge Construction," current edition.

3.0 INITIATION AND COMPLETION OF WORK. Petitioner agrees to notify the District Engineer (and City) of their duty authorized KDOT representative, TECH. SERVICES, before work is initiated and again when the work is completed.

3.1 An approved signed copy of this Permit shall be on the premises before and during the period any work is performed.

3.2 All work, including right-of-way restoration, shall be completed within 10 calendar days of APPROVAL DATE, otherwise all this Permit is rescinded. If work has not been started within the completion time, this Permit becomes null and void.

4.0 INSPECTION. The Petitioner will be responsible for supervising construction to insure compliance with KDOT (and City) policies and standards.

5.0 ACCEPTANCE. (Check One) KDOT ☒ City ☐ will be responsible for acceptance of restored right-of-way.

6.0 RIGHT-OF-WAY. Except for authorized change, Petitioner agrees to restore said right-of-way to a condition equal to or better than existed prior to approval of the work described on this Permit.

6.1 Any soil, debris or more discerned by the work shall be replaced as directed by the District Engineer (and City).

6.2 The right-of-way shall be kept free from parking, advertising signs or any other commercial activity.

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BACKSIDE OF DUMMY PERMIT

7.0 OBSTRUCTION OF TRAFFIC: Petitioner agrees that highway (and connecting link) traffic will be free of interference unless specifically provided for as a part of this Permit. Traffic protection shall be in accordance with the "Manual on Uniform Traffic Control Devices," current edition. This includes the use of approved safety vests and traffic control devices.

8.0 MAINTENANCE: All utility installations shall be maintained or caused to be maintained by the Owner.

9.0 BOND WAIVED: In lieu of bond, Petitioner agrees that the Secretary may revoke the permit and remove any work performed. The Petitioner agrees to reimburse the Secretary for any cost incurred by the Secretary to restore the right-of-way. The Secretary will not authorize any other highway permits until the Petitioner has either reimbursed the Secretary or restored the right-of-way.

10.0 LIABILITY: The Petitioner shall hold harmless the Secretary from personal injury and property damage claims arising out of the Petitioner's act or omission. If the Secretary defends a third party's claim, the Petitioner shall indemnify the Secretary for personal injury damages, property damages, and related expenses the Secretary incurs arising out of the Petitioner's act or omission. For purposes of this provision, the term Petitioner includes Petitioner's employees, agents, subcontractors (at any tier), suppliers (at any tier), successors, and assigns. The Petitioner shall obtain the insurance coverage specified below unless the Secretary or the District Engineer modifies these requirements.

10.1 INSURANCE: Liability Insurance. The Petitioner shall carry "General Liability" insurance under a claims-made policy that has a minimum combined single limit of \$2,000,000 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Premises-Operation, Underground Hazard, Products/Completed Operations Hazard, Contractual Insurance, Broad Form Property Damage, Independent Contractors, and Personal Injury. Worker's Compensation. The Petitioner shall carry "Worker's Compensation and Employer's Liability" insurance that complies with Kansas state law. Automobile Liability. The Petitioner shall carry "Automobile Liability" insurance under a claims-made policy that has a minimum combined single limit of \$1,000,000.00 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Owned, Hired, and Non-Owned.

10.2 "Certificate of Insurance": "Certificate of Insurance". Before signing the permit, the Petitioner shall furnish to the Secretary "Certificates of Insurance" showing the Petitioner carries insurance in the amounts and type this section requires. The Petitioner shall obtain insurance only from insurers on the approved Federal Treasury List and authorized by the Kansas Commissioner of Insurance. The "Certificates of Insurance" shall include a clause requiring the insurer to notify the Secretary thirty (30) days in advance of a change in or cancellation of the insurance contracts.

10.3 The Petitioner shall maintain this insurance until the District Engineer releases the Petitioner from any Permit obligation.

11.0 PIPELINE LIABILITY: For attachments to bridges or other structures and for roadway crossings of PIPELINES CARRYING PETROLEUM, HAZARDOUS AND/OR CORROSIVE PRODUCTS, the Petitioner shall solely assume all risk and liability for accidents and damages that may occur to persons or property by reason of the operation of the pipeline attached to said bridge or structure or crossing said roadway.

11.1 The Petitioner shall maintain the insurance required in Section 9.0 for as long as the pipeline remains attached to the bridge or other structure or for as long as the pipeline crosses the roadway. The insurance contract shall cover claims for each length of time in the law permits such claims.

12.0 ENVIRONMENTAL LIABILITY AND INDEMNIFICATION: The Petitioner shall assume all risk and liability for all claims suits, actions, causes of action, demands, rights, damages, costs, expenses, penalties, fines or compensation whatsoever, direct or indirect, which the Petitioner now has or of which the Petitioner may have in the future on account of or in any arising out of or in connection with known or unknown physical or environmental conditions of the Petitioner's property or operation. The Petitioner shall comply with federal, state and local rules and regulations. These rules include, without limitation, the Toxic Substances Control Act, the Comprehensive Environmental Response, Compensation and Liability Act, and the Resource Conservation Recovery Act. The Petitioner shall indemnify the Secretary against and from all damages, expenses and costs incurred by any person, the State of Kansas, or the United States Government for determining and undertaking remedial action, any fines or penalties assessed under state or federal laws, contract claims, personal injury claims, and damage of or loss of natural resources. For purposes of this provision, the term Petitioner includes Petitioner's employees, agents, subcontractors (at any tier), suppliers (at any tier), successors, and assigns.

13.0 HIGHWAY IMPROVEMENTS AND/OR MAINTENANCE: In the event the Secretary deems it necessary or proper to make any alteration or improvement along or upon the highway right-of-way which is the subject of this Permit, the Petitioner agrees to hold the Secretary harmless for any and all damage or injury to said Petitioner's facilities, whether finished or unfinished, as well as damage or injury to Petitioner's equipment, materials, employees, agents or contractors. The Petitioner further agrees that the work approved on this permit will be conducted in such a manner as not to interfere with construction or other work being performed by the KDOT (or City) or its contractors in the vicinity of the Petitioner's work or project.

13.1 The Petitioner agrees, that within a reasonable time after receiving written notice from the Secretary that Petitioner's facilities are in conflict with KDOT's new construction or major maintenance operations, to alter, change location or move their construction work or facilities without cost or expense to the Secretary.

13.2 It is further agreed that written notice will not be required for KDOT normal maintenance such as sign installation or replacement, cleaning existing ditches and channels, etc., whether planned or not.

14.0 ABANDONED OR RETIRED IN PLACE: The Petitioner agrees to notify the Secretary when the permit work has been abandoned or retired in place and to be responsible for all cost associated with removal of abandoned or retired in place upon highway right-of-way.

This Permit is hereby accepted and its provisions agreed to by the parties hereto.

APPROVED: _____ PETITIONER: _____

CITY OF: NIA (when applicable)

☐ Mayor ☐ City Mgr. ☐ City Engineer

City Clerk: _____

RECOMMENDED BY: Kerry Daniels (City Engineer) _____ (City Engineer)

PERMIT APPROVAL DATE: 10/20/2007

SECRETARY OF TRANSPORTATION OF THE STATE OF KANSAS

BY: Carlton M. Rouse (District Engineer)

Owner (Signature): _____

Owner: _____

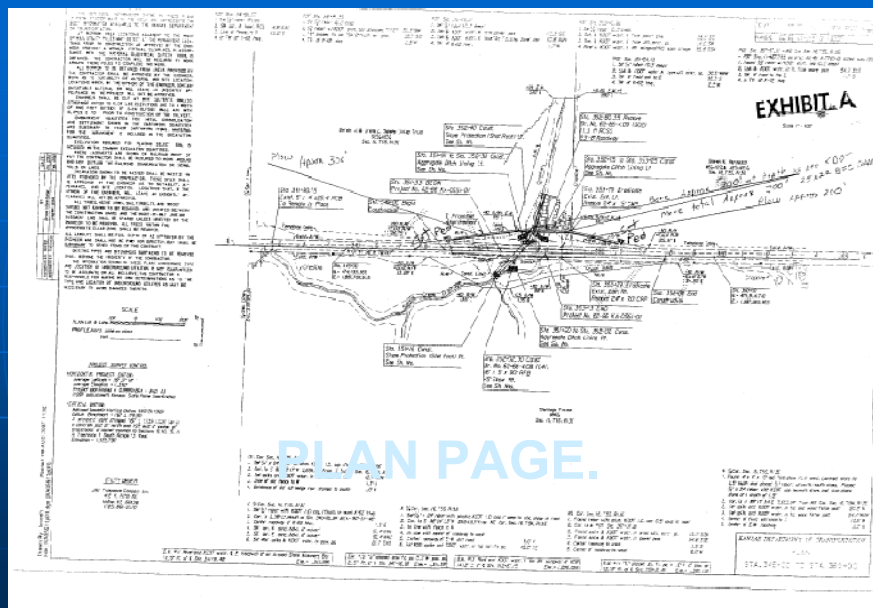
Street Address (City, State, Zip Code): _____

☐ Agent ☐ Lessee ☐ Contractor

Street Address (City, State, Zip Code): _____

Contact Email: _____

179



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KDOT Construction Manual **cont'd**

- The Area Office will complete a D.O.T. Form 304 for the utility company. It does not require the signature of the utility company. It does require the signature of the person filling it out – generally the Construction Engineer or the Utility Coordinator for the construction office.

181

KDOT Construction Manual **cont'd.**

- The information for the permit application will be contained in the Agreement documents.
- The Area office should review the adjustment/relocation Agreement to make sure it satisfies the needs of the construction project.

182

KDOT Construction Manual **cont'd...**

- Send the D.O.T. Form 304 to District for approval. (5) sets of proposed construction plans shall accompany the submittal.
- An Electronic Copy is okay.

183

KDOT Construction Manual **cont'd....**

- When the District approves the permit, we will distribute signed copies to the appropriate entities.
- Once a permit is authorized the Field Engineer becomes responsible for the field administration of the work under the Agreement.
- The Field Engineer must assure compliance with all aspects of the Agreement.

184

KDOT Construction Manual cont'd.....

- **1.12.04 – Utility Change Orders**
- Any work involving MINOR changes in quantities or items not included in the original Agreement may be authorized.
- Changes of a MAJOR nature must get prior approval from the Bureau of Design – Utilities Section.
- This could present a difficult situation for you, use caution and prudence in authorizing changes.

185

KDOT Construction Manual cont'd.....

- **1.12.05 Pre-construction Conference**
 - It is good policy to invite affected utility companies to the pre-construction conference to discuss necessary relocation, adjustments, permits and agreements.
 - These actions help build good relationships with our utility partners.

186

KDOT Construction Manual **cont'd**.....

■ **1.12.06 – Progress of Work**

- The Notice to Proceed is given by the D.E. The Area office will inspect the work under the utility agreement.
- The Area office shall keep a record of the progress of the utility adjustments

187

KDOT Construction Manual **cont'd**.....

■ **1.12.07 – Inspection of Work**

- Inspection shall be performed on both Permit & Agreement utility adjustment/relocations.
- All finished utilities should be shown on the As-Built Plans along with final elevations.

188

KDOT Construction Manual **cont'd**.....

■ **1.12.08 – Lump Sum Agreements**

- Daily records are not required of Man hours, material items and equipment time.
- The inspector should assure that work is in accordance with the Agreement

189

KDOT Construction Manual **cont.**

■ **1.12.09 – Actual Cost Agreements**

- The inspector should maintain a diary for information to document and support billings.
- Document such items as:
 - Progress of utility work
 - Major items installed
 - Labor and equipment force
 - Material on hand

190

KDOT Construction Manual **cont..**

- **1.12.09 – Actual Cost Agreements**
- The inspector should maintain a diary for information to document and support billings.
- Document such items as:
 - Weather
 - Any rock excavation
 - Major items of salvaged material
 - Traffic control
 - Conditions that may lead to additional expense or delay

191

KDOT Construction Manual **cont...**

- It is not contemplated that our inspectors will act as timekeepers for the work forces nor count each nut and bolt or other items of material.
- It is required, however, that sufficient records be kept to enable the Field Engineer to satisfy himself that the billing submitted by the utility company is substantially correct.

192

KDOT Construction Manual cont....

- **1.12.10 – Inspection of Recovered Materials**
- Utility company will notify, in writing, of the time and place for inspection of material that is to be disposed of by sale or scrapped.
- KDOT personnel are not too become arbiters as to the suitability of material for reuse or scrap.
- Inspection of removed material is not required on a lump sum Agreements.

193

KDOT Construction Manual cont.....

- **1.12.11 – Final Billing**
 - The billing for reimbursable Agreements are submitted to the Field Engineer.
 - The Field Engineer prepares a pay voucher and forwards it and the statement to the Bureau of Design – Utilities Section

194

KDOT Construction Manual cont.....

- Example
 - Final Bill

195

Kansas Department of Transportation

BILL MEMO

MEMO TO: Bureau of Design
Project Coordinating Engineer

Bureau of Fiscal Services
Contract Audit Section

FROM: Kenneth Massingill, P.E.
Area Engineer
Horton Construction Office

DATE: December 23, 2003

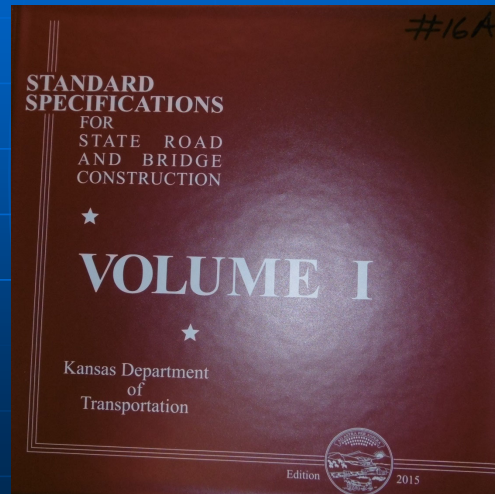
SUBJECT: 9-66K-6410-01
CMS Contract No. 006032114
Utility Agreement – Nemaha-Marshall Electric Co-op Assoc., Inc.

Enclosed is First and Last Intermediate Estimate with the supporting detail information attached as received from ~~Brown County Rural Water District #2~~ for the above captioned project.

cc: File

196

2015 KDOT Specifications



197

2015 KDOT Specifications **cont.**

- Section 105.11
 - Contractor's Responsibility for Utility Property and Services and Cooperation with Utilities

198

2015 KDOT Specifications **cont..**

- Section 105.11
 - General
 - Coordinate and perform work to avoid interrupting service
 - The contract documents will designate the utilities to be adjusted or relocated by utility owners, other third parties, or the contractor during the construction

199

2015 KDOT Specifications **cont...**

- Section 105.11
 - General (cont'd)
 - Coordinate, schedule, and perform work to minimize interference with others who are adjusting or relocating the utilities. If necessary, modify the contractor's schedule to accommodate utility adjustments or relocation
 - Notify One Call

200

2015 KDOT Specifications **cont....**

- Section 105.11
 - Contractor's Responsibility for Utility Property and Services
 - Coordinate and perform work to avoid interrupting utility service.
 - Notify the utility owner of damage to or exposure of its utility or other property. Do not hinder the utility owner from restoring utility service.

201

2015 KDOT Specifications **cont.....**

- Section 105.11
 - Contractor's Responsibility for Utility Property and Services
 - No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

202

2015 KDOT Specifications **cont.....**

- Section 105.11 Contractor's Responsibility for Utility Property and Services
 - Assume responsibility for damages to utilities arising from the contractor's negligent acts or omissions if the utilities were designated in the contract documents and properly relocated (having no or only minor deviations from the plan location). The utility owner will decide whether the contractor shall pay the utility owner to repair the damage or whether the contractor shall repair the damage. Repair the damaged utilities by restoring them to the existing condition before the damage occurred.

203

2015 KDOT Specifications **cont.....**

- Section 105.11
 - Contractor's Responsibility for Unidentified Utilities or Incorrectly-Relocated Utilities Found During Construction
 - Exceptions as provided in subsection 105.11c(2)
 - Contractor assumes no responsibility for damages or delays caused by utilities unidentified in the contract documents or discovered in a different location than that identified and outside the industry-accepted tolerances.

204

2015 KDOT Specifications **cont**.....

- Section 105.11
 - Contractor's Responsibility for Unidentified Utilities or Incorrectly-Relocated Utilities Found During Construction
 - Despite being incorrectly located the Secretary will not compensate for damages caused by the utility if
 - Contractor did not notify one call
 - Contractor knew or should have know the utility was in the location discovered
 - Contractor was negligent

205

2015 KDOT Specifications **cont**.....

- Section 105.11
 - Contractor's Responsibility for negligent field locates
 - Contractor is responsible for incorrectly located utilities after one call but may be allowed extra time if approved by the Secretary.

206

INSPECTION OF UTILITIES

207

Inspection of Utilities **cont**

- Federal Aid Policy Guide Part 645 & KSA 68-415
 - Utility is on private/public owned land by law the utility will not be required to relocate at their own expense
 - Utility on KDOT R/W by law the utility will be required to relocate at their own expense

208

Inspection of Utilities **cont.**

- Rural Water Districts
 - KSA 82a-612 et seq.
 - Utility shall be reimbursed for relocation of utility whether on private or KDOT R/W

209

Inspection Of Utilities **cont..**

- **Review Utility Field Check plans from Topeka Utility Coordination Section.**
- Contact utility companies to check locations, if necessary amend locations on the field check plans.
- After amending submit back to Utility Coordinating Section in Topeka to be corrected.
- Coordinating Section will distribute Utility Field Check plans to District, Area, and utility companies for review.

210

Inspection Of Utilities cont...

- KDOT coordinating section will send a Form "A" to the known utility companies and District office. This form states that there will be a preliminary survey by KDOT crews who will then locate all utilities in the construction area.

211

January 10, 2005

Subject: Project No. 16-43 KA-0138-01

Co: Jackson

A survey crew is expected to begin work on January 11, 2005, to gather information necessary for the proposed improvements at the intersection of K-16 and Jackson County road "N". A county map is included for reference. The survey is expected to take three (3) weeks to complete.

A member of the survey crew will be contacting dig safe or your local representative for field locates within the survey area. Providing accurate horizontal and vertical location information will aid in the design of the improvement. Rob Selley, L.S., with the Kansas Department of Transportation, will be in charge of the survey. Please review and submit a Utility Survey Notice Form "A" at <http://www.ksdot.org/burdesign/coorsect/forma.asp> If you prefer, you may complete the Form "A" that is enclosed.

If you have any questions or concerns, please contact me at (785) 296-0240 or via e-mail at rhamit@ksdot.org

Sincerely,
Jim L. Kowach, P.E.
Chief, Bureau of Design
Richard S. Hamit, Utilities
Coordinating Section
RSH:jah
Enclosure
c: file

Example

212

Inspection Of Utilities cont....

- The KDOT utility coordinating section will mail a Form "B" to companies that have utilities in the construction area.
- The utility company will then fill out the Form "B" and return to KDOT or they can also submit this form online.
<http://www.ksdot.org/burDesign/coorsect/formb.asp>

213

Kansas Department of Transportation Utility Questionnaire Form B	
Form B	1. Is utility relocation necessary to clear proposed construction? _____
	2. Utility is located on: Public R/W _____ Private R/W _____ Both _____
	3. Will you be submitting a plan and estimate of relocation cost for reimbursement consideration? _____ If yes, when? _____
	4. If a consulting engineering firm will be preparing the relocation plan and estimate, provide name of firm: _____ Forward a copy of the proposed engineering agreement for review and approval.
	5. Will you contract the relocation work? _____ If yes, by bid process or continuing contract? _____ If by continuing contract, forward a copy of the contract.
	6. Estimate time interval between approval to proceed date and commencement of work date. _____
	7. Estimate time interval needed to complete relocation. _____
	8. Name, address & phone # of company's local representative. _____ _____ _____
Comments: _____ _____ _____ _____	
Signature: _____ Phone: _____	
Print Name: _____ Date: _____	
Email: _____	
Return to: KS Dept. of Transportation DSCB, Coordinating Section 8th Floor Topeka, KS 66612-1568 Or submit electronically: http://www.ksdot.org/burDesign/coorsect/formb.asp Fax: 785-298-3940	

214

Inspection of Utilities **cont'd**

- Applications for relocation
 - The following shall be submitted to the appropriate area office
 - Form "304"
 - Utility companies shall submit plans consisting of five (5) sets of 8 ½"x11" or 11"x17" sheets; 24"x36" sheets will only be accepted when smaller sheets would be illegible.
 - Traffic Control Plan (Electronic is acceptable)

215

Inspection of Utilities **cont'd.**

- Applications for relocation (cont'd)
 - Area office will submit all forms in accordance with the procedures of the KDOT Construction Manual

216

Inspection of Utilities **cont'd..**

- Utilities around structures require Bridge Design approval
 - Form "310"
 - When the Bureau of Design approves or disapproves, they return it to District. As a rule, whatever approval Bridge Design gives is what the District will approve.
 - The process could take as much as a month to complete. Therefore, encourage the utility company to act quickly so as to not delay work waiting on a permit approval.

217

Inspection of Utilities **cont'd...**

- Example of District approval

218

District Letter

STATE OF KANSAS



KANSAS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
121 W. 21st St
PO Box 5128
Topeka, Kansas 66605-0128
Phone (785) 296-3881 Fax (785) 296-1162
TTY (785) 296-3585
June 5, 2003

Kathleen Seaborn
Commissioner

Dan Miller
Secretary of Transportation

Roy D. Risky, P. E.
District Engineer

Qwest Communications (Op)
10955 Lowell Suite 1005
Overland Park, Kansas 66210

To Whom It May Concern:

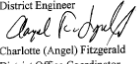
Highway Permit 1-03-207
Route VARIOUS
Brown County

Enclosed is your approved copy of the above referenced highway permit granting permission to relocate buried telephone cable for 75-7 K-5766-01 along US-36 & US-75 in Brown county.

Please notify our Utilities Coordinator, Terry Daniels, at (785) 486-2142 prior to starting any work on the highway right-of-way so that arrangements can be made for the necessary inspection.

When you have completed all work connected with this permit, please let him know so that the permit can be released.

Yours truly,
Roy D. Risky, P. E.
District Engineer


Charlotte (Angel) Fitzgerald
District Office Coordinator

RDR:CF
cc: Terry Daniels : Faxed 4/6/5/03
Area One

*Released
12-03-2003
JRN*

219

Inspection of Utilities cont'd....

- Permits
 - For reimbursable agreements, a "dummy permit" will have to be created.
 - This permit is an in-house record
 - For non-reimbursable relocates the Form "304" serves as the permit

220

Inspection of Utilities cont'd.....

■ Agreements

- A legal document for reimbursable relocations between the utility company and KDOT
- These are created by the Utility Coordinating Section

221

RE: Stevens County
56-95 K-6400-01
STP K-640(401)

Example (email)

Dear Mr. Wofford:

Enclosed is Utility Agreement No. 006052047, in triplicate. Please have the approving officer's title typed under their signature. Our Chief Counsel requires all three be attested. *In order to keep our records current, please include FEIN information also.* Return all documents for final execution to this office. You will receive an original after final execution. You are authorized to begin relocation work prior to the execution of the agreement, as per paragraph 9 of the standard utility agreement, or paragraph 8 of the lump sum utility agreement, please notify Chuck Oldaker, Area Engineer, phone 620 356-1531 before starting work.

Please take necessary precautions to protect the traveling public from utility construction by means of signs, flaggers and traffic control devices. Consult the "KDOT Utility Accommodation Policy" for typical signing for utility operations at www.ink.org/public/kdot/burdesign/coorsect/utilDEFAULT.HTM or the project engineer for guidance.

Sincerely,
Jim L. Kowach, P. E.,
Chief, Bureau of Design
BY: _____

Steve Kooser, Utilities,
Coordinating Section

c: Larry Thompson, District Engineer
Chuck Oldaker, Area Engineer
File

222

RE: Morris County
4-64 K-7425-01
STP/BRF K-742(501)

Dear Mr. Hebert:

Enclosed is one (1) original executed Agreement No. 006052052 dated February 15, 2005. This agreement outlines the reimbursement for utility relocation costs pertaining to the above noted project. There is 5% retainage, pending final audit. Coordinate relocation work and billing through Joe Palic, Area Engineer, KDOT, 1021 N. Cedar St., Marion, KS 66861-0230. Please notify the Area Engineer upon completion of relocation, a notification form is attached or email: palic@ksdot.org. **For audit purposes, please note your final billing invoice, "Final".**

For Department of Transportation purposes, this project is federally funded.

Sincerely,

Jim L. Kowach, P. E.,
Chief, Bureau of Design

BY: _____

Steve Kooser, Utilities,
Coordinating Section
Skooser@ksdot.org

c: Don Drickey, District Engineer
Joe Palic, Area Engineer
John Ehmen, Bureau of Fiscal Services (2)
File

Example..

223

Inspection of Utilities - Inspection

■ Inspection

- Regarding inspection – The Field Engineer should inspect the utility adjustment/relocation "... as it is in progress, and also after work is completed."
- This is important to make certain the depth of the utility is adequate and to verify proper compaction techniques.
- If the utility is relocated to an area that will not undergo construction activities, then the utility company should properly finish the area and seed the disturbed ground.

224

Inspection of Utilities cont.....

- Inspection (cont'd)
 - KDOT field representative will monitor utility activities . . . Resolve difficulties in connection with relocations, both public and private.
 - Conduct random field inspections of utility projects.

225

Inspection of Utilities cont'd.....

- Inspection
 - Inspection shall be in accordance as set forth in the following KDOT Manuals
 - UAP
 - S.O.M.
 - KDOT Construction Manual
 - 2015 Spec Book

226

Inspection of Utilities cont'd.....

■ Billing

- There are two types of pay vouchers for reimbursing utility agreements.
 - Intermediate
 - Intermediate vouchers provide periodic payments to the contractor as work progresses.
 - Final (Audit)
 - Final (Audit) vouchers are made after you receive the final bill from the utility company (marked "final").

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Example of
Area Letter

Kansas Department of Transportation

MEMO TO: Bureau of Design
Project Coordinating Engineer

Bureau of Fiscal Services
Contract Audit Section

FROM: Kenneth Massingill, P.E.
Area Engineer
Horton Construction Office

DATE: November 05, 2003

SUBJECT: 75-7K-5766-01
CMS Contract No. 006032106
Utility Agreement - City of Sabetha(Water and Sewer)

Enclosed is Construction Payment Voucher No. 6 with the supporting detail information attached as received from City of Sabetha(Water and Sewer) for the above captioned project.

cc: File

228

Example of Pay Estimate

DTC0065 Kansas Department Of Transportation PAGE - 1
Run Date: 11 05 03 Pay Estimate Approval
Run Time: 08:07 AM

Contract: 006032106 M Status: NOTPR Proj Id: U075 007 K 5766 - 01 \$ Critical: N
Contractor: 09487 CITY OF SABETHA
FPN: NHS K576(601) Pct Complete: 68.21

Est Num: 0006 Status: APPROVED Type: I Pd to Date: 11 05 03 Retainage: 5%

Tot Claim-To-Date: 519,080.00
Adjustments: 0.00
LESS: Prepaid Amt #: 0.00
Retainage: 25,954.00
Deductions: 0.00
LESS: Previous Payments: 395,470.76
Amount of this Payment: 97,655.24

Approvals: Contractor Voucher Num:
Area/Project Engr: KEN F. MASSINGILL 11 05 03 Check Date:
District Engineer: Check Number:
Bureau Chief: Check Amount: 0.00

229

Letter from
City



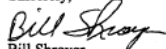
November 4, 2003

Terry Daniels
K.D.O.T.
P.O. Box 151
Horton, KS 66439

Mr. Daniels,

Enclosed is pay estimate #4 by Larson Construction for work that has been completed to date on the utility relocation project. Please call if you have any questions. Thank you.

Sincerely,


Bill Shroyer
Assistant City Administrator

230

Invoice
Example

PAYMENT ESTIMATE

PAY TO: LARSON CONSTRUCTION, INC.
P.O. BOX 1411
MANHATTAN, KS 66505-1411

ESTIMATE NO.: FOUR (4)

PROJECT: CITY OF SABETHA, KANSAS
2003 SANITARY SEWER & WATER RELOCATIONS

FROM: 9/30/2003
TO: 10/31/2003

Item #	Item Description	Estimated Quantities	Total Quantities to Date:	Unit Price (\$)	Amount Earned to Date (\$)
Part A: Sanitary Sewer					
1	Mobilization	1 LS	1 LS	\$ 20,000.00	\$ 20,000.00
2	Clearing and Grubbing	1 LS	1 LS	\$ 3,000.00	\$ 3,000.00
3	8" Gravity Sewer Pipe	652 FT	652 FT	\$ 36.00	\$ 18,256.00
4	10" Gravity Sewer Pipe	1201 FT	1450 FT	\$ 30.00	\$ 43,500.00
5	12" Gravity Sewer Pipe	1189 FT	1189 FT	\$ 35.00	\$ 41,815.00
6	Standard Manhole (6' Depth)	11 EA	11 EA	\$ 2,500.00	\$ 27,500.00
7	Extra Depth Manhole	41.33 VF	41.33 VF	\$ 100.00	\$ 4,133.00
8	Lift Station	1 EA	1 EA	\$ 46,500.00	\$ 46,500.00
9	8" Force Main	710 FT	710 FT	\$ 20.00	\$ 14,200.00
10	Miscellaneous Fittings	1 LS	1 LS	\$ 1,500.00	\$ 1,500.00
11	Gravel Surfacing Removal & Replacement	200 LF	200 LF	\$ 20.00	\$ 4,000.00
12	Connect to Existing Sewer	3 EA	1 EA	\$ 1,500.00	\$ 1,500.00
13	Concrete Encasement	100 LF	100 LF	\$ 40.00	\$ 4,000.00
14	Erosion Control/Seeding/Surface Restoration	1 LS	1 LS	\$ 5,000.00	\$ -
SUBTOTAL PART A					\$ 232,704.00

Part B: Water - 260th Street					
1	Mobilization	1 LS	1 LS	\$ 2,000.00	\$ 2,000.00
2	Clearing and Grubbing	1 LS	1 LS	\$ 2,000.00	\$ 2,000.00
3	Connect to Existing Water	1 EA	1 EA	\$ 1,500.00	\$ 1,500.00
4	Cap & Abandon Existing Water Main	1 EA	1 EA	\$ 600.00	\$ 600.00
5	8" PVC Water Main	749 LF	749 LF	\$ 14.00	\$ 10,486.00
6	Tracer Wire	749 LF	749 LF	\$ 0.15	\$ 112.35
7	Bore & Encasement - 12" Welded Steel	80 LF	80 LF	\$ 150.00	\$ 12,000.00
8	5 1/4" Fire Hydrant Setting	1 EA	1 EA	\$ 2,000.00	\$ 2,000.00
9	8" Gate Valve w/ Valve Box	1 EA	1 EA	\$ 500.00	\$ 500.00
10	Water Service Transfer	1 EA	1 EA	\$ 1,000.00	\$ 1,000.00
11	Miscellaneous Fittings	1 LS	1 LS	\$ 2,000.00	\$ 2,000.00
12	Gravel Surfacing Removal & Replacement	24 LF	24 LF	\$ 20.00	\$ 480.00
13	Erosion Control/Seeding/Surface Restoration	1 LS	1 LS	\$ 1,500.00	\$ -
SUBTOTAL PART B					\$ 34,678.35

Part C: Water Main - Main Street					
1	Mobilization	1 LS	1 LS	\$ 2,000.00	\$ -
2	Clearing and Grubbing	1 LS	1 LS	\$ 1,000.00	\$ -
3	Connect to Existing Water	5 EA	EA	\$ 1,500.00	\$ -
4	Cap & Abandon Existing Water Main	5 EA	EA	\$ 600.00	\$ -
5	10" PVC Water Main	652 LF	LF	\$ 20.00	\$ -
6	8" PVC Water Main	206 LF	LF	\$ 16.00	\$ -
7	Tracer Wire	838 LF	LF	\$ 0.15	\$ -
8	5 1/4" Fire Hydrant Setting	2 EA	EA	\$ 2,000.00	\$ -
9	8" Gate Valve w/ Valve Box	2 EA	EA	\$ 900.00	\$ -
10	Gate Valve w/ Valve Box	3 EA	EA	\$ 500.00	\$ -
11	Miscellaneous Fittings	1 LS	LS	\$ 3,000.00	\$ -

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Invoice
Example
Cont.

12	Flowable Fill	45 CY	CY	\$ 60.00	\$ -
13	Gravel Surfacing Removal & Replacement	85 LF	LF	\$ 20.00	\$ -
14	Erosion Control/Seeding/Surface Restoration	1 LS	LS	\$ 2,500.00	\$ -
SUBTOTAL PART C					\$ -

Part D: Water Main - K-246					
1	Mobilization	1 LS	1 LS	\$ 500.00	\$ 500.00
2	Clearing and Grubbing	1 LS	1 LS	\$ 500.00	\$ 500.00
3	Connect to Existing Water	2 EA	EA	\$ 1,500.00	\$ 3,000.00
4	Cap & Abandon Existing Water Main	2 EA	EA	\$ 750.00	\$ 1,500.00
5	10" PVC Water Main	328 LF	328 LF	\$ 20.00	\$ 6,560.00
6	Tracer Wire	328 LF	328 LF	\$ 0.15	\$ 49.20
7	Encasement - 24" Welded Steel	206 LF	206 LF	\$ 90.00	\$ 18,540.00
8	10" Gate Valve w/ Valve Box	2 EA	EA	\$ 900.00	\$ 1,800.00
9	Miscellaneous Fittings	1 LS	1 LS	\$ 1,500.00	\$ 1,500.00
10	Erosion Control/Seeding/Surface Restoration	1 LS	LS	\$ 1,000.00	\$ -
SUBTOTAL PART D					\$ 42,049.20

Part E: Water Main - Bern Road					
1	Mobilization	1 LS	1 LS	\$ 4,000.00	\$ 4,000.00
2	Clearing and Grubbing	1 LS	1 LS	\$ 500.00	\$ 500.00
3	Connect to Existing Water	5 EA	EA	\$ 1,000.00	\$ -
4	Cap & Abandon Existing Water Main	4 EA	EA	\$ 500.00	\$ -
5	10" PVC Water Main	6,775 LF	4944 LF	\$ 15.00	\$ 74,190.00
6	8" PVC Water Main	66 LF	LF	\$ 15.00	\$ -
7	Tracer Wire	6,941 LF	4944 LF	\$ 0.15	\$ 741.60
8	Bore & Encasement - 24" Welded Steel	180 LF	180 LF	\$ 140.00	\$ 25,200.00
9	Encasement - 24" Welded Steel	200 LF	LF	\$ 50.00	\$ -
10	10" Gate Valve w/ Valve Box	6 EA	EA	\$ 600.00	\$ 3,600.00
11	8" Gate Valve w/ Valve Box	2 EA	EA	\$ 800.00	\$ 1,600.00
12	Water Service Transfer	1 EA	EA	\$ 1,000.00	\$ -
13	Miscellaneous Fittings	1 LS	.75 LS	\$ 2,500.00	\$ 1,875.00
14	Erosion Control/Seeding/Surface Restoration	1 LS	LS	\$ 7,500.00	\$ -
SUBTOTAL PART E					\$ 111,276.60

Part F: Water Main - Antelope Road					
1	Mobilization	1 LS	1 LS	\$ 1,000.00	\$ 1,000.00
2	Clearing and Grubbing	1 LS	1 LS	\$ 500.00	\$ 500.00
3	Connect to Existing Water	1 EA	EA	\$ 800.00	\$ -
4	Cap & Abandon Existing Water Main	1 EA	EA	\$ 900.00	\$ -
5	8" PVC Water Main	620 LF	600 LF	\$ 12.00	\$ 7,200.00
6	Tracer Wire	620 LF	600 LF	\$ 0.15	\$ 90.00
7	Bore & Encasement - 16" Welded Steel	100 LF	100 LF	\$ 100.00	\$ 10,000.00
8	5 1/4" Fire Hydrant Setting	2 EA	EA	\$ 2,000.00	\$ 4,000.00
9	8" Gate Valve w/ Valve Box	2 EA	EA	\$ 600.00	\$ 1,200.00
10	Water Service Transfer	1 EA	EA	\$ 4,000.00	\$ -
11	Miscellaneous Fittings	1 LS	1 LS	\$ 1,000.00	\$ 1,000.00
12	Erosion Control/Seeding/Surface Restoration	1 LS	LS	\$ 1,000.00	\$ -
SUBTOTAL PART F					\$ 24,990.00

Part G: Water Main - US 75					
1	Mobilization	1 LS	LS	\$ 1,500.00	\$ -
2	Clearing and Grubbing	1 LS	LS	\$ 500.00	\$ -
3	Connect to Existing Water	2 EA	EA	\$ 500.00	\$ -
4	Cap & Abandon Existing Water Main	2 EA	EA	\$ 360.00	\$ -
5	8" PVC Water Main	1,336 LF	LF	\$ 6.00	\$ -
6	Tracer Wire	1,336 LF	LF	\$ 0.15	\$ -

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Invoice
Example
Cont..

7	4" Gate Valve w/ Valve Box	2	EA	EA	\$	400.00	\$	-
8	Miscellaneous Fittings	1	LS	LS	\$	500.00	\$	-
9	Erosion Control/Seeding/Surface Restoration	1	LS	LS	\$	2,000.00	\$	-
SUBTOTAL PART G								\$ -
Part H: Raw Water								
1	Mobilization	1	LS	1	LS	\$	2,500.00	\$ 2,500.00
2	Clearing and Grubbing	1	LS	1	LS	\$	1,000.00	\$ 1,000.00
3	Connect to Existing Water	2	EA	EA	\$	1,000.00	\$ -	
4	Cap & Abandon Existing Water Main	2	EA	EA	\$	500.00	\$ -	
5	10" PVC Water Main	5,066	LF	220	LF	\$	13.50	\$ 2,970.00
6	Tracer Wire	5,066	LF	220	LF	\$	0.15	\$ 33.00
7	Box & Encasement - 24" Wasted Steel	60	LF	60	LF	\$	130.00	\$ 7,800.00
8	Encasement - 24" Wasted Steel	190	LF	LF	\$	55.00	\$ -	
9	12" Gate Valve w/ Valve Box	4	EA	1	EA	\$	800.00	\$ 800.00
10	Miscellaneous Fittings	1	LS	.36	LS	\$	2,000.00	\$ 500.00
11	Gravel Surfacing Removal & Replacement	53	LF	LF	\$	20.00	\$ -	
12	Erosion Control/Seeding/Surface Restoration	1	LS	LS	\$	7,500.00	\$ -	
SUBTOTAL PART H								\$ 15,603.00
Stored Material								
1	LS	1	LS	LS	\$	66,500.00	\$	66,500.00
SUBTOTAL STORED MATERIAL								\$ 66,500.00
TOTAL AMOUNT EARNED TO DATE (PARTS A thru H and Stored Material)								\$ 529,891.15
LESS 10% RETAINED (OF TOTAL PROJECT)								\$ 52,989.12
NET AMOUNT								\$ 476,902.04
LESS PREVIOUS PAYMENT								\$ 374,926.05
AMOUNT DUE THIS ESTIMATE								\$ 101,975.99

B.R. Rogers
Larson Construction, Inc. - Bob Rogers
Date 11-3-03
Greg Fiel
McWhorter-Edwards - Greg Fiel
Date 11-4-03
Bill Shroyer
City of Sabal
Date 11-4-03

233

Inspection of Utilities (Billing)

- Billing (cont'd)
 - Final (Audit)
 - After receiving the final bill from the utility company, the final voucher is created withholding 5% of the total contract dollar amount for audit.
 - KDOT Coordinating Section and Fiscal Services review the final voucher and finalize the contract.

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Inspection of Utilities (form 267)

- The Field Technician or Utility Coordinator will submit a monthly report, or such intermediate reports as may be needed, D.O.T. Form "267" Status of Utilities. Forward these reports to the Utility Section Bureau of Design.

235

Inspection of Utilities (Cont'd)

- Check special provisions for utilities. If not correct, have Bureau of Construction & Materials issue addendum.

236

Inspection of Utilities (Pre-Con)

■ Preconstruction Conference

- It is a good idea to invite the utility companies to the project preconstruction conference to review their status and for general project information

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Addendum – Underground Broadband

238

FHWA letter
Example



1200 New Jersey Avenue, SE
Washington, DC 20590

January 6, 2020

In Reply Refer To:
HDA-KS

Ms. Julie M. Lorenz
Secretary
Kansas Department of Transportation
700 SW Harrison Street
Topeka, Kansas 66603

Subject: FHWA Approval of Kansas Utility Accommodation Policy Addendum for Underground
Broadband Facilities

Dear Secretary Lorenz:

The Federal Highway Administration's (FHWA) Kansas Division Office has received the Kansas Utility Accommodation Policy Addendum for Underground Broadband Facilities that the Kansas Department of Transportation (KDOT) submitted to our office on January 3, 2020.

Based upon our analysis, we have determined this Addendum meets the FHWA's guidelines and the requirements as set forth in 23 CFR § 645.205(c) for the contents of this policy, and as required by 23 CFR § 645.215(c). The FHWA approves this Utility Accommodation Policy Addendum as submitted.

Sincerely,


Richard E. Backlund, AICP
Division Administrator
FHWA Kansas Division

Cc:
Mr. Burt Morey – Deputy Secretary & State Transportation Engineer - KDOT
Ms. Carmen D. Tuoker Bakariroh – Staff Attorney & Manager of Contract Claims - KDOT

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KDOT UAP
Broadband
Addendum page 1

Addendum—Utility Accommodation Policy (UAP)

Wired Underground Telecommunications for Broadband

STATEMENT OF POLICY

Current federal and state legislation and executive initiatives recognize the need for broadband infrastructure as essential to public health, safety, education, transportation, job growth, and economic development, especially for rural and other underserved areas. FHWA has asked State transportation leaders to consider accommodating broadband infrastructure on highway rights-of-way to help achieve these goals and needs while maintaining safe and efficient highway operations. (See Letter from Administrator Mendez to State Departments of Transportation (August 20, 2013). The Secretary finds that broadband facilities serve a public interest and underground broadband facilities may be located and maintained on non-interstate highway rights-of-way with minimal risk to the free and safe flow of traffic. Thus, continued restrictions in the UAP on such installations will result in severe hardship in rural and underserved areas and is contrary to the public interest.

This Addendum to the UAP is being issued to further accommodate broadband facilities on non-interstate highway right-of-way. This Addendum modifies Part One, General Policy; Part Two, Utilities on Permitted Highways, and Part Three, Utility Accommodation Policy For Fully Controlled Access Highways.

1. Telecommunications public utilities seeking to install underground fiber optic cable, coaxial cable, DSL, or other facilities that support telecommunications service for broadband, as defined in K.S.A. 66-1,187, (Underground Broadband Facilities) may request from the Secretary a Highway Permit (D.O.T. Form 304) to install such underground facilities along non-interstate fully controlled access highways, partially controlled access highways, and nonaccess controlled highways. On these non-interstate routes, Underground Broadband Facilities shall comply with Parts One, Two, and Four of the UAP except as otherwise modified in this Addendum. Underground Broadband Facilities and other utility facilities on interstate right-of-way continue to be governed by Part Three of the UAP.
2. Underground Broadband Facilities may be installed parallel to the roadway (longitudinally) between the right-of-way line and toe of backslope (back line of the ditch bottom) on the rights of way of non-interstate fully controlled access highways, partially controlled access highways, and nonaccess controlled highways. Such longitudinal installations shall be:
 - a. Placed within the Utility Corridor established by the Secretary if both physically possible and commercially practicable or placed outside such Utility Corridor but no closer to the roadway than the toe of backslope if the District Engineer determines placement within the Utility Corridor is not physically possible or commercially practicable.
 - b. Installed at a minimum depth of 42 inches below the existing ground line by boring, plowing, trenching, or a combination thereof to maintain a parallel, uniform path

KDOT UAP Broadband Addendum
01/03/20
Page 1 of 3

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KDOT UAP Broadband Addendum page 2	beneath (not around) existing surface or subsurface obstructions unless the District Engineer approves a variance. c. Placed in conduit that includes a trace wire or be comprised of armored fiber cable or other material that the District Engineer determines allows tracing. 3. Hand holes for Underground Broadband Facilities less than or equal to 3 foot x 4 foot for branch connections may be located on highway right-of-way at interchanges, rest areas, or side roads in a location approved by the District Engineer; on other department property approved by the District Engineer, or on private right-of-way. At the District Engineer's discretion, hand holes less than or equal to 3 foot x 4 foot to aid line installation may be located mid-mile. Hand holes shall be flush and maintained in a flush condition to the existing ground and structurally adequate to withstand highway maintenance operations and operations by other users of the right-of-way. Hand holes larger than 3 foot x 4 foot and Vaults shall be located on private right-of-way. 4. After a Utility Company demonstrates that such structure's location on private right-of-way is not physically possible or commercially practicable, Point of Presence (POP) Buildings for Underground Broadband Facilities may be located on highway right-of-way at interchanges, rest areas, or side roads in a location approved by the District Engineer or on other department property approved by the District Engineer. POP Buildings on highway right-of-way may only be accessed from interchanges, side roads, existing entrances, or adjacent property. Utility Companies shall not access POP Buildings from roadway shoulders or ditches. 5. The Utility Company shall install permanent markers at or near the right-of-way line and at appropriate intervals showing the approximate location of its Underground Broadband Facility. In addition, the Utility Company shall prepare As-Built Plans that depict the following minimum information in .pdf format and *KMZ, Shapefile, Geodatabase or other mutually agreed format. As-Built Plans and the other information listed below shall be furnished by the Utility Company to the District Engineer. a. Show (a) location of installed Conduit, hand holes and Vault locations relative to permanent landmarks and facilities and (b) distances from the centerline roadway and other features (such as mileposts, boundary and utility crossings, waterways, etc.). Clearly depict any turns in installation route at road crossings. Clearly depict non-parallel portions of the route approved by the District Engineer to follow the right-of-way line rather than the roadway or to avoid obstructions upon the Utility Company showing that boring or other installation method to avoid such an obstruction is not physically possible or commercially practicable. b. At 150' intervals, GPS coordinates for all installed Conduit and related facilities in shapefile format. GPS accuracy within 1 foot. Also furnish locations of and GPS coordinates for fiber optic marker locations (facility location signs or markers). KDOT UAP Broadband Addendum 01/03/20 Page 2 of 3	
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KDOT UAP Broadband Addendum page 3	c. Conduit information (color, type, length, expansion joints, etc.). d. Note any deviation from the <i>Utility Accommodation Policy</i> (depth, etc.). GIS data format shall include the following fields, where * indicates attribution for the field is required. SHAPE*, OID or UniqueID*, Feature*, Description Shape: This is the GIS shape OID: Unique, indexed long integer identifier. Most GPS systems will automatically populate an Object ID, which is sufficient. Feature: This field describes the feature that was collected in the field. Valid feature attributes shall include: Handhole, Conduit, Vault, Landmark, ROW point, Marker Sign, Expansion Joints, splices. Other valid feature types may be mutually agreed upon. Description: This field includes information, such as color, type, length etc. 6. No fee will be required for processing and issuing a Highway Permit under this Addendum. 7. Wireless telecommunication facilities that support broadband are addressed in Part One and Two of the UAP and the Small Cell Antenna and Tower Addendum, September 28, 2018. W. Clay Adams Bureau Chief of Maintenance	
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242

Review

243

SECTION 1 REVIEW

What is a 304?

Highway and use of Right of Way permit. It is the form required to work on KDOT r/w.

How much does it cost to get a permit?

They are free

How soon before the contracts are let should the utilities be relocated?

6 weeks

What should be done before the contractor starts relocation of utilities?

Call Dig safe. Have a permit on hand or an agreement and proper notification to authorities.

244

SECTION 2 REVIEW

Where is the standard utility corridor located from right of way?

7 feet from the r/w on both sides

Where is the preferred location of power poles in rural areas?

2 feet from the r/w

In curbed areas?

6 feet from back of curb, 8 feet is desirable.

In interchange areas?

No closer than the clear zone but near the r/w

245

SECTION 2 REVIEW CONT.

What is a slack line and what is it used for?

This is a pole that is used to brace service lines. It is used instead of an anchor to save space on the r/w

What is the clearance for

0-750 volts

18 feet

750-22,000 volts

20 feet

How much does the clearance increase 1000 volts when over 22,000 volts

0.4"

See problem

246

SECTION 2 REVIEW CONT

Underground installations (parallel)

What is the minimum depth of utilities (unless otherwise specified)

Minimum of 3' unless otherwise specified

What is the minimum depth of electrical lines?

48"

What is required to be with electrical lines?

Tape 12" below grade to mark cable

How many times per mile should they be marked?

4 times

When is casing required with electrical lines?

When it crosses underneath the roadway.

247

SECTION 2 REVIEW CONT.

What is the minimum depth of a fiber optic line?

42"

What is required to be with fiber optic lines?

Trace wire

What is the minimum depth when crossing the highway?(Not parallel)

See handout problems?

What is a casing and when is it required?

Casing is an oversized load bearing conduits or ducts which a utility is inserted.

To provide for repair without interfering with highway traffic

To protect the pipe from external loads or shock

To convey leaking fluids or gases away from area beneath traveled way.

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SECTION 2 REVIEW CONT'D

What utilities are required to be cased from r/w to r/w

Sanitary sewer

All plastic pipe with an inside diameter greater than two inches must be cased from the right-of-way line and meet minimum ASTM specifications and all applicable laws and codes.

What is a form 308 and what is it used for?

Cased utility line waiver.

Where can boring pits be located?

Outside the toe of the slope.

What diameter can the bore hole be?

1.5" bigger than the pipe for pipe size 12" or less

2" for pipe bigger than 12"

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SECTION 2 REVIEW CONT'D.

What are some suitable casing materials?

Welded steel pipe, smooth wall in sound condition

Corrugated metal pipe

Reinforced concrete pipe meeting KDOT specifications

Welded steel pipe, smooth wall in sound condition

Corrugated metal pipe

Reinforced concrete pipe meeting KDOT specifications

PVC pipe

250

SECTION 3 REVIEW

What is a fully controlled access highway?

Full-access control means that the authority to control access is exercised to give preference to through traffic by permitting access to the main roadway only at interchange location.

Where is the utility corridor located and on which side?

Within 7 feet of the right of way and on which side is designated by the secretary.

251

SECTION 3 REVIEW CONT

What is the difference between controlled access and non controlled access on utilities?

Non controlled access can be on either side

Controlled access is on one side and has a few more stipulations.

What shall the traffic control plans be in compliance with?

MUTCD and 350 compliant

Where is the only place a utility can be located on a controlled access highway?

In the access corridor

What steps can be taken for non compliance with the agreement?

Can terminate the agreement

252

SECTION 4 REVIEW

What is an MSE wall?

Mechanically stabilized earth wall

What is a form 310 and what is it used for?

Highway permit for attachment to bridges and other structures. It is the permit that is required when a utility would like to attach to a structure.

Who has the right to review the plan when the utility is attached to a structure or by an MSE wall?

Bureau of Bridge Design

253

SECTION 4 REVIEW CONT

Can hazardous materials be attached to structures?

Yes, if no other option is available. Requires names and addresses of company officials

Who designs and pays for the plans for adjusting the utilities?

Utility company applying for the permit.

What do you do if there is a manhole in the middle of the deck?

There should not be one. This is not permissible.

On which side should a utility be located on a bridge?

Downstream side

254

SECTION 4 REVIEW CONT.

What are some of the methods that cannot be used to attach utilities to structures?

- Anchors driven using explosive type driving force method
- All welding and drilling on steel members
- Attachment of conduits to bridge handrail and guardrail components
- Pipelines using bridge members to resist forces generated by fluids in motion

What are some of the regulations for utilities around MSE walls when trenching?

- No Utilities shall be placed within a distance 2 times the height of the back face of the MSE Wall
- Trenching may be allowed a distance of 2 times the height away from the back face of the wall upon review of application (DOT Form 310) by KDOT Bureau of Design-Bridge section
- Trenching may be allowed in front of the wall upon review of application (DOT form 310) by KDOT Bureau of Design-Bridge section

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SECTION 4 REVIEW CONT'D

What are some of the regulations for utilities around MSE walls with open excavation?

- No Open excavation shall be allowed within 2 times the height of the back face of the MSE Wall
- Open excavation may be allowed a distance of 2 times the height away from the back face of MSE wall upon review of application (DOT FORM 310) by KDOT Bureau of Design-Bridge section
- Open excavations may be allowed in front of the MSE Wall to the top of the leveling pad upon review of application (DOT Form 310) by KDOT Bureau of Design-Bridge section

See problem

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APPENDIX REVIEW

Clear zone problem

What does a blue flag represent

Water, irrigation, slurry line

What does a red flag represent

Electric power lines, cables and conduit lighting cables

What does a yellow flag represent

Gas, oil, steam, petroleum, and gaseous materials

What does an orange flag represent

Communication, alarm and signal lines, and cable TV

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APPENDIX REVIEW CONT.

What types of fencing can be used?

Multistrand barbed wire (non-residential)

Woven wire (non-residential and suburban)

Chain link (developed areas)

Single wire cable (aesthetics)

Where does the fence need to be located on KDOT R/W

Within 6 to 12 or R/W on KDOT's side

Landowner can substitute fence provided the following

They are responsible for all cost except when acquired during acquisition

Located on property owner

Does not present sight obstruction

Needs to be accomplished during projects

Owners maintain fence

Required appropriate permit

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APPENDIX REVIEW CONT'D

When is a temporary fence required?

When construction activities require a fence

What are the heights of the mailboxes

42-48 inches

What is a standing permit

Allows the utility to perform routine maintenance activities

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S.O.M. REVIEW

S.O.M. 1.12.4 Review

What is the purpose of this S.O.M

Outlines the procedures for Bureaus and Districts for handling utility adjustments

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CONSTRUCTION MANUAL REVIEW

What is the difference between reimbursable and non reimbursable agreements?

Reimbursable(agreement)- KDOT pays

Non reimbursable (permit) – utility company pays

Who handles the utility adjustments?

Area office (Utility coordinator area engineers)

What is required to be inspected while the utility is being relocated?

Depth, location, proper bedding, casing, ect.

261

CONSTRUCTION MANUAL REVIEW CONT

When is an agreement used and when is a permit used?

Agreement is when KDOT has to pay and a permit is when the utility has to pay.

What is the difference between lump sum and actual cost agreement? What is required when an actual cost is used?

Lump sum is the amount that the utility company submits for payment.

Actual cost is basically a force account agreement

What is a "dummy permit?"

Is a permit that is issued for an agreement only? This permit is an internal permit and is signed by the area.

How many copies of proposed utility relocation should accompany the permit?

5 copies

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CONSTRUCTION MANUAL REVIEW CONT'D

Who approve the permit?

District (Engineer)

Are there change orders on utility relocates?

yes

When and who issues the notice to proceed?

When construction starts, this is issued by district.

Who should do the as built plans?

Utility company

Who prepares the pay vouchers and where do they go?

Area/Construction office that handles the utility relocation. It is then sent to the Bureau of Design Utilities Section

263

KDOT SPECIFICATIONS REVIEW

Who is responsible for improperly relocated utilities and why?

Despite being incorrectly located the Secretary will not compensate for damages caused by the utility if

Contractor did not notify one call

Contractor knew or should have know the utility was in the location discovered

Contractor was negligent

If a utility is hit without notification of one call who is responsible?

The person/company that did not call dig safe/one call

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INSPECTION REVIEW

When does KDOT pay for a utility relocate?

When the utility is not located on KDOT

When do rural water lines get reimbursed for relocating?

Always

What is a form "A"

Notice of preliminary survey

What is a form "B"

Utility questionnaire

What documents shall be submitted to the area office with the permit application?

Form "304"

Utility companies shall submit plans consisting of five (5) sets of 8 1/2"x11" or 11"x17" sheets; 24"x36" sheets will only be accepted when smaller sheets would be illegible.

Traffic Control Plan

265

INSPECTION REVIEW CONT

What resources should be used for inspection of utilities?

UAP

Construction Manual

2007 Specifications Book

How much is retained on the final bill?

5%

What is a "267" and why is it important?

It is the status of utilities that is with the contract when it is let. It is important to be accurate and up to date.

What should be done before the contract is let?

Verify that the 267 is up to date and accurate.

Video says "367" but "267" is correct

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KDOT UTILITY ACCOMMODATION POLICY

KANSAS

DEPARTMENT OF TRANSPORTATION

2007



**KANSAS
DEPARTMENT OF TRANSPORTATION
UTILITY ACCOMMODATION POLICY**

2007

**BUREAU OF CONSTRUCTION AND
MAINTENANCE**

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KANSAS DEPARTMENT OF TRANSPORTATION

2007 UTILITY ACCOMMODATION POLICY

CERTIFICATION

Pursuant to the power and authority granted to the Kansas Department of Transportation by the laws of the State of Kansas as set forth generally and principally, but not exclusively in K.S.A. 68-404, K.S.A. 68-415, and K.A.R. 36-11-6, I, Deb Miller, Secretary of Transportation declare that the Kansas Department of Transportation has officially adopted this "Utility Accommodation Policy". Adherence to policy requirements and the regulation of the use of highway right-of-way on the Kansas State Highway System is to be authorized through the issuance of Highway Permits, Reimbursable Utility Agreements or in the case of parallel installations along Fully Controlled Access Highways, Utility Permit Agreements.

Dated this 23rd day of October, 2007.

/S/ Deb Miller
Deb Miller
Secretary of Transportation

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INTRODUCTION

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KANSAS DEPARTMENT OF TRANSPORTATION

UTILITY ACCOMMODATION POLICY

INTRODUCTION

This policy is adopted by the Kansas Department of Transportation (KDOT) acting pursuant to the authority granted by the laws of the State of Kansas to establish and administer the State Highway System.

The power and authority of the Secretary of the Kansas Department of Transportation (Secretary) with respect to the accommodation of utilities are as set forth generally and principally in K.S.A. 68-404 and K.S.A. 68-415. These statutes require compliance with state regulations and obtaining a permit for construction of public and private utilities (including pipelines) along, crossing over or under any state highway right-of-way including that acquired for controlled access facilities. K.S.A. 17-1901 and K.S.A. 17-4604 apply to the occupancy of public highway right-of-way by telephone and telegraph companies and by electric cooperatives, respectively.

Utilities occupying public right-of-way, not a part of the State Highway System, such as city connecting links and urban and secondary roads involved in street and/or road construction projects are issued a use permit by the city or county. Any agreement for use of highway right-of-way is to include a statement as to which party will bear the cost of future adjustments or relocations required as a result of street or highway improvements.

Utility or private construction on city connecting links, utilizing public right-of-way, not involved with a street improvement project, requires a Highway Permit with approval from both the City and KDOT. The Highway Permit may be obtained from either the City or KDOT.

If applicable state, rule or regulation sets forth more stringent requirement than this Utility Accommodation Policy, the statute, rule or regulation shall control.

This policy becomes effective upon publication and supersedes all previously published KDOT or former State Highway Commission policies accommodating utility facilities and appurtenances on highway right-of-way.

If application of this policy is not feasible, alternate proposals may be submitted by the Utility Company to the District Engineer for consideration.

The Secretary reserves the right to waive the provisions of this Utility Accommodation Policy. The Secretary may request Federal Highway Administration (FHWA) concurrence when such a waiver is proposed.

GLOSSARY OF TERMS / DEFINITIONS

ACCESS CONTROL: Full or partial restriction of access from abutting lands to and from the highway.

FULL CONTROL OF ACCESS: Prohibits access to the highway except at selected public roads where interchanges are utilized. Crossings at grade or direct private driveway connections are not permitted. Highways with full control of access usually have divided roadways and are classified as Freeways, which includes all Interstate Highways.

PARTIAL CONTROL OF ACCESS: Limits access to the highway. Major public roads generally are served with interchanges, selected public roads may be allowed access at grade as well as some private driveway connections. Such highways usually are classified as Expressways.

BACKFILL: Replacement of soil around and over an underground Utility Company facility.

BORING: Piercing a hole under the surface of the ground without disturbing the earth surrounding the hole. Boring may be accomplished by any KDOT approved manner. Water jetting or puddling is not permitted. Holes may be mechanically bored and cased using a cutting head and a continuous auger mounted inside of the casing. Small diameter holes may be augured and the casing or utility facility pushed in later.

BURY: Placement of the Utility Company facility below grade of roadway, ditch or natural ground to a specified depth.

CARRIER: Pipe directly enclosing a transmitted fluid (liquid or gas).

CASING: A larger pipe enclosing a carrier.

CITY CONNECTING LINK: A routing inside the city limits of a city which: 1) connects a state highway through a city; 2) connects a state highway to a city connection link of another state highway 3) is a state highway which terminates within such city; 4) connects a state highway with a road or highway under the jurisdiction of the Kansas Turnpike authority; or 5) begins and ends within a city's limits and is designated as part of the national system of Interstate and defense highways.

CLEAR ZONE: The total roadside border area, starting at the edge of the traveled way, available for safe use by errant vehicles. This area may consist of a shoulder, recoverable slope, non-recoverable slope, and/or clear run-out area. The desired width is dependent upon the traffic volumes and speeds, and the roadside geometry. See table of Clear Zone Distances in Appendix.

COATING: Material applied to or wrapped around a pipe.

CONDUIT OR DUCT: An enclosed tubular runway for enclosing wires or cables.

DIRECT BURIAL: Installing an underground utility without encasement by plowing or trenching.

DITCH GRADE: Original plan grade, not silted in.

ENCASEMENT: Structural element surrounding a pipe or cable.

FLEXIBLE PIPE: A plastic, fiberglass, or metallic pipe having a large ratio of diameter to wall thickness which can be deformed without undue stress. Copper or aluminum pipe shall be considered as flexible pipe.

FREEWAY: A highway with full control of access. All Interstate Highways and highways which do not have any at grade entrances or crossings are classified as Freeways. These facilities usually have divided roadways.

FRONTAGE ROAD: A public street or road located adjacent to a freeway or arterial highway to serve abutting property and local areas.

GROUNDING: Connected to earth or to some extended conducting body which serves instead of the earth whether the connection is intentional or accidental.

GROUT: A cement mortar or slurry of fine sand or clay.

HIGHWAY: The entire area within the right-of-way dedicated as a public way for the purpose of vehicular travel.

INTERSTATE HIGHWAYS: National system of Interstate and Defense Highways with full control of access, selected by joint action of the State Highway Departments of each State and adjoining States, subject to the approval of the United States Secretary of Transportation.

JACKING: The installation of small pipes by the use of hydraulic jacks or rams to push the pipe under the traveled surface of the road.

KDOT STANDARD SPECIFICATION: Standard Specification for State Road and Bridge Construction. The specification are located online at www.ksdot.org/burConsMain/specprov/specifications.asp

MANHOLE: An opening to an underground utility system which workers or others may enter.

MEDIAN: The portion of a divided highway separating the roadways for movement of traffic in opposite directions.

MONITORING WELL: A well installed and used for ground water investigation and/or remediation of environmental pollution.

NATURAL GAS PIPE LINES:

DISTRIBUTION SYSTEM: Pipeline other than a gathering or transmission line.

SERVICE LINE: Distribution line that transports gas from a common source of supply to a customer meter.

TRANSMISSION SYSTEM: Pipeline other than a gathering line that transports gas from a gathering line or storage facility to a distribution center or storage facility. Operates at a hoop stress of 20 per cent or more of the Specified Minimum Yield Strength (SMYS).

NORMAL: Crossing at a right angle.

PERMITS:

HIGHWAY PERMITS: Executed for all Utility Company facilities or ROW Occupants located on state highway right-of-way, except for parallel installations on Fully Controlled Access Highways.

REIMBURSABLE UTILITY AGREEMENTS: Executed when Utility Company facilities are located on private right-of-way and must be relocated for highway improvements.

UTILITY PERMIT AGREEMENTS: Executed permits with a negotiated contract for parallel occupancy by Utility Companies on Fully Controlled Access Highways.

PIPE: A tubular product made as a production item for sale. Cylinders formed from plate in the course of the fabrication of auxiliary equipment are not pipe.

PRESSURE: Relative internal pressure in PSIG (Pounds per Square Inch Gauge).

PRIVATE LINES: Privately owned facilities which convey or transmit commodities as defined in this section but devoted exclusively to private use.

PUBLIC LINES: Facilities which convey or transmit commodities as defined in this section and directly or indirectly serve the public or any part thereof.

REMEDIATION WELL: A well installed and used for remediation of environmental pollution.

RETAINING WALL SYSTEMS: Retaining wall systems shall include Mechanically Stabilized Earth (MSE) Walls, Modular Block Walls (MBW), Cast-in-Place Walls, Crib Walls, T-Walls and etc.

RIGHT-OF-WAY: Land, property or interest therein, usually in a strip, acquired for or devoted to highway transportation purposes.

ROADWAY: That portion of the highway extending from outside shoulder line to outside shoulder line or between curb lines. Divided highways are considered to have two roadways.

SCENIC OVERLOOK: A roadside area provided for motorists to stop their vehicles beyond the shoulder, primarily for viewing the scenery in safety.

SHOULDER: That portion of roadway contiguous with the traveled way for accommodation of stopped vehicles and emergency use.

TRAFFIC CONTROL PLAN: A signing plan for controlling traffic when work is being performed on the highway or within the "Clear Zone". The signing plan will be in accordance with the Manual on Uniform Traffic Control Devices and the State of Kansas Traffic Control Standards. When ever the Traffic Control Standards conflicts with the Manual, the Standards shall govern. The signing plan will also address storage of materials and parking for work crew vehicles on the right-of-way when appropriate.

TRAVELED WAY: The portion of the roadway for the movement of vehicles, exclusive of shoulder and auxiliary lanes.

TRENCHED: Installed in a narrow excavation.

TUNNELING: Excavating the earth ahead of a large diameter pipe by one or more of the following processes:

- 1) The earth ahead of the pipe will be excavated by men using hand tools while the pipe is pushed through the holes by means of jacks, rams, or other mechanical devices.
- 2) The excavation is carried on simultaneously with the installation of tunnel liner plates.
- 3) The tunnel liner plates are installed immediately behind the excavation as it progresses and are assembled completely from the inside.

UTILITIES: All privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water, and other similar commodities, including fire and police signal systems and street lighting systems which directly or indirectly serve the public.

UTILTIY COMPANY AND ROW OCCUPANT: Utility Company is a Company placing their utility on KDOT right-of-way. ROW occupant is any one who is utilizing KDOT right-of-way for placement of utility or other approved item.

WALL SYSTEM: refer to Retaining Wall Systems

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PART ONE



GENERAL POLICY



PART ONE GENERAL POLICY

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PART ONE - GENERAL POLICY

I. POLICY APPLICATION

A. GENERAL

1. This policy applies to the location, construction, maintenance, removal and relocation of all private, public and cooperatively owned utilities within the highway right-of-way under the jurisdiction of the Secretary of the Kansas Department of Transportation (Secretary).
2. Utilities include lines, facilities, and systems for producing, transmitting or distributing communications, power, electricity, Cable TV, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway drainage, and other similar commodities, including fire and police signal systems and street lighting and traffic control systems, which directly or indirectly serve the public.
3. A permit allowing a Utility Company the privilege of placing its facilities in or on the highway right-of-way does not constitute any permanent right of use. Removal, remodeling, maintenance or relocation of the facilities will be promptly accomplished by the owner at no cost to the KDOT.
4. Private Utility Company lines shall not occupy the highway right-of-way except where necessary to cross the highway.
5. Commercial towers and antennas for private and/or public utilities are not permitted to occupy the highway right-of-way, except when adverse economic impacts are documented and approval is granted by the Secretary or the utilities provide service to maintain highway facilities.
6. Utility Companies who utilize subcontractors are responsible for subcontractor compliance with KDOT standard specifications, regulations and permit issued pursuant to this Policy. Unsatisfactory work will be rejected and result in permit revocation and may result in denial of future Highway Permits.
7. Subcontractors must carry the required liability insurance unless the subcontractor is covered by the Utility Company insurance.
8. Utility Companies and subcontractors shall follow industry accepted construction and safety practices and follow applicable statutes and regulation(s).

9. Periodic updates will be made to the D.O.T. Forms No. 304 "Highway Permit" and No. 310 "Attachment to Bridges and Other Structures or Installations near Retaining Wall Systems". The current version of the forms applies.
10. The Secretary may waive requirements of this policy in writing for utility lines which service facilities required for operating the highway.
11. An approved and signed copy of the Highway Permit must be on the premises at the start and during the period any work is performed.
12. The Utility Company and its subcontractor(s) are responsible for contacting Dig Safe and for securing additional permits, (i.e. permits for crossing railroad right-of-way, dikes, levees and/or pipeline easement(s)).

B. FEE

1. A fee is not required for processing and issuing a Highway Permit.
2. A fee may be required for processing and issuing a Utility Permit Agreement for use of Fully Controlled Access Highway right-of-way.

C. PERMIT REVOCATION

In lieu of bond, the Secretary may revoke the permit and remove any work performed for failure to complete a project as described in the Permit or failure to comply with this policy. The Utility Company or ROW Occupant shall reimburse the Secretary for any cost incurred by the Secretary to restore the right-of-way. The Secretary will not authorize any other highway permits for the Utility Company or ROW Occupant until the Utility Company or ROW Occupant has either reimbursed the Secretary or restored the right-of-way.

D. LIABILITY

1. Liability insurance shall be provided as more specifically outlined in the Highway Permits (D.O.T. Form No. 304 - Section 10 and D.O.T. Form No. 310 - Section 9), which are included in the Appendix.
2. The Utility Company or ROW Occupant assumes all risk and liability for accidents and damages that may occur to persons or property from work performed under a Highway Permit, Utility Agreement or Lump Sum Agreement. The Utility Company or ROW Occupant shall comply with the Underground Utility Damage Prevention Act (K.S.A. 66-1801 et seq.).
3. KDOT shall not be liable for damage to any utility not installed in the location authorized by any permit or agreement issued pursuant to this UAP.

E. REPLACEMENT OR CHANGE OF USE OF FACILITY

Replacement or change of use of existing Utility Company facilities with the same facilities or facilities of a different type, or design is to be considered as a new utility installation requiring a new permit, and all work shall adhere to this policy.

F. CHANGE IN OWNERSHIP

Each KDOT District shall be notified in writing of the names and addresses of the new owners within 30 days after a Utility Company changes ownership.

G. ABANDON OR RETIRE IN PLACE

The Utility Company shall notify KDOT when the utility has been abandoned or retired in place and is responsible for all costs associated with removal (or making safe in place) abandoned or retired in place utility. The Utility Company shall remove all above ground structures, pedestals, markers, manholes, and other structures or installations deemed necessary by the District Engineer or designee.

H. HIGHWAY CONSTRUCTION PROJECTS

Utilities must be relocated six weeks prior to construction project bid lettings. Utility Companies must contact the District Engineer or designee prior to starting relocation work. Relocation of utilities prior to construction project bid letting may require clearing and grubbing of trees and vegetation. Permission to leave debris for disposal may be granted by the District Engineer or designee. If not feasible as determined by the District Engineer or designee to have all utilities moved prior to a project bid letting, the Utility Company will coordinate with the contractor during the construction of the project. If utilities are not moved in a reasonable time following a request by KDOT, KDOT may move the utilities. KDOT may submit an itemized statement of costs for the relocation to Utility Company and Utility Company shall reimburse KDOT upon receipt of this statement.

I. DISCHARGE OF WASTE MATERIAL

Applications for a Highway Permit, Utility Permit Agreement, or Reimbursable Utility Agreement for the installation of utility facilities which may discharge materials into the waters of the United States or waters of the State shall comply with all applicable requirements of the Corps of Engineers, Federal, State and local environmental protection agencies with jurisdiction. A copy of any necessary permit or authorization shall be provided to the District Engineer or designee.

J. NON-COMPLIANCE

Non-compliance with any of the terms of this Utility Accommodation Policy or any permit, license or agreement issued pursuant to the Policy may be considered as cause for shut down of operations until compliance is assured to the satisfaction of the District Engineer or designee or revocation of the permit at the discretion of the District Engineer or designee. The cost of any work required by KDOT in the removal of non-complying construction will be assessed against the Utility Company or ROW Occupant.

II. PERMITS

A. GENERAL

1. Highway Permits are required when utility facilities are installed, relocated, removed or maintained along, crossing over or under all highway right-of-way. The Secretary has delegated authority to the District Engineer or designee to approve and execute Highway Permits. All such permits are approved through the District Engineer or designee of the appropriate KDOT District Office.
 - a. A certificate of liability insurance shall be on file with the KDOT for each permit. Signing and all work shall be subject to the requirements of this Utility Accommodation Policy and the Highway Permits (D.O.T. Forms No. 304 "Highway Permit" and No. 310 "Attachment to Bridges and Other Structures or Installations near Retaining Wall Systems").
 - b. On City Connecting Links, a Highway Permit must be obtained for work on the right-of-way other than routine maintenance or a KDOT approved construction project. Permit forms may be obtained from either KDOT or the City. The Permit requires the signature of both KDOT and the City. The issuing party, either the City or District Office, will distribute copies of the Highway Permit to the Utility Company or ROW Occupant, District Office and City. The District Office will forward a copy to the Bureau of Construction and Maintenance.
 - c. Changes in the scope of work on a Highway Permit will require prior review and approval by the District Engineer or designee.

d. "Standing Permits" may be granted, at the discretion of the District Engineer or designee to Utility Company, Engineering Firms or ROW Occupant with satisfactory performance records. "Standing Permits" may be issued for a maximum period of one year and are for routine and normal maintenance. Large projects are outside the scope of routine maintenance.

The Utility Company, subcontractor or ROW Occupant shall contact the District Engineer or designee prior to conducting any normal maintenance type work on the highway right-of-way covered by a "Standing Permit". Location and dates of the beginning and completion of the proposed work will be logged and documented on the "Standing Permit". Approval of the work may be given by telephone.

2. Utility Permit Agreements are executed permits with a negotiated contract for qualifying utilities for parallel occupancy on the right-of-way of Fully Controlled Access Highways. See Part Three - "Utility Accommodation Policy for Fully Controlled Access Highways" for details.

3. Reimbursable Utility Agreements are executed when Utility Company facilities are located on private right-of-way or private easements and must be relocated, adjusted or removed because of highway improvements. Costs for such utility changes are to be reimbursed by KDOT. Such agreements are prepared and approved by the KDOT Bureau of Design.

a. A properly executed Reimbursable Utility Agreement will be considered to be a Highway Permit and all utility facilities relocated or adjusted on highway right-of-way will conform to this Utility Accommodation Policy. KDOT Construction personnel will prepare a "Highway Permit" for reimbursable utility relocations. These "Highway Permits" are for KDOT's internal use and Utility Company endorsement is not required. These "Highway Permits" will be filed by KDOT the same as any other "Highway Permit".

b. 23 C.F.R. 645 Subpart A prescribes the policies, procedures and reimbursement provisions for the adjustment and relocation of utility facilities on Federal-Aid projects. The Internet site for this publication is at www.fhwa.dot.gov/legsregs.

c. Utility relocations accomplished under a highway construction project, where costs are not reimbursable, will require a Highway Permit along with the required liability insurance.

d. KDOT will reimburse the cost for municipally owned like-kind utility adjustments required by KDOT initiated bridge and highway improvement projects if the municipality population is not greater than 2500.

- e. Any rural water district meeting the requirements of K.S.A. 68-415(c) shall be reimbursed for the district's costs for relocating their water lines or if the Secretary relocates the water lines, the water district shall not be required to reimburse the Secretary for such cost.

B. APPLICATIONS

1. Application and plans shall be submitted, for review and approval to the Area Engineer. The application shall show the location of the utility by route, county, reference marker, section, township and range; and position of the utility within the right-of-way noting all construction details such as depths, type of materials, operating pressures, voltages, vertical and horizontal clearances, etc. Plans shall consist of five (5) sets of 8 1/2" x 11" or 11" x 17" sheets; 24" x 36" sheets will only be accepted when smaller sheets would be illegible. Approved requests to install, maintain, relocate or remove a utility within public highway right-of-way, other than parallel occupancy on Fully Controlled Access Highways, shall be authorized by a Highway Permit- Use of Highway Right-of-Way (D.O.T. Form No. 304).
2. Permit applications for pipelines carrying hazardous materials shall display the names of company officials who can be contacted on a 24-hour basis in case of any emergency. The Utility Company shall notify the KDOT District of all changes in the calling list within 7 days of such change.
3. A copy of the "Highway Permit - Use of Highway Right-of-Way" (D.O.T. Form No. 304); which also is used for City Connecting Links, is included in the Appendix. Major requirements are listed on this form, which include, among other things, providing Liability Insurance. No insurance will be required for Local Units of Government or other state agencies.
4. Applications for Utility Permit Agreements for parallel occupancy on Fully Controlled Access Highways will be as outlined in Part Three - "Utility Accommodation Policy for Fully Controlled Access Highways" of this policy.
5. Part Four of this Policy describes requirements for applications for utility attachment to bridges and structures. A copy of the Highway Permit - Attachment to Bridges and Other Structures or Installation near Retaining Wall Systems (D.O.T. Form No. 310) is included in the Appendix.
6. Utility projects involving work requiring permits for both the Highway Right-of-Way, (D.O.T. Form No. 304) and Attachment to Bridges and Other Structures or Installations near Retaining Wall Systems, (D.O.T. Form No. 310) shall, whenever feasible, be cross-referenced and submitted at the same time.

7. Permit applications for underground utilities that use cathodically protected pipes shall submit plans of the cathodic protection design and maintenance. The plans should note groundbed and pipeline crossings near underground highway structures and detail the steps proposed to provide for the safety of those structures. The KDOT Bridge Department will review these plans and may issue needed recommendation. After the review of the cathodic protection plans for an underground utility, KDOT may require additional inspections along the pipelines where interference could jeopardize the structural integrity of an underground highway structure.

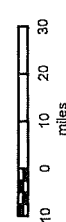
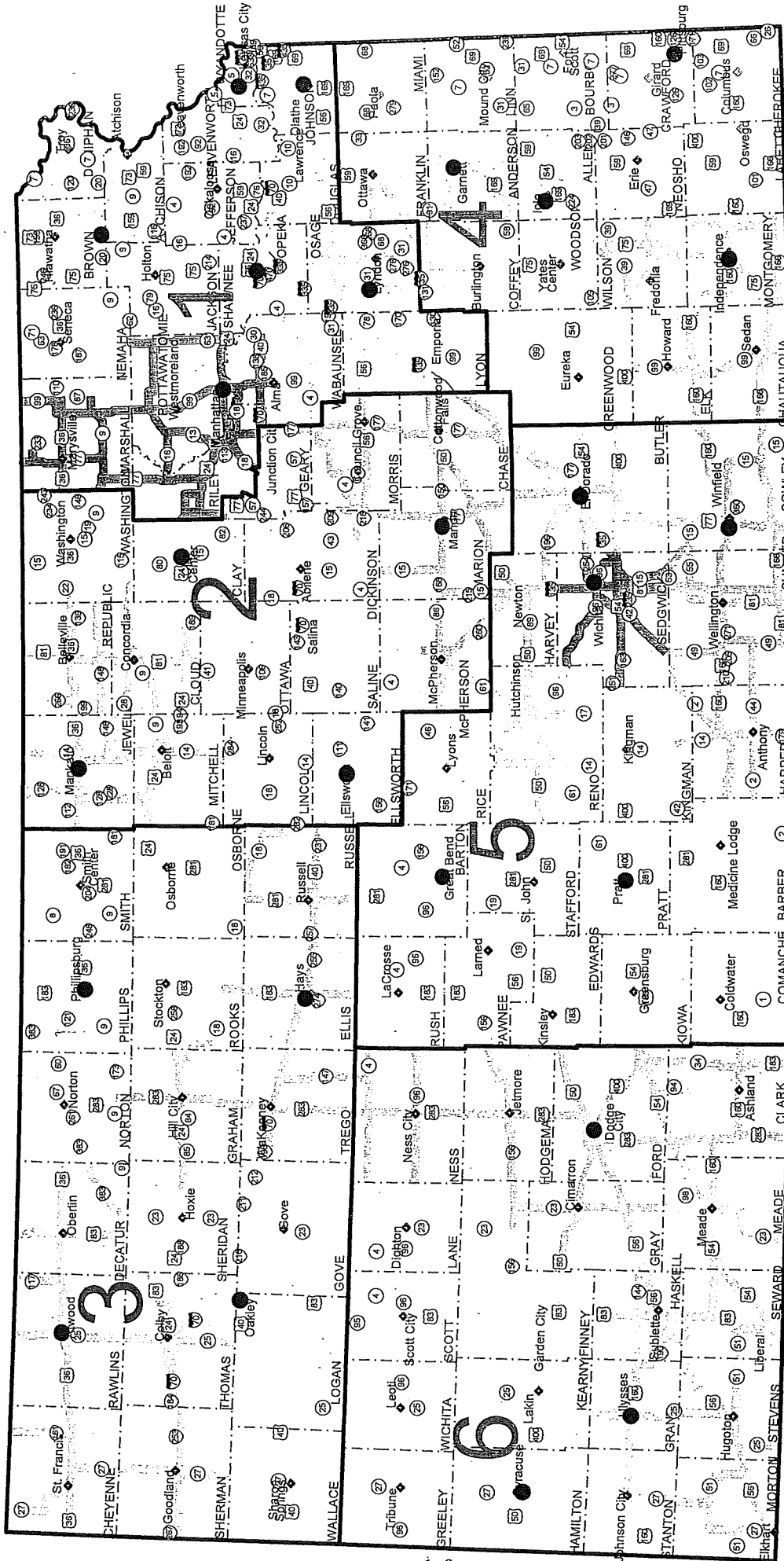
C. KDOT DISTRICT AND AREA OFFICES

Applications for Highway Permits may be obtained at any KDOT District Office or KDOT Area Office.

A map showing KDOT District and Area boundaries and a list of addresses and telephone numbers for each office is listed on the following pages.

Applications may be submitted to KDOT Area Offices.

KDOT MAINTENANCE AREAS



KDOT makes no warranties, guarantees, or representations for accuracy of this information and assumes no liability for errors or omissions.

- Area 1
- Area 2
- Area 3
- Area 4
- Area 5
- Area 6
- Area Office

KANSAS DEPARTMENT OF TRANSPORTATION

DISTRICT AND AREA OFFICES

<u>DISTRICT/ AREA</u>	<u>LOCATION</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>
District I (North East)	Topeka	121 W. 21st St. 66605-1429	785-296-3881 Fax: 785-296-1162
Area 1	Horton	1686 E. 1st Ave. East Box 151 66439-0151	785-486-2142 Fax: 785-486-3788
Area 2	Osage City	322 S. Martin Box 212 66523-9630	785-528-3128 Fax: 785-528-3803
Area 3	Bonner Springs	650 N. K-7 Hwy 66012-1736	913-721-2960 Fax: 913-721-5441
Area 4	Topeka	101 Gage Boulevard 66606-2021	785-296-2291 Fax: 785-296-1096
Area 5	Wamego	1425 W. US-24 66547	785-456-2353 Fax: 785-456-9851
Area 6	Olathe	1290 S. Enterprise 66061-5355	913-764-0987 Fax: 913-782-5914
District II (North Central)	Salina	1006 N. 3rd St. Box 857 67402-0857	785-823-3754 Fax: 785-823-1649
Area 1	Clay Center	731 West Crawford 67432-2339	785-632-3108 Fax: 785-632-3337
Area 2	Mankato	E. on US-36 Box 220 66956-0220	785-378-3166 Fax: 785-378-3800
Area 3	Marion	US-56 & Cedar St. Box 236 66861-0236	620-382-3717 Fax: 620-382-2339
Area 4	Ellsworth	202 W 15 th Street Box 147 67439-0147	785-472-4447 Fax: 785-472-4676

<u>DISTRICT/ AREA</u>	<u>LOCATION</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>
District III (North West)	Norton	312 S. Second St. Box 350 67654-0350	785-877-3315 Fax: 785-877-2531
Area 1	Phillipsburg	1 mile S. of US-36 & US-183 Box 268 67661-0268	785-543-2163 Fax: 785-543-5914
Area 2	Atwood	E. on US-36 Box 156 67730-0156	785-626-3258 Fax: 785-626-3185
Area 3	Hays	1811 W. Frontier Rd. Box 760 67601-0760	785-625-9718 Fax: 785-625-3846
Area 4	Oakley	Jct. US-40 & 83 Box 516 67748-0516	785-672-3113 Fax: 785-672-4985
District IV (South East)	Chanute	411 W. Fourteenth St. Box 498 66720-0498	620-431-1000 Fax: 620-431-4406
Area 1	Iola	1720 N. State Box 366 66749-0366	620-365-2161 Fax: 620-365-2402
Area 2	Garnett	Jct. of US-59 & K-31 Box 325 66032-0325	785-448-5446 Fax: 785-448-2486
Area 3	Independence	W. on US-75 Box 884 67301-0884	620-331-3760 Fax: 620-331-7017
Area 4	Pittsburg	1813 W 4 th ST Box 104 66762-0104	620-231-7560 Fax: 620-231-1149

<u>DISTRICT/ AREA</u>	<u>LOCATION</u>	<u>ADDRESS</u>	<u>TELEPHONE</u>
District V (South Central)	Hutchinson	500 N. Hendricks Box 769 67504-0769	620-663-3361 Fax: 620-663-1804
Area 1	Pratt	309 Iowa Box 409 67124-0409	620-672-7494 Fax: 620-672-7678
Area 2	El Dorado	205 Oil Hill Rd. Box 888 67042-0888	316-321-2880 Fax: 316-321-1702
Area 3	Winfield	7093 US 160 Box 639 67156-0639	620-221-3370 Fax: 620-221-1633
Area 4	Great Bend	E. on US-56 & Kiowa RD Box 86 67530-0086	620-793-5408 Fax: 620-793-6216
Area 5	Wichita	3200 E. 45th St. N. 67220-1432	316-744-1271 Fax: 316-744-3064
District VI (South West)	Garden City	Campus Dr. & US-50 Box 619 67846-0619	620-276-3241 Fax: 620-276-2333
Area 1	Syracuse	N. of Syracuse on Main St. Box 1417 67878-0080	620-384-7821 Fax: 620-384-7687
Area 2	Ulysses	S. of Ulysses on US-160 Box 362 67880-0362	620-356-1531 Fax: 620-356-4361
Area 3	Dodge City	11310 E. US 50 Box 729 67801-0729	620-227-6122 Fax: 620-227-2537

KDOT INTERNET ADDRESS

WWW.KSDOT.ORG\HWYCONT.ASP

III. PROTECTION OF TRAVELING PUBLIC

A. TRAFFIC CONTROL

1. All utility work on the roadway, within the "Clear Zone", or involving equipment parked in the "Clear Zone" requires a Traffic Control Plan. The Clear Zone Table is located in the Appendix.
2. Traffic Control is to be provided by the Utility Company or ROW Occupant for all Highway Permits and Utility Permit Agreements, including all "Standing Permits," whenever such Utility Company work interferes with the movement of traffic or where the work or equipment is located within the Clear Zone.
3. Personnel working on KDOT right-of-way must wear ANSI Class II High Visibility Safety apparel compliant with 23 CFR Part 634, as set forth in 71 Federal Register 67792 to 67800 (Nov. 24, 2006). The purpose of the regulations is to decrease the likelihood of worker fatalities or injuries caused by motor vehicles and construction vehicles and equipment within the right-of-way.
4. The traveling public shall be warned of the activities of the contractor or individuals involved with utility construction and maintenance within the highway right-of-way by means of signs, flaggers, and traffic control devices as outlined in the latest edition of the "Manual of Uniform Traffic Control Devices" (MUTCD), U.S. Department of Transportation, FHWA, or the State of Kansas Traffic Control Standards. Whenever the Traffic Control Standards conflict with the Manual, the Standards shall govern.
5. Flaggers will be required according to the MUTCD when utility construction and maintenance work on the roadway (includes pavement) is in progress. Control by flaggers is for the safety of the workers and the traveling public. Flaggers must wear ANSI Class II safety vests and high visibility headwear at all times when flagging traffic. Utilities can obtain the 'State of Kansas Traffic Control Handbook for Flaggers' from any KDOT Office or download from www.ksdot.org.
6. Typical Signing Plans for traffic control on highways involving "Roadside Work" and "Lane Closure" are included in the Appendix. These are typical plans and should be supplemented if necessary to conform to the MUTCD or the State of Kansas Highway Traffic Control Standards. When ever the Traffic Control Standards conflict with the Manual, the Standards shall govern.
7. A specific Traffic Control Plan may be required for utility work on Divided, Four-Lane Undivided, and High Volume Two-Lane Highways, especially in Metropolitan Areas.

8. All Traffic Control Plans must be preapproved by the District Engineer or designee.

B. STORAGE AND PARKING

Storage of materials, parking of equipment and vehicles when not used in actual utility work within the Interstate, Freeway, or Highway Right-of-Way will not be permitted on the right-of-way unless no other alternative is available. If such storage or parking is permitted, then it must be located beyond the Clear Zone and as far to the edge of the right-of-way as possible.

IV. DESIGN CONSIDERATIONS

A. DESIGN

Each Utility Company is responsible for the design of their facilities to be installed within the highway right-of-way or attached to a highway structure.

B. MATERIALS

All Utility Company installations along, crossing over or under highway right-of-way and attachments to highway structures shall be of durable materials designed for long service life expectancy and free from routine servicing and maintenance. Materials shall conform with current applicable material specifications and codes.

C. FUTURE EXPANSION

1. On new installations or adjustments of existing Utility Company lines, provision should be made for known or planned expansion of the Utility Company facilities, particularly those located underground or attached to bridges and structures.
2. Plan future expansion to minimize hazards and interference with highway traffic when additional overhead or underground lines are installed.

D. CATHODICALLY PROTECTED UTILITIES

Buried pipelines cathodically protected must be electrically isolated from underground metallic highway structures, unless the pipeline and highway structure are interconnected and cathodically protected as a single unit. Any cathodically protected utility shall be at least 10 feet (3.05 meters) from any bridge substructure. Anode beds associated with a cathodically protected utility shall be at least 300 feet (92 meters) or more from any substructure element. Inspections and electrical tests must be made to assure proper electrical isolation. Pipeline cathodic protection systems shall be designed as to minimize any adverse impacts of stray currents to adjacent structures.

V. MAINTENANCE AND SERVICING OF UTILITIES

A. UTILITY COMPANY'S RESPONSIBILITY

1. Maintenance of the utility is the responsibility of the Utility Company.
2. Maintenance must be performed to keep the utility in an as constructed condition and in compliance with the requirements of Federal, State and local statutes, regulations and utility codes.
3. Utility Companies shall replace and stabilize all earth cover and vegetation where the underground utility has caused erosion.
4. The Utility Company shall repair settlement of backfills, fills; and embankments placed by the Utility Company or its contractors or subcontractor at any tier which may occur within one year of notice of acceptance from the District Engineer or designee. Any repairs shall be made by the Utility Company within thirty (30) days after receipt of notice from the District Engineer or designee, such receipt evidenced by KDOT placing notice in the U.S. Mail.

B. EMERGENCY REPAIR

1. Emergency repair of utilities located on highway right-of-way, including Interstate and other Fully Controlled Access Highway right-of-way, is permissible without first obtaining a Highway Permit, if an emergency exists that is dangerous to the life, safety or welfare of the traveling public and requires immediate repair. The Utility Company shall take all reasonable safety measures and temporary traffic control measures consistent with the (MUTCD) or the State of Kansas Traffic Control Standards, to protect the traveling public during repairs and cooperate fully with the State Highway Patrol and KDOT.
2. The Utility Company will advise the Area and District office of the location as soon as possible but no later than 24 hours after discovering the emergency. The Utility Company will coordinate with KDOT on the work and traffic control. Any damage to the right-of-way will be restored in accordance with Section VII - A, "Disturbed Areas." A Highway Permit should be requested by the Utility Company within the second working day after the emergency, unless the work is covered under the "Standing Permit".

VI. ROADSIDE LANDSCAPE AND SCENIC ENHANCEMENT

A. SCENIC AREAS

Areas that have been acquired or set aside for their scenic qualities require specific controls of the type and size of Utility Company facilities. Permits will be reviewed on an individual basis. New Utility Company installations in the following areas including those for highway use must be approved by the FHWA where Federal-Aid projects are involved.

- Scenic strips
- Overlooks
- Rest areas
- Recreation areas
- Right-of-way sections of highways that pass through public parks and historical sites.

B. VISUAL CONTROLS

1. New underground installations may be permitted within scenic areas where no extensive removal or alteration of trees or other natural features is visible to the highway user and where the installation does not impair the visual quality of the lands being traversed.
2. New aerial installations shall be avoided in areas where there is a feasible and prudent alternative. Factors to be considered include but are not limited to:
 - a. Other locations are unusually difficult and unreasonably costly or are more desirable from the standpoint of visual quality;
 - b. Underground installation is not technically feasible or is unreasonably costly;
 - c. The proposed installation can be made at a location and will employ suitable designs and materials which give adequate attention to the visual qualities of the area being traversed.
3. These controls shall also apply to the location and design of Utility Company installations that serve highway purposes. Such highway purpose include, but are not limited to, continuous highway lighting, weigh stations, rest stops and recreation areas.

C. PROTECTION OF VEGETATION

Consistent with the preservation of planted vegetation, consideration will be given to Utility Company for the necessary trimming, clearing or removal of vegetation to provide adequate clearance of overhead wires. Such work will be done in accordance with established practices and standards outlined in the KDOT "Highway Maintenance Manual". Approval shall not be granted for wasteful or wanton trimming or removal.

VII. PRESERVATION, RESTORATION, AND CLEANUP

A. DISTURBED AREAS

1. Areas of highway right-of-way disturbed by the installation, maintenance, removal and relocation of utilities shall be kept to a minimum with special care taken to avoid disturbing existing drainage facilities.
2. All excavations will be backfilled within forty-eight (48) hours after work is completed, or as directed by the District Engineer or designee, and shall comply with KDOT "Standard Specifications for State Road and Bridge Construction". When required, adequate traffic control will be provided as outlined in Section III - A, "Traffic Control".
3. Disturbed areas shall be returned to normal grade and elevation with adequate compaction of backfill material and all excess or undesirable material removed by the Utility Company. All destroyed vegetation shall be replaced by the Utility Company by sodding, seeding, fertilizing or mulching as required by the District Engineer or designee in conformity with KDOT "Standard Specifications for State Road and Bridge Construction."
4. Adequate protection against erosion shall be provided by the Utility Company in disturbed areas that are susceptible to erosion. Such protection may be in the form of rock rip-rap, wash checks, hay cover or other material that does not interfere with highway maintenance operations and is approved by the District Engineer or designee.
5. Disturbed or broken Right-of-Way markers shall be reestablished by a licensed Land Surveyor.

B. DRAINAGE FACILITIES

Utility Company shall not disturb existing drainage facilities. Underground utility facilities shall be back-filled with pervious material and outlets provided for entrapped water. Underdrains shall be provided where necessary.

C. CLEANUP

Prior to the final inspection for acceptance of work performed on highway right-of-way, the Utility Company shall restore all "Disturbed Areas" as required under Subsection A of this Section, remove all unused material or debris from the work area, and leave the right-of-way in a clean, acceptable condition.

VIII. SPRAYING, CUTTING AND TRIMMING TREES

A. PERMIT REQUIRED

Trees, shrubs, bushes, vines or ground cover on the highway right-of-way shall not be sprayed, trimmed, cut down, rooted up, removed, or mutilated in any manner, unless a Highway Permit (D.O.T. Form No. 304) or Highway Permit Harvesting Hay on Highway Right-of-Way (D.O.T. Form No. 317) is granted.

B. CHEMICAL BRUSH CONTROL

Spraying brush and seedling tree growth by Utility Companies or ROW Occupant is prohibited unless a permit is granted by the District Engineer or designee. Such activities shall be performed with extreme caution. The Utility Company or ROW Occupant shall be responsible for the performance of their employees, agents, contractors or subcontractors at any tier in the application of chemicals for brush control.

1. All spraying shall be done by a licensed herbicide applicator, licensed under Category Six of K.S.A. 2-2444a and approved by the Kansas Department of Agriculture.
2. Liability insurance, including coverage for chemical application damage, shall be provided in accordance with the Highway Permit (D.O.T. Form No. 304) prior to issuing a Highway Permit for the use of chemicals.
3. Work involved on each permit application must be reviewed in detail and approved in writing by the District Engineer or designee prior to issuing the permit.
4. The name and type of chemical weed and brush killers that will be used on state highway property shall be listed on the permit application.
5. Plants over five feet (1.5 meters) in height shall not be sprayed. Remove brush over five feet (1.5 meters) in height. Stumps shall be cut flush or below ground level and treated to prevent regrowth.
6. Shrubbery-type growth such as dogwood, sumac, redbud, plum, etc., shall not be sprayed unless prior approval is received in writing from the District Engineer or designee.

7. Steep slopes where brushy growth is a major factor in preventing erosion shall not be sprayed without prior written approval of the District Engineer or designee.
8. The spraying program shall be arranged, if possible, so that long stretches of right-of-way or both sides of the highway are not treated at one time.

C. TREE PRUNING

Tree pruning on highway right-of-way for utility lines will utilize best horticulture practices and shall be done in accordance with the KDOT "Highway Maintenance Manual" www.ksdot.org.

1. The pruning, trimming or removal of trees for utility line clearance or other purposes requires the authorization in writing from the District Engineer or designee.
2. Any and all limbs trimmed shall be removed with a clean cut as set forth in the Highway Maintenance Manual, Section 4.30 Landscape.
3. All cut branches, dead limbs, etc., shall be removed from Clear Zone while traffic control is in place and cleared from the highway right-of-way within forty-eight (48) hours or as directed by the District Engineer or designee. Such materials shall not be burned along the roadside unless such permission is granted on the permit and all required permits for open burning have been obtained by the Utility Company or ROW Occupant.
4. The Utility Company or ROW Occupant shall be held liable for any damage to grass, crops, native shrubs or trees arising from open burning of brush.
5. The Utility Company or ROW Occupant shall secure all required permits for open burning.

IX. SPECIAL USES FOR HIGHWAY PERMITS

Below is a list of special uses for Highway Permits and reference to applicable policies:

A. BANNERS

Refer to Highway Maintenance Manual Chapter 11.25

B. CATTLE CROSSING

Refer to Highway Maintenance Manual Chapter 11.25

C. FENCING

Refer to Appendix for the Kansas Department of Transportation Highway Fencing Policy

- D. FLOWER PLANTING AND LANDSCAPING**
Refer to Highway Maintenance Manual Chapter 11.25
- E. FOSSIL AND ROCK HUNTING**
Refer to Highway Maintenance Manual Chapter 11.25
- F. GRAIN STORAGE ON MIXING STRIPS AND OTHER KDOT PROPERTY**
Refer to Highway Maintenance Manual Chapter 11.25
- G. MAIL BOX INSTALLATION**
KDOT has adopted the Mail Box Installation guidance from the AASHTO Roadside Design Guide. Refer to Appendix for a summary of the guidance.
- H. PAY PHONES AT REST AREAS**
Refer to Highway Maintenance Manual Chapter 11.25
- I. SURVEYORS**
Refer to Appendix for the Standing Permit Policy for Land Surveyors working within the State Highway System Right-of-Way.
- J. WELCOME SIGNS, CITY OWNED**
Refer to Appendix for KDOT policy on City Owned Welcome signs with in the State Highway System Right-of-Way.
The City will also need complete a D.O.T. Form No. 1952 and submit the appropriate fee to the Bureau of Right of Way, pursuant to the K.S.A 68-2236

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PART TWO



UTILITIES ON PERMITTED HIGHWAYS



PART TWO
UTILITIES ON PERMITTED HIGHWAYS

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PART TWO

UTILITIES ON PERMITTED HIGHWAYS

I. GENERAL PROVISIONS

This Part of the Policy applies to all public and private utilities, including electric power, telephone, telegraph, cable television, water, gas, oil, petroleum products, steam, chemicals, sewage, drainage, irrigation, and similar lines that are to be located, adjusted, or relocated, within the right-of-way under the jurisdiction of the Secretary, except Fully Controlled Access Highways covered in Part Three. Such utilities may involve underground, surface, or aboveground facilities, either singly or in combination.

Expressway type highways with Partial Control of Access which do not meet all criteria to qualify as Fully Controlled Access Highways, at the discretion of the District Engineer or designee, may be required to follow requirements of this Policy as outlined in Part Three - "Utility Accommodation Policy for Fully Controlled Access Highways."

Part One - "General Policy" and Part Four - "Attachments to Bridges and Structures or Installations near Retaining Wall Systems" contain general information and other requirements which pertain to Part Two and are to be referred to in application of this Policy.

Utility Company lines constructed on public highway right-of-way shall be in conformance with the current "National Electrical Safety Code", "American Waterworks Association Specifications", "Federal Pipeline Safety Regulations" and KDOT "Standard Specifications for State Road and Bridge Construction". Utilities must be located beyond the clear zone.

A. LOCATION

1. Utility Company installations shall be located to minimize need for later adjustment to accommodate future highway improvements and to permit servicing such lines with minimum interference to highway traffic and highway maintenance operations.
2. All Utility Company installations, adjustments, and/or relocations, shall be located with consideration to highway and Utility Company costs, impacts on highway users, interference with highway facilities and their operation, and impacts on highway maintenance operations.
3. Parallel installations shall be located on uniform alignment within seven feet (2.1 meters) or less of the right-of-way line to reduce impacts on traffic operations and preserve space for future highway improvements or other transportation purposes.

4. Utility Company line crossings of highway right-of-way are to be installed perpendicular to the highway alignment to the extent possible.
5. The horizontal and vertical location of Utility Company lines within the highway right-of-way is to conform to the dimensions outlined in Sections II and III of this Part.
6. Attachments to bridges and structures must be in accordance with this Policy outlined in Part Four - "Attachments to Bridges and Other Structures or Installations near Retaining Wall Systems".

B. TRENCHING AND BACKFILL

1. Where soil and depth conditions permit, trenches should be cut to have vertical faces with a maximum width of outside diameter of pipe plus two feet (600 millimeters). Trenches must be shored where necessary for safety and to protect the traveled way, shoulders and slopes.
 - a. Bedding shall be provided to a depth of six inches (150 millimeters) or half of the diameter of the pipe, whichever is less. This requirement may be waived for lines with inside diameter of two inches (50 millimeters) or less, and installed in compliance with the American Waterworks Association (AWWA) standards, or other applicable Industry Standards.
 - b. Bedding material shall be free of lumps, clods, stones, and frozen material and shall be graded to a firm but yielding surface without abrupt changes in bearing value.
2. Backfilling of open trenches shall use only approved materials that will produce a dense, well-compacted backfill. Materials containing frozen soil, sod, debris, or organic material shall not be used.
 - a. The materials shall be placed in uniform layers not to exceed eight inches (200 millimeters) in depth and compacted by means of suitable equipment or by tamping with mechanical or hand tampers.
 - b. The moisture content of the soil used for backfilling shall be uniform and shall be such that required densities can be obtained.
3. A blasting plan shall be submitted to the District Engineer or designee before blasting a trench for utilities in rock on the right-of-way. A blasting plan will also be reviewed by KDOT Bridge Design before blasting a trench for utilities in rock on the right-of-way within 100 feet (30.5 meters) of a bridge or highway structure.

C. PIPELINE INSTALLATIONS

1. Utility Companies shall specify the type and class of material, test, design and maximum working pressures of their pipeline installations. Utility Companies operating pipelines that are not constructed, operated, and maintained under regulations established by the U.S. Department of Transportation shall upon revision in the class of material or an increase in the maximum operating pressure, advise the Secretary of Transportation in writing of such revisions.
2. Vents are appurtenances by which fluids between carrier and casing may be inspected, sampled, exhausted, or evacuated.
 - a. Vents shall be located at the high end of short casings and at both ends of casing longer than 150 feet (45 meters).
 - b. Vent standpipes shall be located and constructed so as not to interfere with maintenance of the highway nor to be concealed by vegetation. Where possible, they shall be marked and located at the right-of-way line. The markers shall display the name and telephone number of company officials to contact in case of emergency.
3. Drains are appurtenances by which liquids or heavy gases may be evacuated or exhausted.
 - a. Roadside ditches or natural water courses shall not be used for purging the carrier unless specifically authorized by the Secretary and any state or federal agency with jurisdiction over said ditches or water courses.
4. The Utility Company shall place readily identifiable and suitable markers at the right-of-way where it crosses the highway except in those cases where a vent serves as a marker.

D. MONITORING AND REMEDIATION WELLS

All efforts to place monitoring or remediation well(s) off of KDOT ROW shall be thoroughly evaluated by the applicant prior to installation on KDOT ROW.

1. Monitoring and Remediation Wells shall be located outside of the highway Clear Zone. Wells shall not be located in the toe of the slope.
2. The District Engineer or designee will decide if Monitoring or Remediation Wells shall be installed flush with the ground or raised and such requirement shall be stated on the permit. Monitoring or Remediation Wells will be installed in accordance with current Kansas Department of Health Environment (KDHE) standards. Ground markers are to be located at the outer limits of the right-of-way line.

3. During maintenance/construction activities, the ROW Occupant will locate and mark wells as needed.
4. During installation and monitoring, the ROW Occupant shall use approved traffic control procedures consistent with the MUTCD or the State of Kansas Traffic Control Standards. Whenever the Traffic Control Standards conflict with the Manual, the Standards shall govern.
5. During well sampling, installation or closure, the ROW Occupant should park vehicles on the right-of-way beyond the clear zone.
6. Monitoring and Remediation Wells shall be installed consistent with the KDHE and KDOT Memorandum of Understanding dated August 4, 1995, referenced in the appendix.

II. ABOVEGROUND INSTALLATIONS

Where a utility crosses over or under a Fully Controlled Access Highway, the utility is to be serviced without access from the roadway or ramps. Aboveground utilities crossing the right-of-way shall be perpendicular to the highway alignment to the extent feasible and practicable. Complete spanning of access controlled right-of-way is encouraged with supportive structures and appurtenances located outside the right-of-way lines. When spanning is not feasible, consideration should be given to underground installation.

A. GENERAL

1. Aboveground Utility Company installations in rural areas are to be located at the outer limits of the right-of-way, preferably within two feet (600 millimeters) or less of the right-of-way line. As a minimum when considering specific installations, facilities shall not be allowed closer to the traveled way than the Clear Zone. As a general guide the Clear Zone distance may be determined from the Clear Zone Table in the Appendix. This table is adopted from the AASHTO publication, "Roadside Design Guide" current addition.
2. In suburban areas, with rural type highways and posted speeds of 45 mph (70 km/h) or lower, Utility Company poles or appurtenance are to be located at least 15 feet (4.5 meters) from the edge of the traveled way, with the preferred location near the right-of-way line.
3. In urban areas, where there are curbed sections, the utilities should be located at least six feet (1.8 meters) from the back of the curb; eight feet (2.4 meters) is desirable. Exceptions will be considered only in extreme cases. The preferred location is near the right-of-way line. When the above distances are not practicable, exceptions will be considered with consideration given to protection devices or break-away supports.

4. At interchange areas, aboveground installations and appurtenances are to be located near the right-of-way line, but in no case closer than the Clear Zone.
5. Poles, guys, anchors, or other appurtenances shall not be located in the travel way, shoulder slopes, ditches, backslopes, medians, at drainage structure openings, or on roadway shoulders. Exceptions may be permitted with the approval of the District Engineer or designee, but generally facilities should not be allowed closer to the paved traveled way than the Clear Zone. The "Clear Zone Table" is located in the Appendix. All poles, guys, anchors, or other appurtenances shall be located to minimize interference with maintenance operations of KDOT. Support structures and appurtenances may be allowed in medians greater than 100 feet (30.5 meters) in width when crossing the right-of-way.
6. Service lines (those that run from the primary lines on KDOT right-of-way to a house or business) should utilize a "Slack" line configuration. The "Slack" line configuration will eliminate the need for additional guy anchors extending on to the right-of-way and congesting the utility corridor.
7. The minimum vertical clearance to overhead installations including guy wires and telephone poles should be that required by the National Electrical Safety Code, Institute of Electrical and Electronics Engineers, Inc. However, additional clearance may be required by the KDOT in certain instances.

General clearance guides are provided as follows:

<u>Vertical Clearance</u>	<u>Line Voltage</u>
18 feet (5.5 meters)	Any Communication Line
18 feet (5.5 meters)	0-750
20 feet (6.1 meters)	750-22,000
**	22,000-470,000
***	Over 50,000

** Increase general clearance 0.4 inch (10 millimeters) for each 1,000 volts of the excess over 22,000 volts.

*** All clearances for lines over 50,000 volts shall be based on maximum operating voltage. For voltages exceeding 50,000 volts, the additional clearance specified shall be increased 3% for each 1,000 feet (300 meters) in excess of 3,300 feet (1,000 meters) above mean sea level.

8. Installations should be limited to single pole type construction with vertical configuration of conductors and cables. Joint-use single pole construction is encouraged at locations where more than one utility or type of facility is involved.

III. UNDERGROUND INSTALLATIONS

A. GENERAL

1. Underground utility installations should be located within the seven feet (2.1 meters) utility corridor at the right-of-way line. All installations and appurtenances shall be located to minimize interference with maintenance operations of KDOT and other utilities in the corridor.
 - a. All Utility Company appurtenances above the ground surface shall be located outside the Clear Zone in the seven feet (2.1 meters) utility corridor at the right-of-way line.
2. Utilities will not be permitted in the traveled way, median shoulder, shoulder slope, ditch, or back slope, exception will be considered in extreme cases and require written approved by the District Engineer or designee.
3. Utility Companies petitioning to place utilities near a Retaining Wall System, within a distance of 2 times the height measured from the back face of the wall system or one times the height in front of the wall, shall complete the form Attachment to Bridges and Other Structures or Installations near Retaining Wall Systems (D.O.T. Form No. 310), See Chapter 4, Attachments to Bridges and Other Structures or Installations near Retaining Wall Systems.
4. Underground facilities shall be installed at a minimum depth of three (3) feet (900 millimeters). Such cable may require greater burial depth at certain locations including, but not limited to, crossings of streambeds, side roads, and major entrances. In no case shall the depth of cover for any underground facilities be less than that meeting applicable Industry Safety Guidelines.
 - a. If less than minimum depth is necessary because of existing utilities, water table, ordinance, or similar reasons the line shall be rerouted or protected with a casing, suitable bridging, concrete slab or other appropriate means.
 - b. Locations where it will be difficult to attain minimum depth due to wet or rocky terrain shall be avoided. Any plan location change must be approved by the District Engineer or designee.
5. Manholes shall not be located in a bridge deck, traveled way, median, shoulder, shoulder slope, ditch or backslope and shall not protrude above the surrounding ground.

6. Any above ground structures (i.e. pedestal) shall be marked by a post higher than the surrounding vegetation. This post shall be a minimum of six feet (1.8 meters). All pedestal type structures shall be located at the outer limits of the right-of-way, preferably within two feet (600 millimeters) or less of the right-of-way line.
7. Buried electrical lines paralleling the right-of-way will only be allowed where KDOT determines there is no reasonable alternative.
 - a. The electrical line shall be buried a minimum depth of 48 inches (1.2 meters) unless it is encased.
 - b. A tape shall be placed 12 inches (300 millimeters) below grade to mark the location of the cable.
 - c. Whenever the electrical line crosses a roadway, it shall be cased; this includes side roads as well as state highways.
 - d. Electrical lines crossing state highways shall be marked with an aboveground marker on each side of the right-of-way.
 - e. The Utility Company shall mark buried cable with above ground markers a minimum of four times per mile (kilometer). These markers may be placed directly above the buried cable, or offset at the right-of-way line at the discretion of the District Engineer or designee.
 - f. KDOT may also require the encasement of the electrical line whenever it is in close proximity of a sign, i.e. stop sign, for the safety of KDOT personnel when replacing downed signs.
8. Utility Company lines installed parallel to highway right-of-way require casing at certain locations. Such locations include, but are not limited to, crossings of side roads and major entrances.
9. All buried plastic pipes shall be required to have a trace wire for ease of locating.
10. Private and public Utility Company lines shall not be permitted to be attached to or routed through drainage structures or cattle passes.
11. Fiber optic lines shall be buried at a depth of 42 inches (1.01 meters) and have a trace wire for ease of locating.
12. Buried vaults larger than a hand hole (3 foot x 4 foot) shall be located on private right-of-way. Aboveground equipment cabinets other than splitter posts shall be located on private right-of-way.

13. Point of Presents (POP) Buildings are to be approved by the District Engineer or designee. POP buildings typically are located at interchanges. POP buildings shall be located beyond the Clear Zone and shall not interfere with the line of sight geometrics of the interchange.

B. UNDERGROUND INSTALLATIONS CROSSING RIGHT-OF-WAY

1. All utilities crossing under ditches and roadways should have a minimum depth of cover of five feet (1.5 meters) below crown grade or three feet (900 millimeters) below ditch grade (original plan grade elevation), whichever shall govern. In fill sections, the natural ground line at the toe of the slope will be considered as ditch grade. However, in no case shall the depth of cover be less than that meeting applicable Industry Safety Guidelines.
 - a. If the minimum depth is not possible because of existing utilities, water table, ordinances, or similar reasons, the line shall be rerouted or protected with a casing, suitable bridging, concrete slab or other appropriate means.
 - b. Locations that are considered unsuitable or undesirable shall be avoided. These include, but are not limited to, locations as in deep cuts, near bridge footings, and in wet or rocky terrain where it is difficult to obtain minimum depth. Plan location changes must be approved by the District Engineer or designee.
2. Underground installations may be made by open trenching from the right-of-way line to the toe of the fill slope in fill sections and to the toe of the shoulder slope in cut sections. No trenching or excavating shall be allowed in the fill or shoulder slope unless approved by the District Engineer or designee. The remainder will be tunneled, augured, or dry bored through the roadway and shall be cased, unless casing is waived by the District Engineer or designee.

IV. ENCASEMENT OF UTILITIES

A. GENERAL

1. Casings are oversized load bearing conduits or ducts through which a utility is inserted:
 - a. To protect the roadway from damages and to provide for repair, removal and replacement of the utility without interference to highway traffic.
 - b. To protect the carrier pipe from external loads or shock, either during or after construction of the highway.
 - c. To convey leaking fluids or gases away from the area directly beneath the traveled way to a point of venting at or near the right-of-way line.
2. The casing shall include necessary appurtenances, such as vents, drains, and markers. Casing pipe shall be sealed at both ends with a suitable material to prevent water or debris from entering the annular space between the casing and the carrier, in accordance with Pipeline Industry Standards.
3. Utility Company lines crossing highway right-of-way shall be cased from right-of-way line to right-of-way line. The District Engineer or designee may allow minimum encasing from toe of backslope to toe of backslope in ditch sections and from toe of fill slope to toe of fill slope in fill sections.
4. Utility Company lines installed parallel to highway right-of-way require casing at certain locations. Locations included, but not limited to, are the crossings of side roads and major entrances.

B. CASING REQUIREMENTS FOR UTILITIES CROSSING THE RIGHT-OF-WAY

1. Underground electric service lines shall be placed in conduit or ducts from right-of-way line to right-of-way line and shall be clearly marked by the Utility Company at the outer limits of the right-of-way.
2. Underground fiber optic lines shall be placed in schedule 40 PVC, HDPE, or equivalent from right-of-way to right-of-way line, with a tracer wire and must be clearly marked by the Utility Company at the limits of the right-of-way.
3. Direct buried telephone and communications cable will not be required to be cased.

4. Lines carrying high-pressure natural gas, liquid petroleum products, ammonia, chlorine, or other hazardous or corrosive products need not be cased provided they are:
 - a. Welded steel pipelines;
 - b. Cathodically protected, if welded steel;
 - c. Coated in accordance with accepted Industry Standards, if welded steel;
 - d. Wall thickness is thick enough to meet requirements of the Federal Pipeline Safety Regulations - Code of Federal Regulations - Title 49 Code of Federal Regulations Parts 191 and 192 (Natural Gas) or Part 195 (Liquid Petroleum Gas) with respect to wall thickness;
 - e. Designed for operating stress levels in accordance with Federal Pipeline Safety Regulations;
 - f. Natural gas distribution and service lines with maximum pressure of sixty pounds per square inch (PSI) [414 Kpa] of copper, steel or plastic which have an inside diameter of two inches (50 millimeters) or less.
5. When a waiver of casing is requested, the Utility Company shall provide, as a part of the Permit, a statement of certification that Utility Company pipeline will comply with the applicable conditions and provisions contained in items (a) through (f) in Section B.5. above. D.O.T. Form No. 308, 'Cased Utility Line Waiver', located in the Appendix shall be used.
6. Gas pipelines not meeting applicable conditions and provisions (a) through (f) in Section B.5. above shall be cased within the right-of-way limits and shall be vented and marked at the outer right-of-way limits. The markers shall give the name of the owner and phone number to contact in case of an emergency.
7. Sanitary sewer lines crossing the right-of-way must be encased from right-of-way line to right-of-way line. An exception shall be made for gravity flow lines placed prior to highway construction, properly bedded, and constructed of heavy duty cast or ductile iron pipe with suitable mechanical and/or restraint joints and seals. Suitability shall be determined by the District Engineer or designee in writing.

8. Water lines must be cased, from toe to toe of backslope in ditch sections or toe to toe of fill slope in fill sections. Venting and sealing of casement is not required. Casement is not required provided:
 - a. Water line is placed prior to highway construction utilizing extra strength cast iron or ductile iron with mechanical and/or restraint joints and seals, and is properly bedded. The extra strength pipe is to be used from right-of-way line to right-of-way line.
 - b. Any copper, steel, or plastic waterline has an inside diameter of two inches (50 millimeters) or less.
9. All plastic pipe with inside diameter greater than two inches (50 millimeters) must be cased from right-of-way line to right-of-way line and meet minimum ASTM specifications and all applicable laws and codes. In certain instances as determined appropriate by KDOT in writing, minimum casing may be allowed requiring encasing from toe of backslope to toe of backslope in ditch sections and from toe of fill slope to toe of fill slope in fill sections.
10. Uncased Utility Company installations, which by reason of shallow depth or location make them vulnerable to damage from highway construction or maintenance operations, shall be protected with suitable bridging, concrete slabs or other appropriate measures.
11. Underground utility installations not listed below may be installed without protective casing, where it is acceptable to both the Utility Company and KDOT. Any such determination by KDOT shall be in writing. Approval will be determined by the District Engineer or designee on an individual basis and limited to:
 - a. Open trenched construction;
 - b. Small bores;
 - c. Pipelines that are continuous (seamless) without joints;
 - d. Gas lines designed using the National Gas Institute Guidelines for Pipelines Crossing Railroads and Highway. A computer printout must be submitted showing that the crossing is designed without encasement to meet stresses at the highway crossing.

C. BORING

1. Pits for boring, tunneling or jacking will not be permitted in the highway median and will not be permitted closer to the roadway than toe of fill in fill sections or toe of shoulder slope in ditch sections when allowed on the right-of-way.

2. Casing and pipeline installations shall be accomplished by dry boring, tunneling, jacking, trenching, or other approved methods.
 - a. The use of water under pressure (jetting) or puddling will not be permitted to facilitate boring, pushing, or jacking operations. Some boring may require water to lubricate cutter and pipe and under such conditions, may be considered dry boring, with prior written approval from the District Engineer or designee.
 - b. Where unstable soil conditions exist, boring or tunneling operations shall be conducted in such a manner as not to be detrimental to the roadside being crossed.
 - c. If excessive voids or a too large bored hole is produced during casing or pipeline installations, or if it is necessary to abandon a bored or tunneled hole, prompt remedial action shall be taken by the Utility Company, subject to the written approval of the District Engineer or designee.
 - d. All voids or abandoned holes caused by boring or jacking are to be filled by pressure grouting when deemed necessary by the District Engineer or designee in writing. The grout material should be a sand cement slurry with a minimum of two sacks of cement per cubic yard and a minimum of water to assure satisfactory placement.
3. The hole diameter resulting from bored or tunneled installations shall not exceed the outside diameter of the utility pipe, cable or casing (including coating) by more than 1.5 inches (40 millimeters) on pipes with an inside diameter of 12 inches (300 millimeters) or less; or two inches (50 millimeters) on pipes with an inside diameter greater than 12 inches (300 millimeters).

D. CASING MATERIAL

The following materials are acceptable for use in the casing of utility facilities when permitted by industry requirements and standards.

1. Welded steel pipe, smooth wall, in sound condition meeting the requirements of the current KDOT "Standard Specifications for State Road and Bridge Construction".
2. Corrugated metal pipe and coupling band meeting the requirements of the current KDOT "Standard Specifications for State Road and Bridge Construction".

3. Reinforced concrete pipe meeting the requirements of the current KDOT "Standard Specifications for State Road and Bridge Construction".
4. Vitrified clay pipe meeting the requirements of the current KDOT "Standard Specifications for State Road and Bridge Construction".
5. Cast iron pipe or ductile iron of the same class as used for carrier pipe, providing it meets the minimum ASTM Specifications. A statement certifying that such specifications are met will be submitted as a part of the permit.
6. Polyvinyl Chloride (PVC) meeting the requirements of the current KDOT "Standard Specifications for State Road and Bridge Construction".

High-Density Polyethylene (HDPE) providing it meets the minimum ASTM Specifications.

Chlorinated Polyvinyl Chloride (CPVC) providing it meets the minimum ASTM Specifications and all applicable laws and codes, in accordance with the listing below:

CPVC - WATER LINE PIPE

ASTM SPECIFICATION F 441

<u>Casing Diameter</u>	<u>Min. Wall Thickness</u>	<u>Schedule</u>
4 inches (100 mm)	0.237 inches (6.02 mm)	40
6 inches (150 mm)	0.280 inches (7.11 mm)	40
8 inches (200 mm)	0.322 inches (8.18 mm)	40
10 inches (250 mm)	0.365 inches (9.27 mm)	40
12 inches (300 mm)	0.460 inches (10.31 mm)	40

The use of PVC pipe for casing is acceptable up to a maximum diameter of 12 inches (300 millimeters).

7. Electric conduits may be of non-metallic materials such as polyvinyl chloride, high-density polyethylene, transite, or vitrified clay.

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PART THREE



UTILITY ACCOMMODATION POLICY FOR FULLY CONTROLLED ACCESS HIGHWAYS



PART THREE
UTILITY ACCOMMODATION POLICY
FOR FULLY CONTROLLED ACCESS HIGHWAYS

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PART THREE
UTILITY ACCOMMODATION POLICY
FOR
FULLY CONTROLLED ACCESS HIGHWAYS

I. STATEMENT OF POLICY

This policy is established pursuant to 23 U.S.C. 109 and 23 U.S.C. 111 and Federal Regulations promulgated there under, 2005 AASHTO Policy on Accommodation of Utilities within Highway Right-of-Way and 2005 Policy of the AASHTO Policy on Accommodations on Utilities within Freeway Right-of-Way prohibiting the longitudinal installation of Utilities along Full Control Access Highways except when a determination is made that would result in severe hardship or is contrary to the public interest.

It shall be the policy of the Secretary, to permit certain Utilities to locate longitudinally within the access control limits of Fully Controlled Access Highways when approved conditions are met.

Utilities that must cross over or under Fully Controlled Access Highways will be regulated in accordance with applicable Sections of Part Two "Utilities on Permitted Highways" of this Policy.

A. CRITERIA FOR LONGITUDINAL INSTALLATIONS

The Secretary may permit longitudinal installations of certain Utilities within the access control limits if the installation meets each of the following conditions:

1. The utility is underground;
2. No aboveground support utilities are within the access control limits, unless such utilities can be located at interchanges or highway Rest Areas;
3. Temporary access for construction by the Utility Company should be accomplished without using through traffic roadways or connecting ramps, and shall have no impact on the health, safety and welfare of the public. (Exceptions as noted in Part Three, Section II.A.10 and II.B.4);
4. The utility would not be used for transmitting gasses or liquids under pressure or for the transmissions of products that are flammable, corrosive, expansive, energized or unstable;
5. The utility shall present no hazard to life, health or property if it fails to function properly, is severed or otherwise damaged;
6. Utility will require minimum maintenance after installation;

7. The maintenance, use or future expansion of the highway will not be impaired and any costs to relocate Utility Company facilities will be born by the Utility Company;
8. Such use by the Utility Company will not restrict or exclude competitors or others who meet these conditions from equitable treatment;
9. The proposed use qualifies as a Categorical Exclusion under the Federal Highway Administration regulations for implementing the National Environmental Policy Act; and
10. The proposed installation meets a need for the KDOT Intelligent Transportation System.

B. LIABILITY

This policy does not confer any liability upon the Secretary for any future costs of damages to or relocation or removal of the Utility Company from the right-of-way for any reason.

C. PRINCIPLES

The underlying principles of this part of the policy are as follows:

1. Economic benefits realized can be passed directly to the general public as users of transportation and Utility Company facilities.
2. Public benefits may accrue if undisturbed land is preserved through joint use of the right-of-way corridors.
3. By being the most direct route with favorable grade and alignment, these corridors provide the most economic transmission route.
4. Protected access of these corridors offers more security to utility lifelines from accidental or malicious damage.

D. GENERAL

1. All Utility Company accommodations other than longitudinal on Fully Controlled Access Highways shall be in accordance with other Parts of this Utility Accommodation Policy.
2. Utility attachments to bridge structures on Fully Controlled Access right-of-way is prohibited except when adverse economic impacts are documented and approval is granted in writing by the Secretary.

3. For partial access control, see Part Two, Section I of this Utility Accommodation Policy.
4. This Policy does not apply to existing Utility Company installations, except when there is a major replacement of current Utility Company facilities.

E. LENGTH OF INSTALLATION

The minimum installation length in rural areas is twenty-five miles and shall be limited in urban areas to facilities which do not start and terminate within the same urbanized area. Exceptions will be considered on a case by case basis.

II. INSTALLATION AND MAINTENANCE GUIDELINES

A. UTILITY REQUIREMENTS

1. The Secretary shall establish a utility corridor along the outer edge of the right-of-way line and a utility access control line between the utility corridor and the roadway and ramps. The Secretary shall only establish a utility corridor on one side of the right-of-way. Where feasible, the utility shall place its facility within this corridor and conduct installation within this area.
2. Limited maintenance will be permitted on the underground facility from within the utility corridor.
3. The Utility Company's installation plan shall take into account:
 - a. Planned or likely improvements or alterations in the nature or configuration of the highway. In planning new or altered uses of the highway, the Secretary will undertake to notify interested Utilities of plans to permit those Utilities to plan their use of highways in a manner which will fulfill the purposes of this policy and make maximum effective use of the highway right-of-way.
 - b. Planned or likely improvements or alterations in the nature and configuration of the Utility Company system.
 - c. Planned or likely use of the utility corridor by other Utility Companies or private users whose installations may also qualify under this policy.
4. Permanent aboveground facilities shall not be placed within the access control of the highway facility except for documented hardship conditions as approved by the Secretary in writing or for installations at Rest Areas.

5. No part of the Utility Company's facility shall be placed in the Clear Zone except upon a finding of necessity by the Secretary. Any such approval shall include the means of installation and set forth requirements for policing and other controls necessary to protect highway users.
6. The Utility Company will furnish all materials and labor required for the proposed installation. The Utility Company may install its facility by manual or machine methods. Where feasible, the Utility Company shall plow its installation since this involves a minimum disturbance of the terrain. When it installs ducts, the ducts shall be installed to a depth that permits at least 42 inches (1050 millimeters) of ground cover. All ducts should be dry bored only unless specified otherwise. Upon completion of installation, the Utility Company shall return the disturbed area to its original condition. Backfill shall be compacted to the same condition as the surrounding area and seeded with a seed mix specified by the Secretary. The Utility Company is responsible for correcting any settlement due to the installation of their facilities.
7. When installation is authorized as provided in this Policy, the Utility Company may not remove or prune any trees or brush without written approval of the Secretary. The proposed installation route will be reviewed by the KDOT Landscape Architect and the District Engineer or designee. The Utility Company will be provided with a summary of the environmentally sensitive areas along the route and the Utility Company will design their installation to protect such areas. The Secretary may require that removed trees be replaced with new trees in the vicinity.
8. In the case of fiber optic or other telecommunication uses of the highway right-of-way, the Secretary may require the installation to be placed in underground duct(s), which shall include two ducts in addition to those the Utility Company proposes to utilize. All ducts should be banded together. Ducts will normally utilize PVC or polyethylene materials and have an inside diameter of four inches (100 millimeters). Additional ducts will become the property of the Secretary.
9. The installation of the duct shall include all appurtenances necessary or incidental to the operation of the facility, and shall include manholes or other access points at appropriate spacings to permit pulling of additional cables into the duct system without further excavation.
10. Where the Secretary finds that other means of access are not practicably available and imposes conditions for policing and other controls to protect highway users, the facility may be installed, serviced or maintained by direct access from through roadways or connecting ramps. The Utility Company will address safety aspects and develop a traffic control plan to mitigate safety concerns prior to any action taken.

11. A Traffic Control Plan shall be included as a part of the Utility Company's installation plans and shall address parking of the work crews and storage of materials. This Traffic Control Plan shall be in accordance with the Manual on Uniform Traffic Control Devices or the State of Kansas Traffic Control Standards. Whenever the Traffic Control Standards conflicts with the Manual, the Standards shall govern. No parking or storage of materials shall be allowed on the right-of-way unless no other alternative is available. If storage or parking is permitted, then it shall be located beyond the Clear Zone.
12. The Utility Company shall install permanent markers at appropriate intervals showing the approximate location of its underground facility. Markers shall not interfere with highway operations. The Utility Company shall also maintain records that describe the facility, its location, depth, size and other relevant data, which shall be available to the Secretary and to other interested Utilities. A copy of these records, including As-Built Plans and any subsequent revisions, shall be provided to the Secretary upon request.
13. The Utility Company will comply with Industry Standards for special marking techniques and location standards for their facility, when the Utility Accommodation Policy calls for more stringent procedures, the Policy shall control.
14. The Utility Company shall make no direct service connection to adjacent properties from the installed Utility Company facility, except that the Utility Company line or branch of the Utility Company line may exit the highway right-of-way at any point along the right-of-way, upon approval by the Secretary.
15. The Utility Company shall obtain all approvals for the authorized activities, including necessary environmental and federal regulatory authorizations, if applicable.
16. The Policy shall be implemented through a Utility Permit Agreement. Upon finding that a proposed installation meets the criteria and conditions of this Policy, the Secretary may authorize the execution of a Utility Permit Agreement.

B. THE SECRETARY'S AUTHORITIES AND RESPONSIBILITIES:

1. Longitudinal installation of a Utility Company facility is prohibited except upon a finding of necessity by the Secretary that:
 - a. The installation will not unreasonably affect the safety, design, construction, operation, maintenance or stability of the highway.

- b. There is adequate usable right-of-way available for Utility Company use that is not needed for planned highway expansion.
 - c. The proposed installation will not interfere with the present or future use of the highway.
 - d. Denial of use of highway right-of-way would have an adverse impact on the productivity of agricultural land. This determination shall be made upon the best information available and shall not be construed to reduce or eliminate the Utility Company's responsibilities in the event that the Secretary later determines that the highway facility requires modernization through reconstruction or widening.
- 2. The Secretary shall evaluate the proposed installation in terms of the criteria and conditions set forth herein. Upon finding that the proposed installation meets these criteria and conditions, the Secretary shall authorize the installation by executing a Joint Use Agreement as herein provided.
 - 3. The Secretary has the authority to establish utility corridors and utility access control corridors within the highway right-of-way. The Secretary may authorize the Utility Company to locate its facility within a utility access corridor or elsewhere within the right-of-way if it is determined that the authorized location will not unreasonably effect highway or traffic safety or otherwise impair the highway or its aesthetic qualities and is permissible under applicable laws or regulations. The Utility Access Control line shall not be more than 30 feet (nine meters) from the normal Highway right-of-way line. Variations may be necessary due to existing field conditions.
 - 4. The Secretary may authorize the Utility Company to install, service or maintain the Utility Company facility by direct access from the roadways or connecting ramps when it is found that other means of access are not practicably available. Prior to any authorization, the Utility Company will be required to address any safety concerns and submit a traffic control plan for approval.
 - 5. At bridge crossings or where unusual terrain, environmental or other conditions warrant, the Secretary may authorize the Utility Company to install a portion of its facility aboveground or at depths or under certain conditions which differ from those specified in this policy, provided it is determined that the installation will not unreasonably impair highway safety or the aesthetic quality of the land traversed.

6. The Secretary has authority to place inspectors on site to observe the Utility Company's installation activities and to request the presence of state or local police to assure the safety of highway travelers.
7. Upon reasonable demand and upon a finding by the Secretary that another Utility Company or person qualifies under this Policy, the Secretary may provide the necessary duct or ducts to the new applicant.
8. The Secretary recognizes that subsequent installations may result in potential construction conflicts of existing facilities. In all cases the new Utility Company is responsible for all damages to existing facilities or disruption of services, provided previously installed facilities were installed in accordance with field marker records and as-built plans submitted to the Secretary.
9. It is the responsibility of the Utility Company performing installation or maintenance work to locate and protect the facilities of other Utilities. The Secretary shall be indemnified and held harmless by Utility Company from any and all causes of action arising from the installation or maintenance of the utility facilities.

III. UTILITY PERMIT AGREEMENT

A. APPLICATION PROCEDURE

1. A Utility Company that proposes to install a facility longitudinally within a controlled access right-of-way shall request in writing, authority to do so from the Secretary. Thereafter, the Utility Company shall consult with the Secretary to achieve a plan that meets the objectives and conditions of this Policy. The Secretary will cooperate with the Utility Company in facilitating the proposed installation. When the Utility Company and the Secretary have reached agreement on a plan for Utility Company installation, the Utility Company shall submit formal drawings showing the location and specifications for the system. If the drawings are found to be in conformity with this Policy, the Secretary may enter into an Agreement with the Utility Company. By execution of this Agreement the Secretary approves the Utility Company's proposed use. The Utility Company may proceed with its proposed installation in conformity with the Agreement and this Policy.
2. The Agreement will contain provisions that implement the following general provisions:
 - a. To permit the Utility Company the right to enter upon the highway utility corridor for the purpose of conducting surveys and performing preliminary engineering studies and tests.

- b. To allow the right of ingress and egress to the Utility Company for installation or maintenance from the utility corridor.
- c. The requirement that the Utility Company will notify the Secretary of the location and time schedule for maintenance activities on the utility corridor.
- d. Provisions for the Utility Company to provide for liability insurance, notice of work starting and completion, traffic control provisions, and other pertinent items.
- e. Provisions for payments and fees that may include but are not limited to: 1) actual costs accrued by the Secretary and 2) negotiated fees for the joint use of right of way. This provision mandates that the Secretary shall not be liable for any costs accrued in the development of the Utility Company's plans.
- f. Clauses specifying the conditions under which the Secretary or the Utility Company may terminate the agreement and the Secretary's rights in the event of Utility Company's default under the Agreement.
- g. The rights of either party to the Agreement to correct any noncompliance with terms of the Agreement within a reasonable time.
- h. A penalty for non-compliance with terms of this policy or the Agreement.
- i. A clause determining ownership of the facilities in the event the Utility Company abandons or ceases to use its facilities. The Secretary may require the removal of the facilities.
- j. The maintenance, use or future expansion of the highway facility will not be impaired and any costs to relocate Utility Company facilities will be borne by the Utility Company.
- k. The Utility Company's responsibility for settlement of their trench backfill.
- l. If seeding is unsuccessful or in need of repair the Utility Company will be responsible for its repair.
- m. It is the responsibility of the Utility Company performing installation or maintenance work to locate and protect the facilities of other utilities. The Secretary shall be held harmless and indemnified by Utility Company from any and all causes of action arising from the installation or maintenance of the facilities.

- n. If the Utility Company fails to relocate the facilities in a timely manner following receipt of notice from the Secretary, the Secretary may remove the facilities and the cost of such removal shall be paid by the Utility Company.
- o. Additionally, if the Utility Company fails to relocate the utilities in a timely manner following receipt of notice from the Secretary, the Utility Company shall reimburse the Secretary for any liability the Secretary may incur from any construction claim attributable to Utility Company's failure to relocate utilities timely.

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PART FOUR



ATTACHMENTS TO BRIDGES AND OTHER STRUCTURES OR INSTALLATIONS NEAR RETAINING WALL SYSTEMS



**PART FOUR
ATTACHMENTS TO BRIDGES
AND
OTHER STRUCTURES
OR
INSTALLATIONS NEAR RETAINING WALL SYSTEMS**

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PART FOUR
ATTACHMENTS TO BRIDGES
AND
OTHER STRUCTURES
OR
INSTALLATIONS NEAR RETAINING WALL SYSTEMS

I. GENERAL PROVISIONS

A. HIGHWAY PERMIT

1. Applications for all Utility Company attachments to bridges and structures or installations near a Retaining Wall System shall be authorized by a Highway Permit - Attachment to Bridges and Other Structures or Installations near Retaining Wall Systems (D.O.T. Form No. 310), which is included in the Appendix and is part of this policy incorporated by reference.
2. Permit requirements regarding, but not limited to, liability insurance are included in the Highway Permit-Attachment to Bridges and Other Structures or Installations near Retaining Wall Systems (D.O.T. Form No. 310).
3. Structure insurance coverage, for damages that may occur by reason of pipeline attachments carrying PETROLEUM, HAZARDOUS, AND/OR CORROSIVE PRODUCTS, shall be provided by the Utility Company in an amount determined by the District Engineer or designee for each bridge, structure or retaining wall system. The amount of insurance shall at a minimum meet or exceed the replacement cost of the structure as determined by the District Engineer or designee. The amount of insurance shall be reviewed annually and adjusted with the current cost of replacement of the structure.
4. A permit allowing a Utility Company the privilege of attaching its facilities to a bridge or highway structure or locating its facilities near a retaining wall system does not constitute any permanent right for such attachment or placement. Any removal, remodeling, maintenance, or relocation of the attachment or installation, will be promptly accomplished by the Utility Company at no cost to KDOT.
5. Provisions for a Utility Company attachment may be included during the design of a structure. See Section III.A, 2 for more information.

6. Utilities, when permitted, are to be installed, serviced, or maintained without access from the bridge deck or without interfering with the retaining wall system backfill.
7. The KDOT Bureau of Design - Bridge Section shall review and approve the Utility Company's proposal, particularly the measures to be taken to preserve the retaining wall system, the highway, its safe operation, maintenance and appearance.

B. HAZARDOUS MATERIALS

Permit applications for pipelines carrying hazardous materials shall contain emergency contact phone numbers available on a twenty-four hour basis, in case of emergency. The Utility Company shall notify the appropriate District Engineer or designee in writing of any changes in the calling list within seven (7) days of any change.

II. FULLY CONTROLLED ACCESS HIGHWAYS

A. GENERAL

1. Attachment to bridges and structures or installation of utilities near retaining wall systems on Fully Controlled Access Highways is prohibited, except when adverse economic impacts are documented and approval is granted in writing by the Secretary or the utilities provide service to maintain highway facilities.
2. When special and/or economic conditions warrant and an attachment to a bridge or structure or installation near a wall system on a Fully Controlled Access Highway structure is justified, then this Policy requirements will control as outlined below under "Permitted Highways", unless specific requirements are imposed by KDOT.

III. PERMITTED HIGHWAYS

A. DESIGN

1. The Utility Company is responsible for the design of their facility's attachment to a bridge or highway structure or installation near a retaining wall system and shall submit plans for review and approval. Attachment plans will include catalog cuts of attaching hardware and construction plans detailing the method of attaching the utility and position of the utility on any bridge or structure.

2. When a new structure is in the design stage, the Utility Company, through cooperation with the Bureau of Design - Bridge Section, may arrange for conduit and pipeline support systems to be included in the bridge construction plans. The additional cost of extra structural steel and fabrication needed to support the pipeline and/or conduit beyond what is needed for highway purposes will be determined, and this cost will be assessed to the Utility Company at a reasonable rate by the District Engineer at the time of design. This amount will be submitted along with the Highway Permit - Attachment to Bridges and Other Structures or Installations near Retaining Wall Systems (D.O.T. Form No. 310), which will include final design details outlining this attachment. The conduit itself for bridge attachment is to be supplied and installed later by the Utility Company. No Permit will be issued until all costs assessed to the Utility Company are paid in full.
3. Transition of alignment of utility from paralleling right-of-way to bridge or structure should be perpendicular to the roadway.
4. Satisfactory provisions for longitudinal conduit or pipeline movement due to temperature differentials or lineal expansion and contraction of the bridge shall be made in conduit or pipeline designs. Such provisions may be line bends, flexible couplings, or other methods acceptable under appropriate Industry Codes and Practices.
5. Utility Company lines will not be permitted through bridge abutments.
6. Manholes used to service the utility shall not be located in the bridge deck. Manholes shall be located beyond the edge of the wearing surface of the bridge or structure and outside of the roadway (pavement and shoulders) and median.

B. LOCATION AND METHOD OF ATTACHMENT

1. The Bureau of Design - Bridge Section may be contacted for recommended locations and acceptable types of attachments for various bridges. Although highway structure types and site conditions vary, some general standards have been adopted. The Utility Attachment Placement drawings are available in the Appendix.
2. Whenever possible, attachments will be placed on the downstream side of bridges. Generally, Utility Company pipelines and conduits will be attached to diaphragms located between girders.
3. Prohibited:
 - a. Anchors driven using the explosive type driving force method.
 - b. All welding and drilling on steel members.
 - c. All drilling in prestress and reinforced concrete girders.

- d. Attachment of conduits to bridge handrail and guardrail components.
- e. Pipelines using bridge members to resist forces generated by fluids in motion.

C. EXCAVATIONS

1. GENERAL

- a. Any open trench or excavation required in conjunction with bridge or structure attachments or installation near a retaining wall system will be backfilled within forty-eight hours after work is completed, in accordance with KDOT "Standard Specifications for State Road and Bridge Construction", or as directed by the District Engineer or designee.

2. BORING

- a. No utilities shall be placed within a distance 2 times H (the wall height) measured from the back face of the retaining wall system as shown in Figure 1.
- b. Trenching may be allowed a distance greater than 2 times H measured from the back face of the retaining wall following review of application (D.O.T. Form No. 310) and written approval by KDOT Bureau of Design – Bridge Section.
- c. Trenching may be allowed in front of the retaining wall at a distance greater than 1 time H measured from the front face of the wall following review of application (D.O.T. Form No. 310) and written approval by KDOT Bureau of Design – Bridge Section.

3. OPEN EXCAVATIONS

- a. No open excavations shall be allowed within 2 times H of the back face of the retaining wall.
- b. Open excavations may be allowed a distance greater than 2 times H measured from the back face of the retaining wall upon review of application (D.O.T. Form No. 310) and written approval by KDOT Bureau of Design – Bridge Section.
- c. Open excavations may be allowed in front of the retaining wall system at a distance greater than 1 times H measured from the front face of the retaining wall upon review of application (D.O.T. Form No. 310) and written approval by KDOT Bureau of Design – Bridge Section.

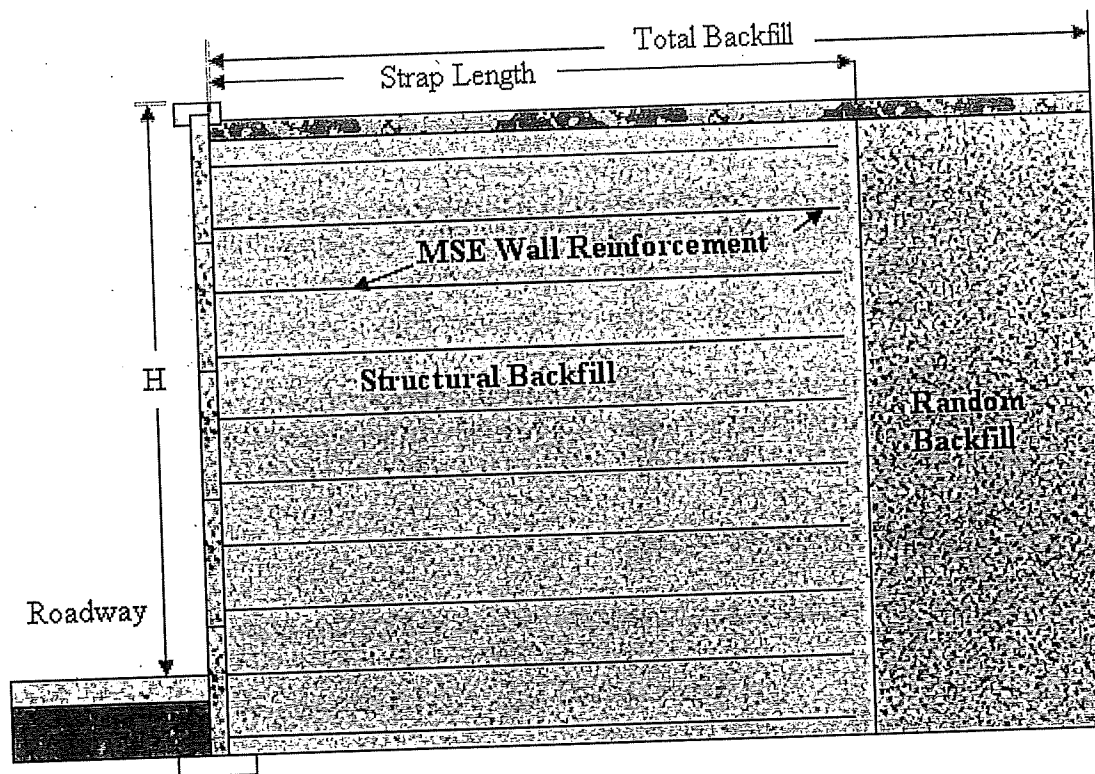


Figure 1 – MSE Wall Sketch

D. MATERIALS

1. All attachments to bridges and structures or placement near retaining wall systems shall be of durable materials designed for long service life expectancy and free from routine servicing and maintenance. Conformance with current applicable materials specifications and codes is mandatory.
2. All steel materials used in attaching a utility to a structure must be stainless or galvanized.

E. MAINTENANCE

1. Maintenance of the Utility Company facility is the responsibility of the Utility Company.
2. The installations shall be maintained to the satisfaction of the Secretary or designee.
3. Maintenance of the utility attachments to bridges will not be performed from the bridge deck.

F. PIPELINES

1. Pipelines carrying liquid petroleum, hazardous, or corrosive products will not be permitted to be attached to bridges or structures or installed near retaining wall systems except in extreme cases where the Utility Company can document that any other location is extremely difficult and of unreasonable cost to the Utility Company and to the consumer and the Secretary or designee approves the attachment or placement in writing.
2. Pipelines carrying natural gas, liquid petroleum products, or other volatile fluid or gas under pressure will require installation of emergency shut off valves. Valves shall be placed on each side of the bridge.
3. Pipelines shall be encased:
 - a. Attachment to Bridges: the length of the bridge with the casing carried beyond the back of the bridge abutments and opened or vented at each end to detect leakage, when the line carries fluids such as:
 - i. petroleum, hazardous and/or corrosive products, sewage etc., or
 - ii. water lines carried over railroads, streets, other highways, or freeways.
 - b. Placed near a Retaining Wall System: the length of the wall system with the casing carried beyond the end of the wall and opened or vented at each end to detect leakage, when the line carries fluids such as water, petroleum, hazardous and/or corrosive products, sewage, or etc.
4. Carrier and casing pipe shall be suitably insulated from electric power line attachments.

G. COMMUNICATIONS AND ELECTRIC LINES

1. Attachment to Bridges
 - a. Communication and electric power line attachments shall be suitably insulated, grounded and carried in protective conduit or pipe from point of exit from the ground to re-entry.

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APPENDIX

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5. National Electrical Safety Code, Institute of Electrical and Electronic Engineers, Inc.
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9. American Society for Testing and Materials (ASTM).
10. Manual on Uniform Traffic Control Devices, U.S. Department of Transportation, Federal Highway Administration.
11. "AASHTO Roadside Design Guide", Current Addition, American Association of State Highway and Transportation official publication.
12. Highway Maintenance Manual, Bureau of Construction and Maintenance, Kansas Department of Transportation.
13. Highway Sign Manual, Bureau of Traffic Engineering, Kansas Department of Transportation.
14. Standard Specifications for State Road and Bridge Construction, Kansas Department of Transportation.
15. State of Kansas Traffic Control Handbook for Flaggers

CLEAR ZONE

Clear Zone Distances (In feet from the edge of the through traveled way)

[U.S. Customary Units]

DESIGN SPEED	DESIGN ADT	FORESLOPES			BACKSLOPES		
		1V:6H or flatter	1V:5H TO 1V:4H	1V:3H	1V:3H	1V:5H TO 1V:4H	1V:6H or flatter
40 mph or less	UNDER 750	7-10	7-10	**	7-10	7-10	7-10
	750-1500	10-12	12-14	**	10-12	10-12	10-12
	1500-6000	12-14	14-16	**	12-14	12-14	12-14
	OVER 6000	14-16	16-18	**	14-16	14-16	14-16
45-50 mph	UNDER 750	10-12	12-14	**	8-10	8-10	10-12
	750-1500	14-16	16-20	**	10-12	12-14	14-16
	1500-6000	16-18	20-26	**	12-14	14-16	16-18
	OVER 6000	20-22	24-28	**	14-16	18-20	20-22
55 mph	UNDER 750	12-14	14-18	**	8-10	10-12	10-12
	750-1500	16-18	20-24	**	10-12	14-16	16-18
	1500-6000	20-22	24-30	**	14-16	16-18	20-22
	OVER 6000	22-24	26-32 *	**	16-18	20-22	22-24
60 mph	UNDER 750	16-18	20-24	**	10-12	12-14	14-16
	750-1500	20-24	26-32 *	**	12-14	16-18	20-22
	1500-6000	26-30	32-40 *	**	14-18	18-22	24-26
	OVER 6000	30-32 *	36-44 *	**	20-22	24-26	26-28
65-70 mph	UNDER 750	18-20	20-26	**	10-12	14-16	14-16
	750-1500	24-26	28-36 *	**	12-16	18-20	20-22
	1500-6000	28-32 *	34-42 *	**	16-20	22-24	26-28
	OVER 6000	30-34 *	38-46 *	**	22-24	26-30	28-30

* Where a site specific investigation indicates a high probability of continuing crashes, or such occurrences are indicated by crash history, the designer may provide clear-zone distances greater than the clear-zone shown in Table 3.1. Clear zones may be limited to 30 ft for practicality and to provide a consistent roadway template if previous experience with similar projects or designs indicates satisfactory performance.

** Since recovery is less likely on the unshielded, traversable 1V:3H slopes, fixed objects should not be present in the vicinity of the toe of these slopes. Recovery of high-speed vehicles that encroach beyond the edge of the shoulder may be expected to occur beyond the toe of slope. Determination of the width of the recovery area at the toe of slope should take into consideration right-of-way availability, environmental concerns, economic factors, safety needs, and crash histories. Also, the distance between the edge of the through traveled lane and the beginning of the 1V:3H slope should influence the recovery area provided at the toe of slope. While the application may be limited by several factors, the foreslope parameters which may enter into determining a maximum desirable recovery area are illustrated in Figure 3.2.

CLEAR ZONE

Clear Zone Distances (In meters from the edge of the through traveled way)

DESIGN SPEED	DESIGN ADT	Metric Units					
		FORESLOPES			BACKSLOPES		
		1V:6H or flatter	1V:5H TO 1V:4H	1V:3H	1V:3H	1V:5H TO 1V:4H	1V:6H or flatter
60 km/h or less	UNDER 750	2.0 - 3.0	2.0 - 3.0	**	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
	750 - 1500	3.0 - 3.5	3.5 - 4.5	**	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5
	1500 - 6000	3.5 - 4.5	4.5 - 5.0	**	3.5 - 4.5	3.5 - 4.5	3.5 - 4.5
	OVER 6000	4.5 - 5.0	5.0 - 5.5	**	4.5 - 5.0	4.5 - 5.0	4.5 - 5.0
70-80 km/h	UNDER 750	3.0 - 3.5	3.5 - 4.5	**	2.5 - 3.0	2.5 - 3.0	3.0 - 3.5
	750 - 1500	4.5 - 5.0	5.0 - 6.0	**	3.0 - 3.5	3.5 - 4.5	4.5 - 5.0
	1500 - 6000	5.0 - 5.5	6.0 - 8.0	**	3.5 - 4.5	4.5 - 5.0	5.0 - 5.5
	OVER 6000	6.0 - 6.5	7.5 - 8.5	**	4.5 - 5.0	5.5 - 6.0	6.0 - 6.5
90 km/h	UNDER 750	3.5 - 4.5	4.5 - 5.5	**	2.5 - 3.0	3.0 - 3.5	3.0 - 3.5
	750 - 1500	5.0 - 5.5	6.0 - 7.5	**	3.0 - 3.5	4.5 - 5.0	5.0 - 5.5
	1500 - 6000	6.0 - 6.5	7.5 - 9.0	**	4.5 - 5.0	5.0 - 5.5	6.0 - 6.5
	OVER 6000	6.5 - 7.5	8.0 - 10.0*	**	5.0 - 5.5	6.0 - 6.5	6.5 - 7.5
100 km/h	UNDER 750	5.0 - 5.5	6.0 - 7.5	**	3.0 - 3.5	3.5 - 4.5	4.5 - 5.0
	750 - 1500	6.0 - 7.5	8.0 - 10.0*	**	3.5 - 4.5	5.0 - 5.5	6.0 - 6.5
	1500 - 6000	8.0 - 9.0	10.0 - 12.0*	**	4.5 - 5.5	5.5 - 6.5	7.5 - 8.0
	OVER 6000	9.0 - 10.0*	11.0 - 13.5*	**	6.0 - 6.5	7.5 - 8.0	8.0 - 8.5
110 km/h	UNDER 750	5.5 - 6.0	6.0 - 8.0	**	3.0 - 3.5	4.5 - 5.0	4.5 - 5.0
	750 - 1500	7.5 - 8.0	8.5 - 11.0*	**	3.5 - 5.0	5.5 - 6.0	6.0 - 6.5
	1500 - 6000	8.5 - 10.0*	10.5 - 13.0*	**	5.0 - 6.0	6.5 - 7.5	8.0 - 8.5
	OVER 6000	9.0 - 10.5*	11.5 - 14.0*	**	6.5 - 7.5	8.0 - 9.0	8.5 - 9.0

* Where a site specific investigation indicates a high probability of continuing crashes, or such occurrences are indicated by crash history, the designer may provide clear-zone distances greater than the clear-zone shown in Table 3.1. Clear zones may be limited to 9 m for practicality and to provide a consistent roadway template if previous experience with similar projects or designs indicates satisfactory performance.

** Since recovery is less likely on the unshielded, traversable 1V:3H slopes, fixed objects should not be present in the vicinity of the toe of these slopes. Recovery of high-speed vehicles that encroach beyond the edge of the shoulder may be expected to occur beyond the toe of slope. Determination of the width of the recovery area at the toe of slope should take into consideration right-of-way availability, environmental concerns, economic factors, safety needs, and crash histories. Also, the distance between the edge of the through traveled lane and the beginning of the 1V:3H slope should influence the recovery area provided at the toe of slope. While the application may be limited by several factors, the foreslope parameters which may enter into determining a maximum desirable recovery area are illustrated in Figure 3.2.

**KANSAS UNDERGROUND UTILITY DAMAGE PREVENTION
ACT
K.S.A. 66-1801 (DIG SAFE)**

1-800-334-7233 (Dig Safe)

Color Coding for Locating Utility Company Lines

RED	Electric Power Lines, Cables, Conduit and Lighting Cables
YELLOW	Gas, Oil, Steam, Petroleum, or Gaseous Materials
ORANGE	Communication, Alarm or Signal Lines, Cables or Conduit including Cable TV
BLUE	Water, Irrigation and Slurry Lines
GREEN	Storm Drain Lines/Sewer
PINK	Survey Markings
WHITE	Proposed Excavation

Tolerance Zone: The area within 24 inches (600 millimeters) of the outside dimensions in all horizontal directions of an underground facility.

KANSAS DEPARTMENT OF TRANSPORTATION HIGHWAY FENCING POLICY

I. PURPOSE

Fencing is one means of delineating and preserving the acquired control of access for a highway. It should be noted that right of way markers or controlled access signs may also be used with or without fence to identify the access control line.

II. POLICY

Access control fencing shall be placed along the access control line as may be shown on highway plans for Interstate highways and other full-access control highways where it is determined to be necessary to preserve access control.

Fencing may be placed on the access control line for other partial access control highways where it is deemed appropriate to delineate access control.

The determination of the appropriate use of access control fencing shall be accomplished at a field check. The type of fence best suited to the specific location should be provided as defined in Section III.

Any changes in the fencing, after the fencing review, shall be documented and maintained in a permanent record.

Access Control fence is owned and maintained by KDOT only for the purpose of delineating access control. Although adjacent property owners are permitted to pasture livestock against this fence, KDOT assumes no responsibility for constructing or maintaining a livestock-tight fence.

III. TYPES OF FENCE

When access control fencing is deemed appropriate under this policy and depending upon the nature of the adjoining property, the following types of fence shall be constructed either separately or in combination:

- A. Multi strand barbed wire or woven wire: non residential areas
- B. Woven wire: suburban type residential areas (generally where lot sizes are over one acre) and rural residences.

- C. Chain link: adjacent to developed areas, such as schools, churches, playgrounds, residential areas (generally where lot sizes are under one acre), industrial areas, etc., and for special screening effect where it is desirable.
- D. Single-wire cable: where aesthetics may be enhanced by a fence of lower height.

IV. FENCING PROCEDURES

- A. LOCATION: Normally, fences are located parallel and 6 to 12 inches inside the right of way line. For continuity, some fence may be erected substantially on a continuous line even though there may be some irregular right of way corners outside the fence line. Fence will not be constructed across drainage structure openings where the fence is winged into the wingwalls of these structures or carried over the top of the structure.
- B. SUBSTITUTION OF FENCE: When the adjacent owner desires to substitute another fence which is acceptable to KDOT and which serves the purpose of delineating access control, the owner may be allowed to do so, provided the owner enters into an agreement containing the following:
 - 1 The property owner is responsible for all costs associated with the construction of substitute fence. (Except where this substitute fence is to replace a property owner fence acquired during acquisition.)
 - 2. The fence is located along the right of way on the right of way line or on the owner's property. (On interstate in urban or suburban areas this will have to be on the owner's property because state owned fence will also be installed.)
The fence does not present a sight obstruction to traffic.
 - 4. The work is accomplished within the time set up for construction of the project. If the work is accomplished after construction of the project, the owner's plan must be approved by the District Engineer and the District Engineer may either remove or continue to maintain any existing state owned fence. On interstate in urban or suburban areas the state owned fence will remain in place.
 - 5. Ownership and maintenance of the substituted fence shall be vested in the property owner.
 - 6. If any of the fence installation requires activity on the right of way a permit will be required.
 - 7. A time frame within which the substitute fence will be installed. If the work is not completed in the time frame agreed between the owner and KDOT, then KDOT will erect fence consistent with this policy.
- C. INTERSECTING PRIVATE FENCE:

1. When KDOT is constructing access control fence, they shall connect all intersecting private fences by the placement of an end post assembly.
 2. When a property owner desires to construct an intersecting fence to existing KDOT fence, the property owner shall place an end post assembly at the intersection with KDOT fence.
- D. **FRONTAGE/ACCESS ROADS:** Along highways with frontage/access roads within the right of way, the access control fence may be located between the frontage/access road and the through traffic lanes or an interchange ramp.
- E. **SALVAGE OF EXISTING FENCE:** Where existing private fence is acquired, the property owner will be allowed to salvage their fence prior to commencement of construction or utility relocation. If the owner's salvage activities create a need for temporary fence, the owner shall be responsible for its installation.
- F. **TEMPORARY FENCE:** When construction activities involve removing existing KDOT fence or fence acquired by KDOT from the owner which the owner chooses not to salvage, the contractor will be responsible for furnishing and installing any necessary temporary fence until such time that the permanent fence is in place.
- G. **WATER GAPS:** At locations where the fence is tied into the wingwalls of the drainage structure or carried over the top of the structure, the property owner may be allowed to erect fence along the right of way line. The property owner shall install end post assemblies and shall be responsible for the maintenance of the fence, so erected by the property owner.
- H. **FENCING FOR TWO-LANE ROADWAY ON FOUR-LANE RIGHT OF WAY:** The fence is normally placed at the final right of way or access control lines in accordance with this policy.

APPROVED BY:

Warren L. Sick 1/09/02
Warren L. Sick Date
Assistant Secretary and State Transportation Engineer

GUIDELINES FOR KDHE MONITORING WELLS ON KDOT RIGHT OF WAY

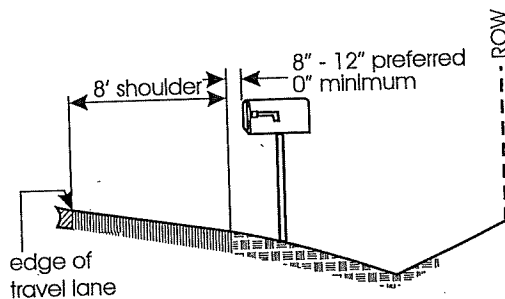
1. When an application, described in the memorandum of Understanding is submitted to KDOT, the application must include five (5) copies of a drawing of proposed well locations along with property and right of way lines
2. The permit shall be obtained by the petitioner doing the work. The petitioner shall acquire all the necessary signatures on the permit, i.e. "City" approval if necessary, and give KDOT a reasonable amount of time (30 days) to issue the permit.
3. KDOT may issue the permit conceptually authorizing a specific number of wells at proposed locations to be drilled. KDOT reserves the right to deny approval of specific wells that can be located off KDOT right of way/easement. It will then be the petitioner's responsibility to prove that all other possible locations have been exhausted before KDOT approves these sites. The petitioner shall contact KDOT (by phone) for approval as to the exact location of each well before installation, and as the contamination pattern is being established. This notification will occur no less than one working day before drilling on KDOT right of way/easement. KDOT will designate a contact representative for each permit when it is issued.
4. The petitioner shall follow the KDOT Utility Accommodation Policy and comply with the Highway Use of Right of Way Permit Agreement.
5. Wells shall be located outside of the highway clear zone, see KDOT Utility Accommodation Policy for chart. Wells shall not be located in the toe of the slope.
6. The District will decide if wells will be flush with the ground or raised, and this shall be stated on the permit. Wells will be installed in accordance with current KDHE standards. Ground markers are to be located at the outer limits of the right of way line. During maintenance/construction activities, the petitioner will locate and mark wells as needed.
7. During installation and monitoring, the petitioner shall use approved traffic control procedures.
8. KDOT shall be notified whenever the petitioner is going to access KDOT right of way, whether this is for installation or monitoring of a well. The petitioner is also responsible for notifying Dig Safe prior to drilling.
9. During monitoring, the petitioner may park their vehicles on the shoulder and/or roadway only with the KDOT Engineer's permission. They may park their vehicle on the cross road right of way.
10. KDOT shall be notified when a well is to be abandoned. Wells will be plugged using current KDHE approved method.

Mailboxes in Roadway Right of Way

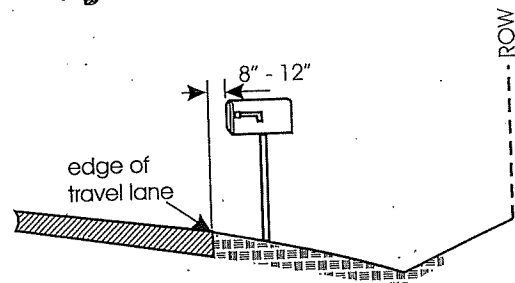
Since mailboxes are normally located within the "clear zone" of the traveled way, crashworthy characteristics of mailboxes and supports are a concern. Also, mailboxes' close proximity to the roadway often results in damage by maintenance equipment. The following information suggests design and placement of mailboxes and supports.

Placement Recommendations

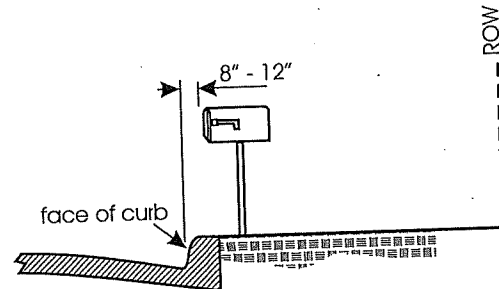
Lateral installation of mailboxes must offer the mail carrier easy access to the box from the delivery vehicle as well as necessary clearance from the traveled way. The following illustrations provide suggested installation locations relative to several road and street situations. (All proposed mailbox placements should be reviewed with the local post office prior to actual installation.)*



Lateral placement with shoulder or turnout

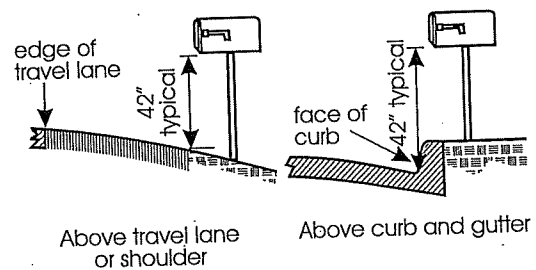


Lateral placement with no shoulder or turnout



Lateral placement with curb and gutter

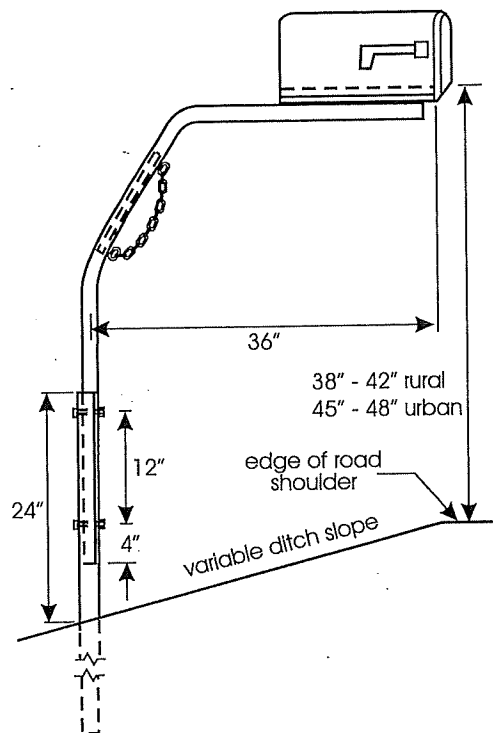
The height of mailboxes is governed by the United States Postal Service, which recommends an installation height of 42 to 48 inches, again for convenient access by the mail carrier.



Height of the mailbox

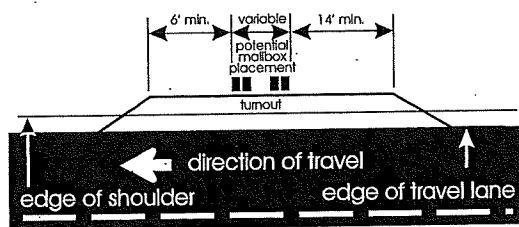
*Note: In consideration of uniformity and crashworthy features, some agencies have established programs to furnish and install approved design supports if property owners provide the mailbox.

One particular support design has been used effectively in some areas to reduce damage from snow plows and other maintenance equipment. This post provides a cantilever support, which places the vertical post section several additional feet from the traveled way. An example of this design is shown below.



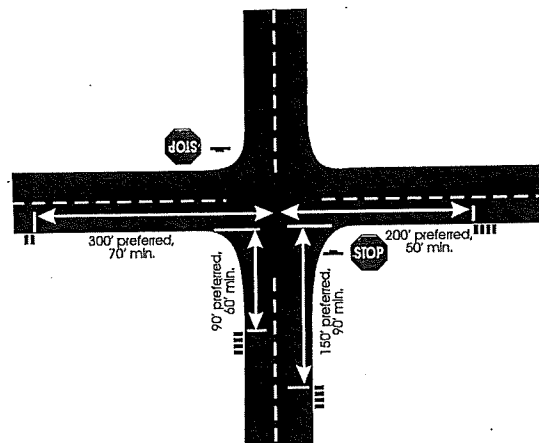
Mailbox support (steel pipe and sign post)

Mail delivery can be made safer and more convenient through the use of turnouts. These designs can be most effective where multiple mailboxes are present requiring the carrier to spend a considerable length of time in one location. An example of a suggested turnout design is shown in the following figure.

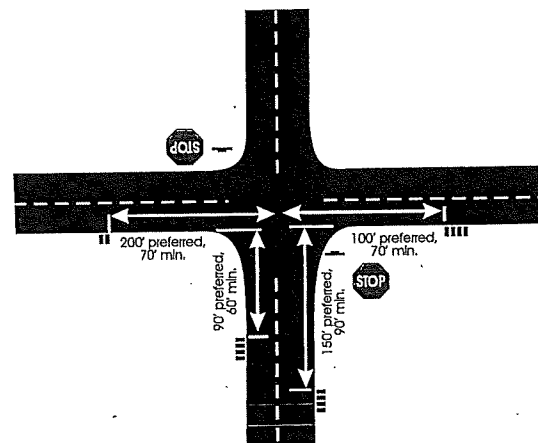


Longitudinal placement for turnout

Mailbox installations near intersections also should be studied for the potential safety of road users and mail carriers as well as convenience of the home owner. Suggested locations for mailbox installations are shown in the following figures.



Mailbox placement at rural intersections where through road speed limit $\geq$ 55 mph

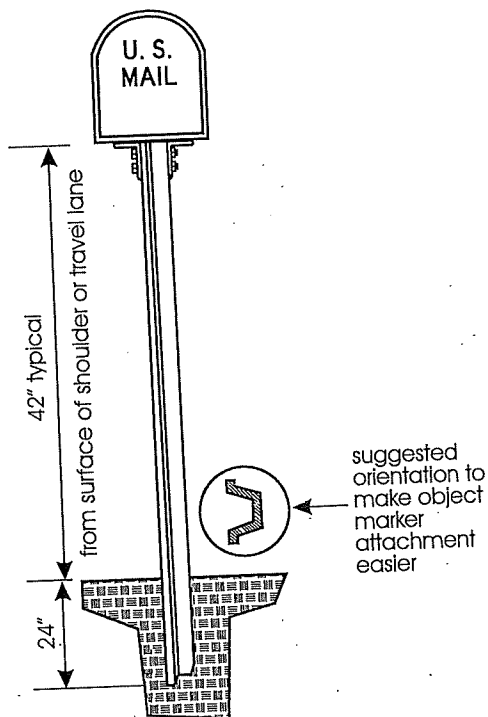


Mailbox placement at intersections where through road speed limit $<$ 55 mph

Mailbox Supports

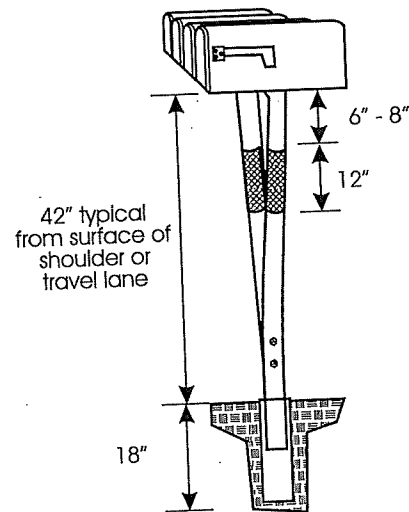
Supports or posts for mailboxes are of two general types: single support and multiple support. Although many existing mailboxes are supported on wood posts or by other means, crash testing has indicated that light metal or plastic are the best materials for meeting crash-worthy recommendations.

Support for a single mailbox can be provided by a channel post or a 2 to 2-1/2-inch thin wall steel pipe. Two small mailboxes can be mounted on a single support with the use of a proper adapter plate. Single supported mailboxes should not be placed closer than 2 feet apart, with a maximum of two single supports grouped together to avoid the "ramp effect" on vehicle impact. American Association of State and Highway Transportation Officials (AASHTO) guidelines recommend a spacing of 3/4 the mounting height. The following shows a suggested single mailbox support.

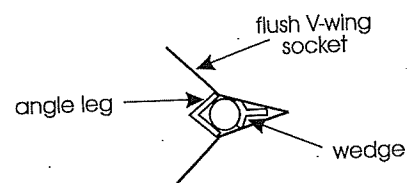
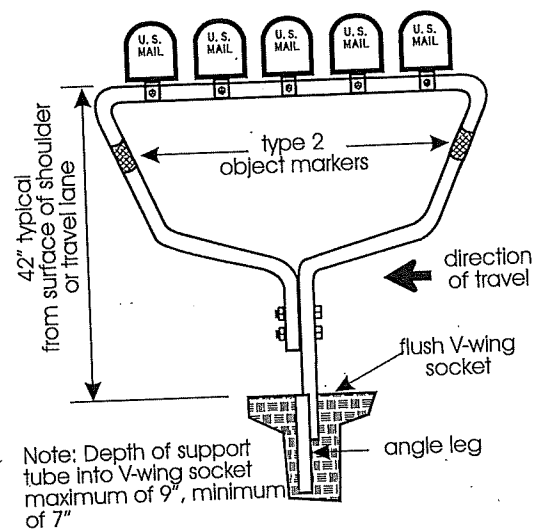


Installation of single mailbox support

Depending on the size of the mailboxes, up to five individual boxes can be installed on multiple support, commonly referred to as a "coat hanger" design. Adjacent multiple supports should not be placed closer than 4 feet, with no limit on the number of adjacent groups. The following figures show recommended multiple support design.



Installation of multiple mailbox support

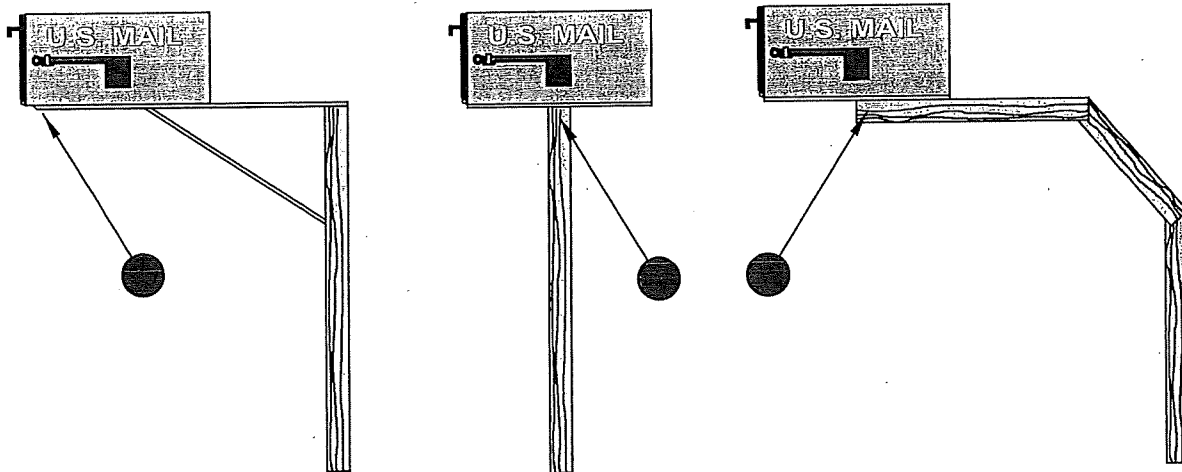


Installation of multiple mailbox support

These designs have been implemented in Texas. The Texas Department of Transportation and AASHTO's *A Guide for Erecting Mailboxes on Highways*, published in 2002, can provide more detailed information on design and experience.

Object Markers for Mailboxes

Use of proper object markers can provide increased visibility of mailbox installations at night. The markers should be blue. Red is not an approved color for this application.



SUGGESTED MARKER PLACEMENT FOR MAILBOXES

NOTE:

Mailbox markers are to be blue in color.

NOTE:

Installation and maintenance of mailbox markers shall be the responsibility of the property owner.

Kansas Department of Transportation

Standing Permit Policy for Land Surveyors working within the State Highway System Right-of-Way

The Kansas Department of Transportation (KDOT) establishes the following policy regarding survey activities within the Right-of-Way of the State Highway System of the State of Kansas. All survey activity occurring within the Right-of-Way of the State Highway System shall be governed by this policy. Surveyors functioning as a subcontractor (Contractor Construction Staking) on a construction project shall abide by the contract requirements, but will not be required to obtain a permit. KDOT survey personnel are also exempted from the permit requirement.

A surveyor, as an individual or as a business firm (henceforth referred to as the Surveyor), shall obtain a Standing Permit from each District in which their work is to be performed. Standing permits may be granted, at the discretion of the District Engineer, to individuals or firms with satisfactory compliance with permit conditions. Standing permits may be issued for a maximum period of one year.

The Surveyor shall request a standing permit by submitting a D.O.T. Form No. 304 – Highway Permit, Use of Right of Way. A separate permit request shall be submitted for each District. When the request has been approved and returned to the Surveyor, it shall be the responsibility of the Surveyor to have a copy of the signed permit on site while working within the State Highway System Right-of-Way.

All traffic control used on the State Highway Right-of-Way shall conform to the current Manual on Uniform Traffic Control Devices (MUTCD) and established State Traffic Control standard drawings. Traffic Control Standard drawings (TE700SI, TE702SI, TE704SI, TE710SI, TE720SI, TE722SI, TE730SI, TE744SI, TE746SI and TE748SI or other applicable standard drawings), developed from the MUTCD for ease of interpretation are available for reference.

The Surveyor shall notify the appropriate KDOT Area Office prior to actually commencing any activities within the State Highway Right-of-Way covered by the standing permit. The area office shall also be notified upon the completion of work. The location and dates of the beginning and completion of all work will be documented and logged by the Surveyor. This documentation log shall be kept with the standing permit. Approval of such work may be given by e-mail, fax or in writing. The Surveyor shall record the name of the individual giving authorization and the date authorization was received.

Vehicles within the State Highway Right-of-Way and within 30 feet of the travel way shall utilize amber rotating lights or amber strobe lights mounted on the top of the vehicle. Unattended vehicles and equipment should be parked off of State Highway Right-of-Way or no closer than 30 feet from the travel way.

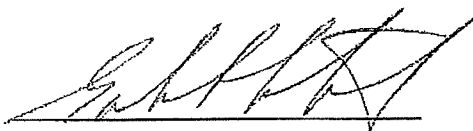
All personnel working outside of a vehicle and anywhere within the State Highway Right-of-Way shall wear, as a minimum, a high visibility (American National Standards Institute, Inc. (ANSI) Class II) safety vest with retro-reflective striping.

The permit of any individual or firm who fails to follow this policy may be revoked. Future requests for a permit may also be denied for failure to follow this policy.

D.O.T. Form No. 304 and Traffic Control Standard drawings may be picked up at any KDOT Area Office. There will be no fee for a standing permit.

(11-06-2003)

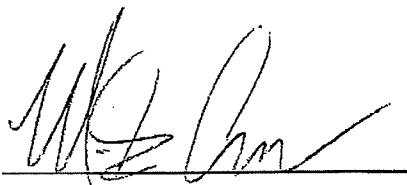
Recommended by:



G. David Comstock, P.E.
Director of Engineering and Design

11-14-03

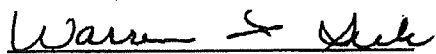
Date



Mike Crow, P.E.
Director of Operations

11/14/03
Date

Approved by:



Warren L. Sick, P.E.
Assistant Secretary &
State Transportation Engineer

11/17/03
Date

Kansas Department of Transportation

Policy on City Owned Welcome Signs Along the Highway Right of Way

BACKGROUND: Except for official highway signs that are the city's responsibility according to the Connecting Link Maintenance Agreements, the installation, by cities, of signs and other structures on the highway right of way is generally discouraged. However, in some instances, cities have requested and received permission to install signs on highway right of way near the city limits that identify the city and present a positive statement about the city's beautification efforts. In recognizing this, the Kansas Department of Transportation needs to establish a policy to ensure that this process is handled equitably, and that a clear and safe roadside is maintained without compromising the integrity of the standard highway signs in that area.

POLICY: If a suitable location is not available on city owned property or private property, and there is a suitable location available on highway right of way, a city may install Welcome signs on State-owned highway right of way through the permit process if the following criteria is met:

- The message must be limited to the city's name, or either of the messages "Welcome to (city)" or "(city) Welcomes You." In addition, the city's officially adopted graphical logo may also be included on the sign.
- A graphical rendition of the proposed sign should be included with the permit request.
- The sign shall be located outside of the clear zone applicable to the highway at the sign's location.
- The sign should be located near the city limit, and preferably just inside the city limits.
- The sign should not interfere or compete with any official highway signs in the area.
- The sign must be located so that it does not block the visibility of, nor the sight distance from, any entrances or side roads.
- The city must agree to assume all costs associated with the installation and maintenance of the sign, and any lighting and landscaping associated with it. The city must also agree to mow the grass/vegetation on a regular basis within a 3 m (10 foot) radius around the sign.
- In cases where a sign must be relocated because of a highway project, the city must assume full responsibility for the relocation of the sign to a suitable location.

Approved:

W. M. Lackey
W. M. Lackey
Assistant Secretary and
State Transportation Engineer

Steve Woolington
Steve Woolington
Director of Operations

Date:

5-28-99

KANSAS DEPARTMENT OF TRANSPORTATION

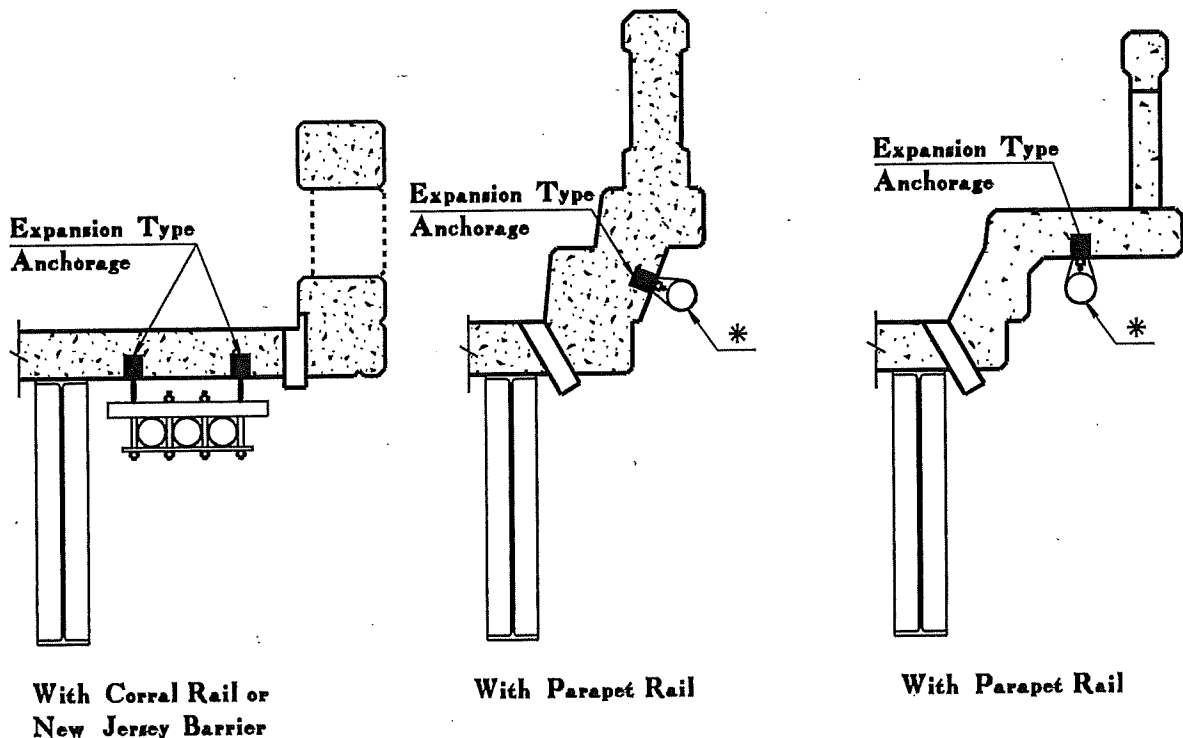
UTILITY ATTACHMENT PLACEMENT

For a Steel Superstructure Bridge with bent plate diaphragms

Support Spacing
_____ meters
(_____)feet

Diameter Conduit(s)
_____ mm
(_____)inches

Weight (Includes Conduit,
Support System and Cables)
_____ kg/ m
(_____)lbs/ ft.



SINGLE OR MULTIPLE CONDUITS - ALTERNATE LOCATIONS -

* Drilling, welding, or cutting of any structural steel is not allowed.
Use Conduit or Beam Clamps in place of drilling or cutting.

NOTE: All steel materials used in attaching a utility to a structure must be stainless or galvanized.

Plot Date : 5/9/2007

View= Plot1

Plotted By : ronalds

Plot File : W:\Bridge Inspection\Br Schen\Bridge Insp Manual\Utility Attachment\utilman.dgn

KANSAS DEPARTMENT OF TRANSPORTATION

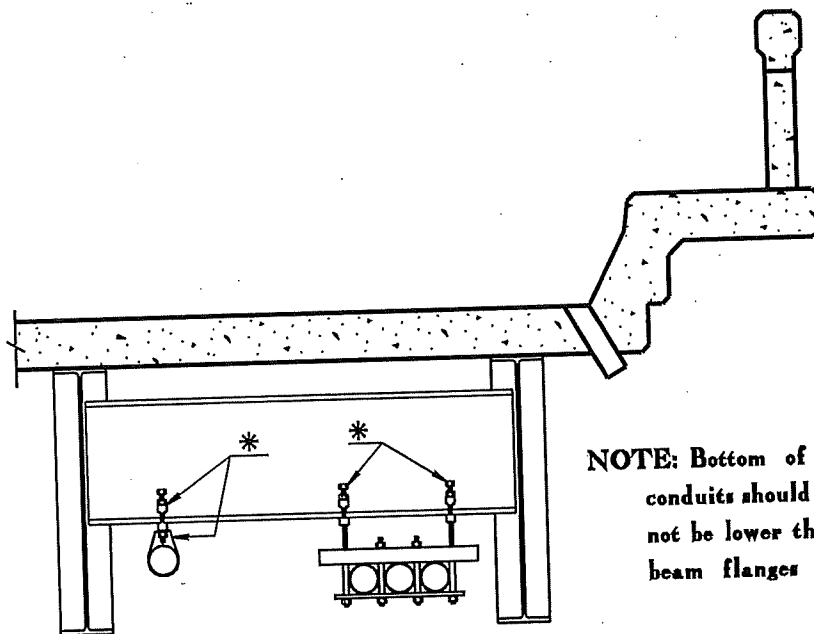
UTILITY ATTACHMENT PLACEMENT

For a Steel Superstructure Bridge with bent plate diaphragms

Support Spacing
_____ meters
(_____)feet

Diameter Conduit(s)
_____ mm
(_____)inches

Weight (Includes Conduit,
Support System and Cables)
_____ kg/ m
(_____)lbs./ ft.



SINGLE OR MULTIPLE CONDUITS - PREFERRED LOCATION -

(See additional sheet for - ALTERNATE LOCATION -)

- * Drilling, welding, or cutting of any structural steel is not allowed.
Use Conduit or Beam Clamps in place of drilling or cutting.

**NOTE: All steel materials used in attaching a utility
to a structure must be stainless or galvanized.**

Plot Date : 5/9/2007

View= Plot1

Plotted By : roads

Plot File : W:\Bridge Inspection\Br-School\Bridge Insp Manual\Utility Attachment\utilityman.dgn

KANSAS DEPARTMENT OF TRANSPORTATION

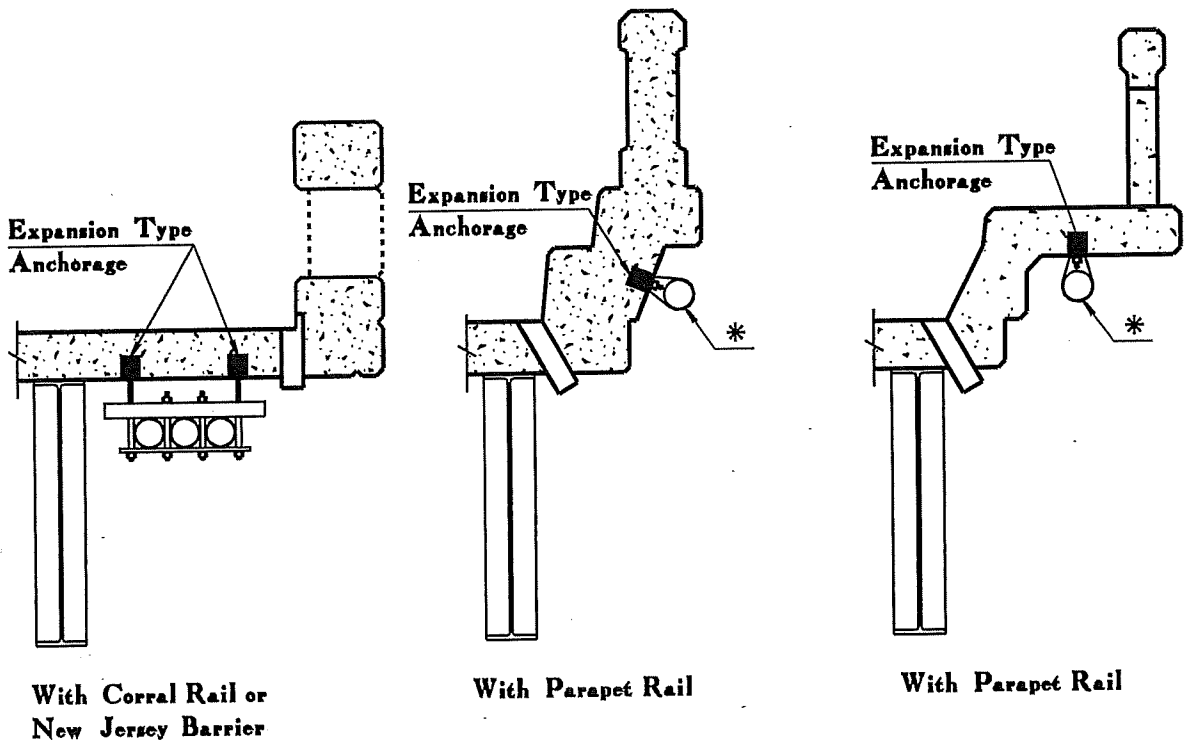
UTILITY ATTACHMENT PLACEMENT

For a Steel Superstructure Bridge with cross frame diaphragms

Support Spacing
_____ meters
(_____)feet

Diameter Conduit(s)
_____ mm
(_____)inches

Weight (Includes Conduit,
Support System and Cables)
_____ kg/ m
(_____)lbs/ ft.



SINGLE OR MULTIPLE CONDUITS - ALTERNATE LOCATIONS -

- * Drilling, welding, or cutting of any structural steel is not allowed.
Use Conduit or Beam Clamps in place of drilling or cutting.

NOTE: All steel materials used in attaching a utility to a structure must be stainless or galvanized.

Plot Date: 5/9/2007

View= Plot2

Plotted By: roads

Plot File: W:\Bridge Inspection\B-School\Bridg Insp Manuals\Utility Attachment\Utility man.dgn

KANSAS DEPARTMENT OF TRANSPORTATION

UTILITY ATTACHMENT PLACEMENT

For a Steel Superstructure Bridge with cross frame diaphragms

Support Spacing

_____ meters

(_____)feet

Diameter Conduit(s)

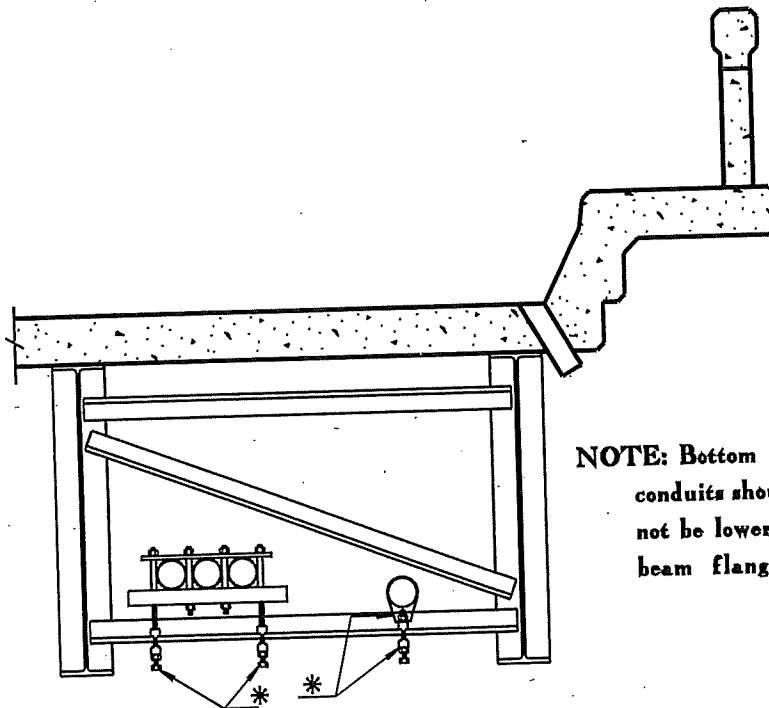
_____ mm

(_____)inches

Weight (Includes Conduit,
Support System and Cables)

_____ kg/ m

(_____)lbs./ ft.



NOTE: Bottom of
conduits should
not be lower than
beam flanges

SINGLE OR MULTIPLE CONDUITS - PREFERRED LOCATION -

(See additional sheet for - ALTERNATE LOCATION -)

- * Drilling, welding, or cutting of any structural steel is not allowed.
Use Conduit or Beam Clamps in place of drilling or cutting.

NOTE: All steel materials used in attaching a utility
to a structure must be stainless or galvanized.

Plot Date : 5/9/2007

View= Plot2

Plotted By : rradus

Plot File : W:\Bridge Inspection\B-School\Bridge Insp. Manual\Utility Attachments\utb man.dgn

KANSAS DEPARTMENT OF TRANSPORTATION

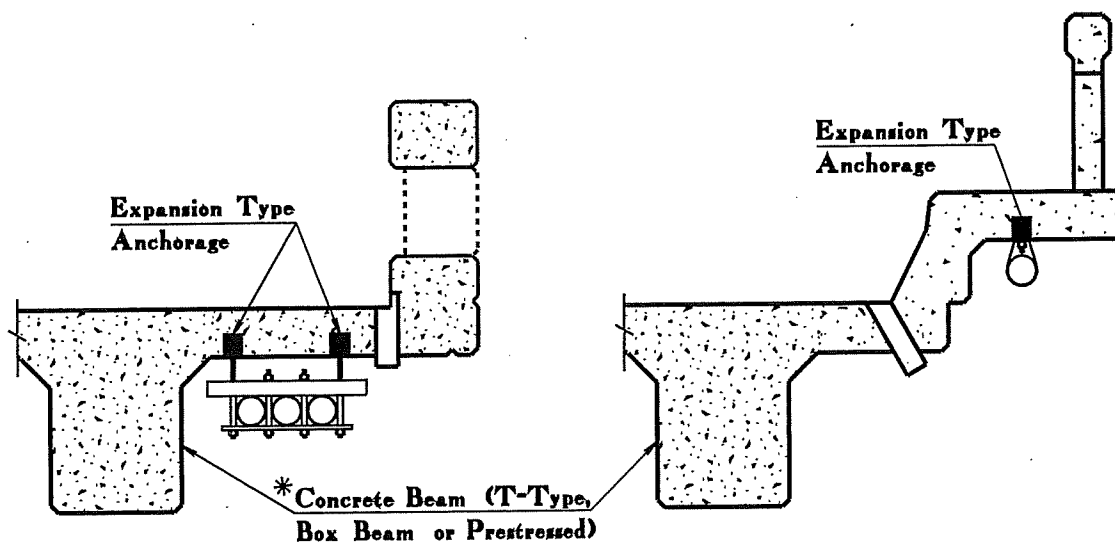
UTILITY ATTACHMENT PLACEMENT

For Concrete Beam Type Superstructures

Support Spacing
_____ meters
(_____) feet

Diameter Conduit(s)
_____ mm
(_____) inches

Weight (Includes Conduit,
Support System and Cables)
_____ kg/m
(_____) lbs./ft.



With Corral Rail or
New Jersey Barrier

With Parapet Rail

*** NOTE: ATTACHMENT ANYWHERE TO THE CONCRETE
SUPERSTRUCTURE (BEAM) WILL NOT BE ALLOWED.**

**SINGLE OR MULTIPLE CONDUIT
- ATTACHMENT LOCATION ON CONCRETE BEAM BRIDGES -**

**NOTE: All steel materials used in attaching a utility
to a structure must be stainless or galvanized.**

Plot Date : 5/9/2007

View= Plot3

Plotted By : roads

Plot File : W:\Bridge Inspection\B-Schulz\Bridge Insp Materials\Utility Attachments\ultraman.dgn

KANSAS DEPARTMENT OF TRANSPORTATION

UTILITY ATTACHMENT PLACEMENT

For a Concrete Slab Type Superstructure

Support Spacing

_____ meters

(_____) feet

Diameter Conduit(s)

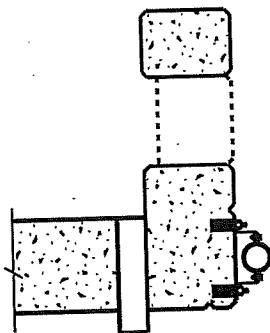
_____ mm

(_____) inches

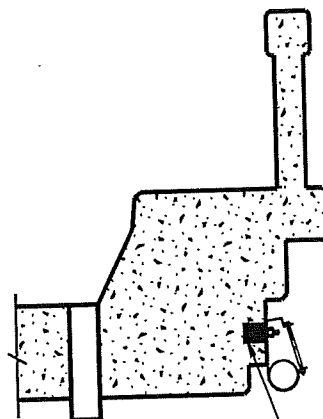
Weight (Includes Conduit,
Support System and Cables)

_____ kg/ m

(_____) lbs./ ft.



With Corral Rail or
New Jersey Barrier



Expansion Type
Anchorage

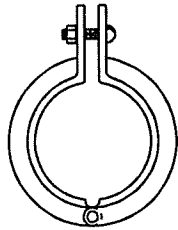
With Parapet Rail

SINGLE CONDUIT - LOCATIONS -

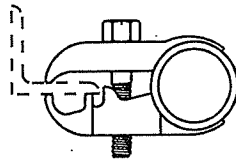
NOTE: All steel materials used in attaching a utility to a structure must be stainless or galvanized.

KANSAS DEPARTMENT OF TRANSPORTATION

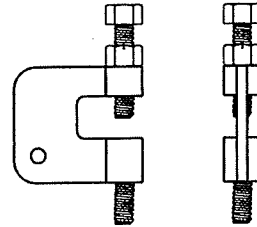
SOME ACCEPTABLE HANGER & CLAMP TYPES



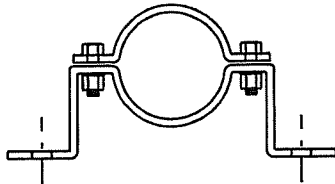
**SPLIT RING
HANGER**



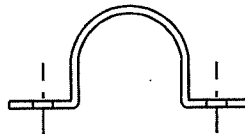
**PARALLEL PIPE AND
CONDUIT CLAMP**



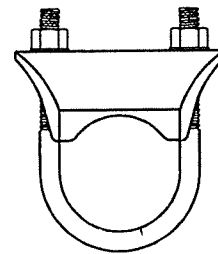
**"C" CLAMP
WITH LOCKNUT**



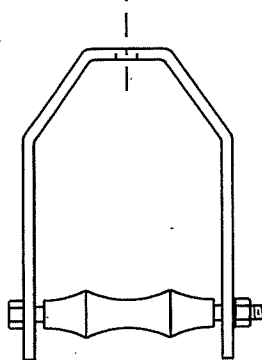
**OFFSET
PIPE CLAMP**



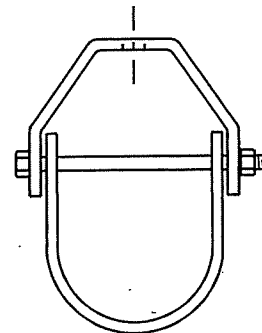
**HOLD DOWN
PIPE CLAMP**



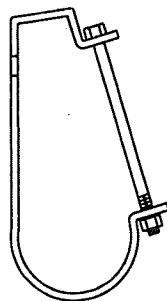
**RIGHT ANGLE
PIPE CLAMP**



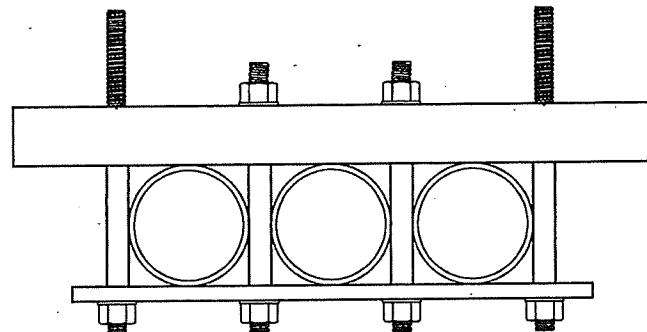
PIPE ROLLER HANGER



CLEVIS HANGER



T-SLOT HANGER



DUCT SUPPORT SYSTEM

Plot Date : 5/9/2007

View= Plot-4

Plotted By : ronalds

Plot File : W:\Bridge Inspection\B-School Bridge Insp Manual\Utility Attachments\ulhman.dgn

DRUMS WITHOUT ATTACHMENTS) AND CATEGORY 2 (i.e. - PORTABLE SIGN ST (WITH SIGNS), TYPE II AND III BARRICADES, AND VERTICAL PANELS) DEVICES USED ON THE PROJECT ARE NCHRP REPORT 350 COMPLIANT.

2) PROVIDE TO THE ENGINEER A COPY OF THE ENTIRE FHWA NCHRP REPORT 350 ACCEPTANCE LETTER (WZ-xxx) FOR ANY CATEGORY 2 DEVICE (i.e. - PORTABLE SIGN STANDS (WITH SIGNS), TYPE II AND III BARRICADES, AND VERTICAL PANELS) USED ON THE PROJECT. WORK ZONE FHWA NCHRP REPORT 350 ACCEPTANCE LETTERS (WZ-xxx) ARE AVAILABLE ON THE INTERNET AT:

http://safety.fhwa.dot.gov/roadway_dept/road_hardware/listing.cfm?code=work

3) CERTIFY THAT THE TRUCK MOUNTED ATTENUATORS (TMA'S) (WHICH ARE DEFINED AS CATEGORY 3 DEVICES BY THE FHWA MEMORANDUM) WERE PURCHASED PRIOR TO OCTOBER 1, 1998, AND INCLUDE A COPY OF THE ENTIRE FHWA ACCEPTANCE LETTER STATING THAT THE TMA'S ARE NCHRP REPORT 230 COMPLIANT; OR IF THE DEVICES WERE PURCHASED AFTER OCTOBER 1, 1998, INCLUDE A COPY OF THE ENTIRE FHWA'S ACCEPTANCE LETTER STATING THAT THE TMA'S ARE NCHRP REPORT 350 COMPLIANT.

ALL CATEGORY 1 & 2 DEVICES SHALL BE NCHRP REPORT 350 COMPLIANT. TMA'S, PURCHASED PRIOR TO OCTOBER 1, 1998, MAY BE USED UNTIL THE END OF THEIR SERVICEABLE LIVES.

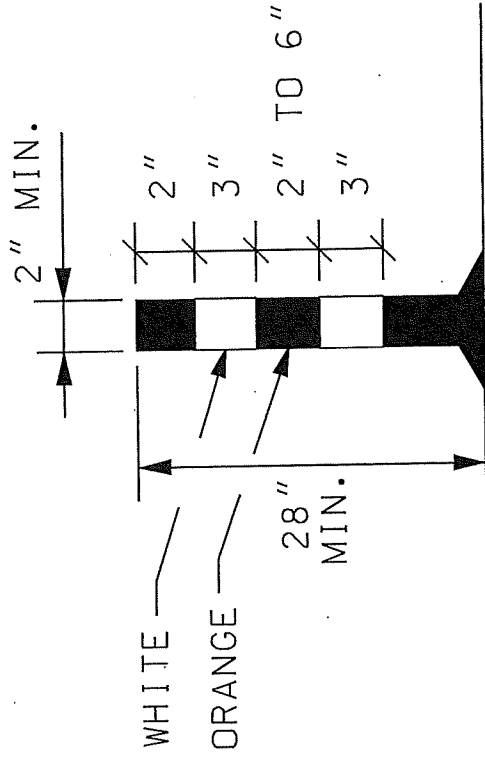
13. TYPE "A" LOW INTENSITY WARNING LIGHTS:

A TYPE "A" LOW INTENSITY WARNING LIGHT IS AN L.E.D. BI-DIRECTIONAL FLASHING WORK ZONE WARNING LIGHT.

CHANNELIZING
DEVICE

IN
(S
OF
IS

THE STRIPES SHALL BE PLACED IN THE MIDDLE OF THE SIDE OF THE
CHANNELIZATION.



TUBULAR MARKER

THE TWO WHITE RETROREFLECTIVE STRIPES SHALL BE ASTM TYPE III SHEETING.

TAPER FORMULAS:

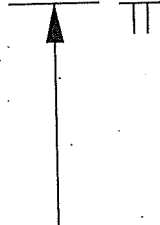
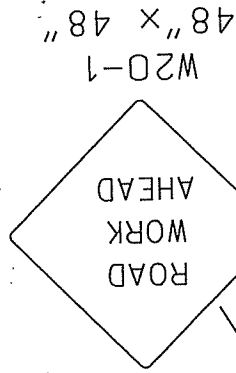
$$L = WS \text{ FOR SPEEDS OF 45 MPH OR MORE}$$

$$L = WS^2/60 \text{ FOR SPEEDS OF 40 MPH OR LESS}$$

AD TO HEAD
IDENTIFIER

CLOSURE

(ONE).



" TYPE III BARRICADE

ROAD OPEN

(ONE).

FIGURE 4: TY

NOTES:

1. SIGNS:

THE R11-4 (ROAD CLOSED TO THRU TRAFFIC C LOCAL TRAFFIC ONLY) SIGN SHALL BE USED W TO THE POINT OF COMPLETE CLOSURE OF THE THAN 1 MILE.

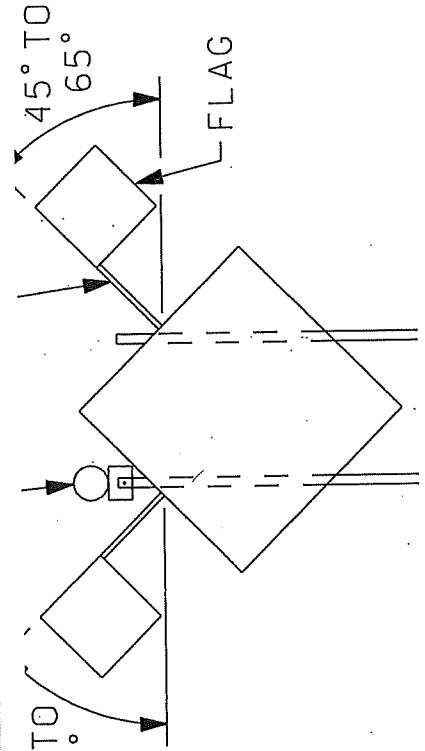
THE R11-3A (ROAD CLOSED # MILES AHEAD L ONLY) SIGN SHALL BE USED WHEN THE DISTAN OF COMPLETE CLOSURE OF THE ROADWAY IS 1

THE WORDS "BRIDGE OUT" (OR BRIDGE CLOSED FOR THE WORDS "ROAD CLOSED" ON THE R11-3 WHERE APPLICABLE.

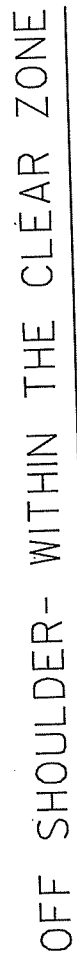
2. BARRICADE PLACEMENT:

A) COMPLETE ROAD CLOSURE

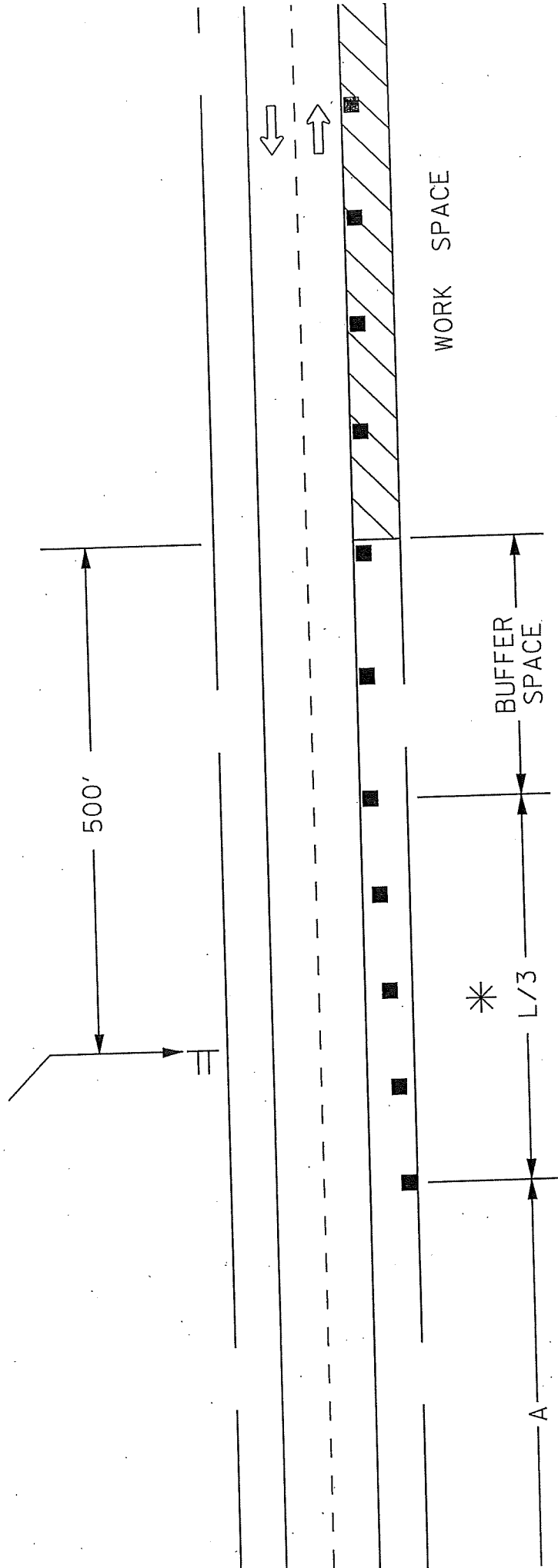
WHEN A ROADWAY IS CLOSED, TYPE III BA PLACED END-TO-END TO COMPLETELY COVER SHOULDERS. WHEN ACCESS MUST BE ALLOW OR OTHER OFFICIAL/GOVERNMENT VEHICLES SHALL BE LONGITUDINALLY STAGGERED FAF ANOTHER TO ALLOW SAFE PASSAGE OF VEHI



BE ATTACHED (IN THE POSITION SHOWN) ON THE W1-1(TURN), W1-2(CURVE), W1-3(REVERSE TURN CURVE), W3-3(SIGNAL AHEAD), W4-2(LANE REDU LANE ROAD), W20-5(LANE CLOSED), W20-7A(FLA (BE PREPARED TO STOP) SIGNS AND ANY OTHER SHOWN ON THE PLANS OR DIRECTED BY THE ENGI AND STAFFS ARE TO BE ATTACHED IN SUCH A MA WILL NOT BE OBSCURED. THE FLAGS MAY BE EI VINYL MATERIAL. THE FLAGS SHALL BE SUBSID CONSTRUCTION SIGN BID ITEMS.



END
ROAD - WORK
KG20-2
48" x 24"



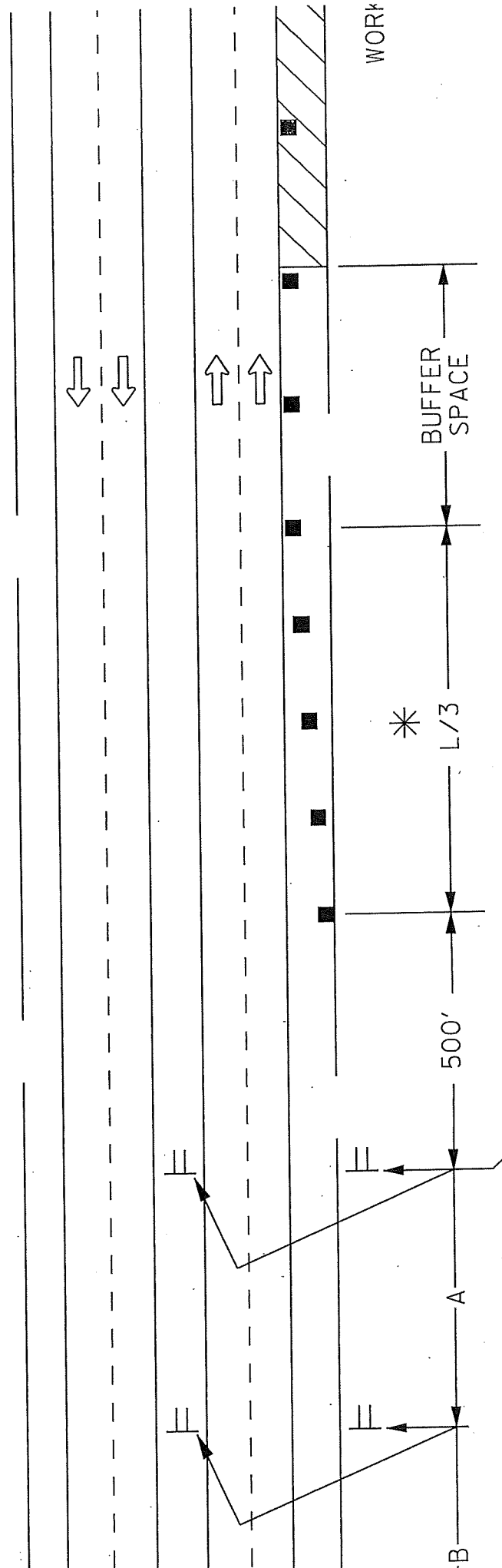
WORK SPACE

OFF SHOULDER- WITHIN THE CLEAR ZONE



W20-1

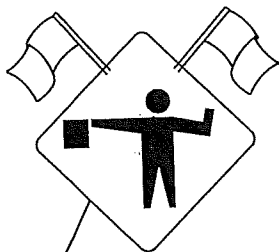
48" x 48"





R2-1

24" x 30"

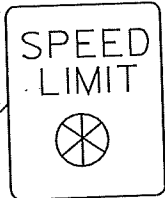


W20-7A
48" x 48"

*

KM4-20
24" x 6"

WORK ZONE



R2-1
24" x 30"

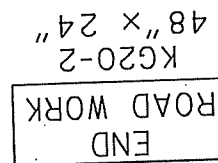


W3-4
48" x 48"

*

USE TYPE "A" LOW INTENSITY WARNING LIGHTS
OPERATIONS ONLY OR AS DIRECTED BY ENGINEER.

FLAGGER AND PILOT CAR



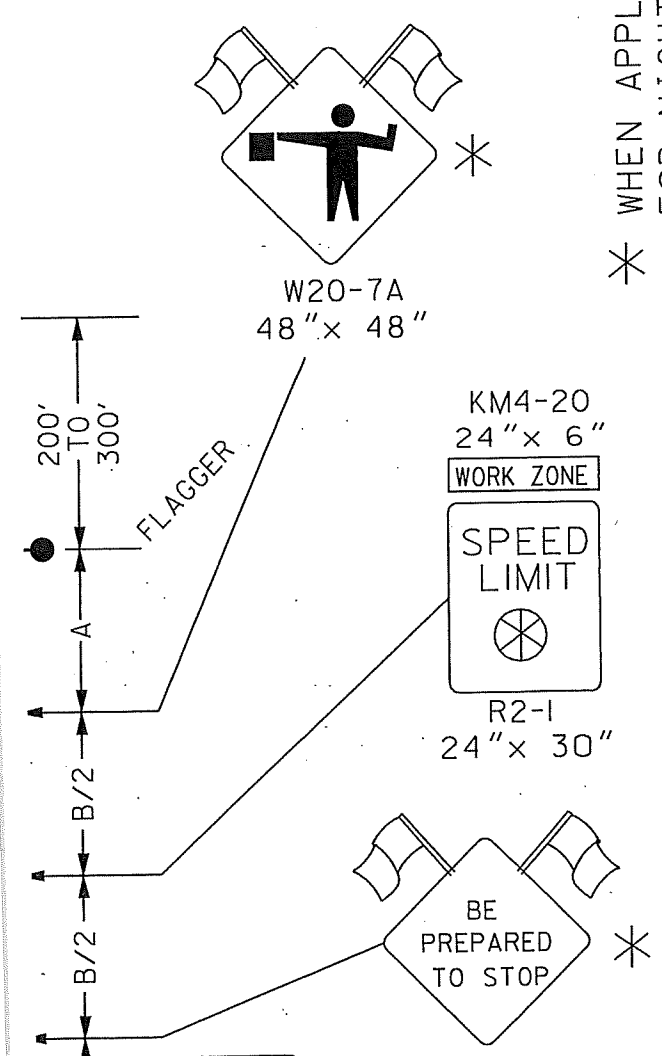
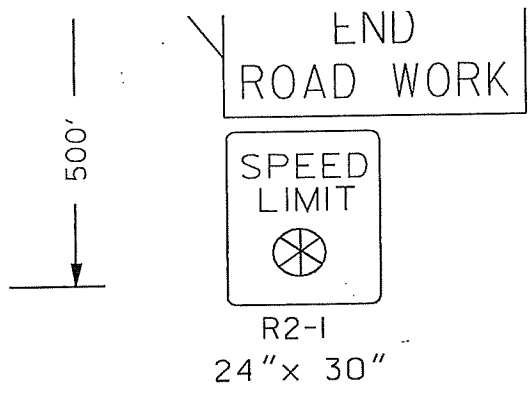
KG20-2
48" x 24"

500'



W14-3
36" x 48" x 48"

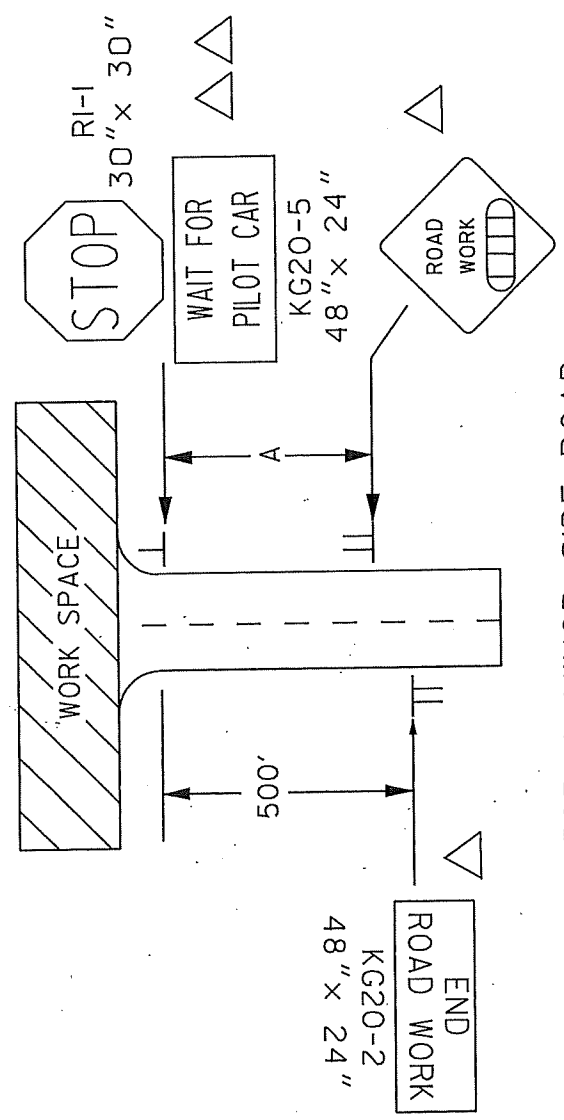
CONICAL DELINEATORS OR DRUMS
ON CENTERLINE BETWEEN W20-4
AND FLAGGER



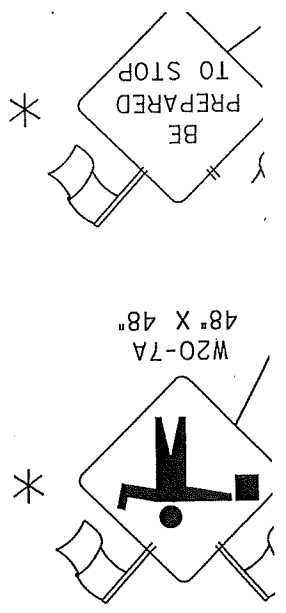
* WHEN APPLICABLE, USE TYPE "A" LOW INTENSITY WARNING FOR NIGHTTIME OPERATIONS ONLY OR AS DIRECTED BY I

FLAGGER AND PILOT CAR

- △ NOT REQUIRED ON SUBSTANTIAL
- △△ THE KG20-5 (WAIT FOR PILOT CAR) BE MOUNTED ON AN APPROVED POST AND NOT ATTACHED TO THE EXISTING
- THE KG20-5 SIGN SHALL BE PLACED IN FRONT OF THE EXISTING STOP SIGN. THE SIGN SHOULD BE COVERED WHEN THERE IS NO



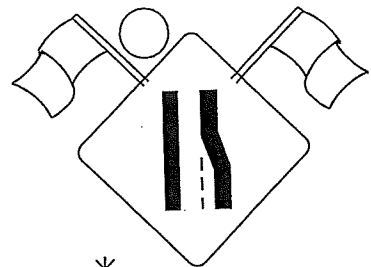
PICAL SIGNING FOR A MINOR SIDE ROAD APPROACH TO WORK SPACE WITHOUT A FLAGGER



4" WHITE *

BUFFER SPACE

ARROW DISPLAY



* W4-2R
48" x 48"

KM4-20
48" x 12"

WORK ZONE

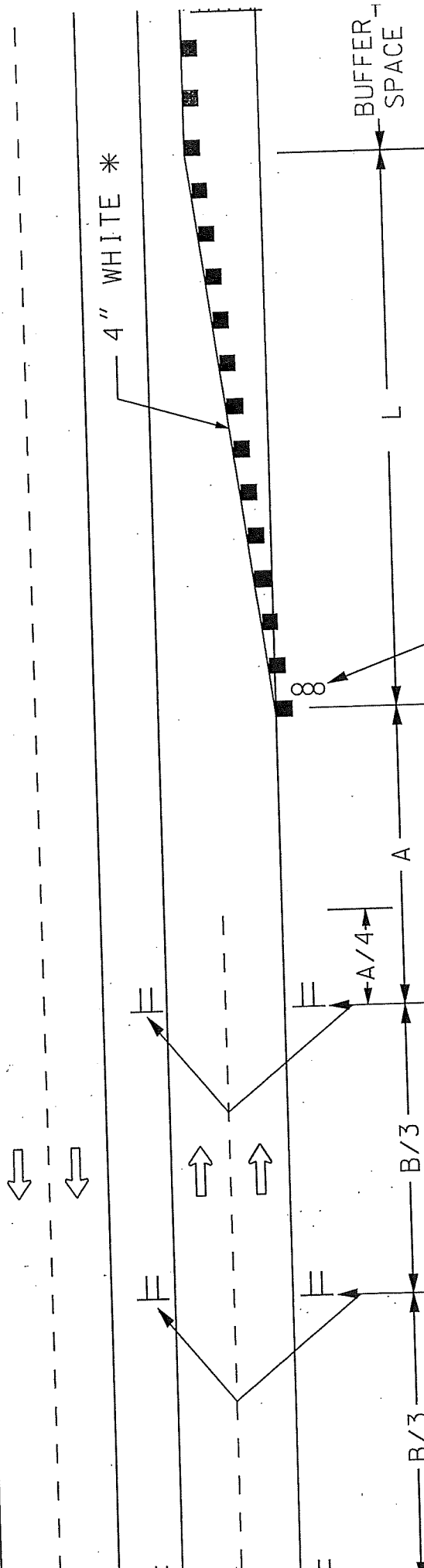
SPEED
LIMIT



R2-1
48" x 60"

DO
NOT
PASS

R4-1
48" x 60"



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Const./Maint.
Petitioner
District
Area
City or Sub-Area

KANSAS DEPARTMENT OF TRANSPORTATION
Bureau of Construction and Maintenance

HIGHWAY PERMIT
USE OF RIGHT OF WAY

Permit No. _____
Route _____
Co. _____
State Highway _____ ☐
City Conn. Link _____ ☐
City _____

THIS AGREEMENT, made and entered into, between the Secretary of Transportation of the State of Kansas, referred to as

"Secretary" and _____ (_____) _____ (Tel. No.)
(Name of Firm or Individual)
_____, _____, _____, _____
(Street) (City) (State) (Zip)
referred to as "Petitioner" and the City of _____, referred to as "City".
(If Not Applicable, Enter N/A)

Secretary has jurisdiction over highway right-of-ways within the State Highway System of Kansas, and

Secretary (and City) believe it is in the interest of the Citizens of the State of Kansas to permit certain work or projects to be performed upon Highway right-of-ways, and

Petitioner requests permission and authority from Secretary (and City) to perform certain work, described as follows:

Said work is located on public right-of-way in, upon or along State Highway Route _____, Reference Point _____ (or City
Connecting Link Route _____ on _____ St.) in Sec. _____ TWP. _____ Range _____, _____ County,
_____ Miles(km) _____ (direction) from _____ (Jct. or county line) and

Secretary has delegated full and complete authority to the District Engineers of the Kansas Department of Transportation (KDOT) to execute Highway Permit Agreements, referred to as "Permits," for and on Secretary's behalf.

In consideration of the permission granted by the Secretary (and City) to utilize Highway right-of-way(s) in the manner described above, the following terms and conditions are mutually agreed to by the Petitioner, the Secretary (and the City).

1.0 PLANS: Petitioner shall furnish five (5) sets of comprehensive plans or sketches, 8 1/2" x 11" or 11" x 17", of the proposed work.

1.1 Plans for utility installations must include a description of the size, type, and method of installation for the proposed Facilities to be located within highway right-of-ways, and adequate sketches to indicate the location of the proposed installation with respect to the traveled way of the highway, the right-of-way lines and, where applicable, the control of access lines.

1.2 An accurate "As Built" Construction Plan shall be provided for deviation from the approved Plan.

2.0 MATERIAL AND METHODS: All requests to perform work in, upon or along Highway right-of-ways must be approved by the District Engineer (and City). In Cities, Petitioner will obtain additional Permits, as required by City.

2.1 The Petitioner shall furnish all material, do all work and pay all costs for the work described on this Permit.

2.2 All utility installations shall comply with the conditions and applicable requirements of the KDOT Utility Accommodation Policy, current edition, which is incorporated by reference in its entirety (and City standards when they exceed those of KDOT).

2.3 Drainage structure requirements shall be determined by Petitioner, but requirements are subject to review and approval by the District Engineer (and City).

2.4 All materials and construction methods used on work within the limits of the right-of-way shall meet or exceed the requirements of the "Standard Specifications for State Road and Bridge Construction," current edition. The Standard Specifications are available at www.ksdot.org.

3.0 INITIATION AND COMPLETION OF WORK: Petitioner agrees to notify the District Engineer (and City) or their duly authorized KDOT representative _____ before work is initiated and again when the work is completed.

3.1 An approved signed copy of this Permit shall be on the premises at the start and during the period any work is performed.

3.2 All work, including right-of-way restoration, shall be completed within _____ calendar days of APPROVAL DATE, otherwise this Permit is rescinded. If work has not been started within the completion time, this Permit becomes null and void.

4.0 INSPECTION: Petitioner will be responsible for supervising construction to insure compliance with KDOT (and City) policies and standards.

5.0 ACCEPTANCE: (Check One) KDOT ☐ ; City ☐ ; will be responsible for acceptance of restored right-of-way.

6.0 RIGHT-OF-WAY: Except for authorized changes, Petitioner shall restore the right-of-way to a condition equal to or better than existed prior to approval of the work described on this Permit.

6.1 Any sod, shrubs or trees destroyed by this work shall be replaced as directed by the District Engineer (and City).

6.2 The right-of-way shall be kept free from parking, advertising signs or any other commercial activity.

7.0 OBSTRUCTION OF TRAFFIC: Petitioner shall ensure highway (and connecting link) traffic will be free of interference unless specifically provided for as a part of this Permit. All temporary traffic control devices and their installation and maintenance shall comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD for streets and highways which has been adopted by the Secretary). Whenever the temporary Traffic Control Standards conflict with the MUTCD, the Standards shall govern. Workers shall wear approved safety vests according to 23 CFR Part 634, Worker Visibility.

8.0 MAINTENANCE: All utility installations shall be maintained or caused to be maintained by Petitioner.

9.0 PERMIT REVOCATION: In lieu of bond, Secretary may revoke the permit and remove any work performed. The Petitioner shall reimburse the Secretary for any cost incurred by Secretary to restore the right-of-way. The Secretary will not authorize any other highway permits until Petitioner has either reimbursed Secretary or restored the right-of-way.

10.0 LIABILITY: Petitioner shall indemnify and hold harmless Secretary from personal injury and property damage claims arising out of any act or omission of Petitioner. If Secretary defends a third party's claim, the Petitioner shall indemnify Secretary for personal injury damages, property damages and related expenses Secretary incurs arising out of Petitioner's act or omission. For purposes of this provision, the term Petitioner includes Petitioner's employees, agents, subcontractors (at any tier), suppliers (at any tier), successors, and assigns.

10.1 INSURANCE: Liability Insurance. Petitioner shall carry "General Liability" insurance under an occurrence policy that has a minimum combined single limit of \$2,000,000 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Premises-Operation, Underground Hazard, Products/Completed Operations Hazard, Contractual Insurance, Broad form Property Damage, Independent Contractors, and Personal Injury. Worker's Compensation: Petitioner shall carry "Worker's Compensation and Employer's Liability" insurance that complies with Kansas Statute. Automobile Liability: Petitioner shall carry "Automobile Liability" insurance under an occurrence policy that has a minimum combined single limit of \$1,000,000.00 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Owned, Hired, and Non-Owned.

10.2 "Certificate of Insurance". This permit shall not take effect unless Petitioner provides Secretary a "Certificates of Insurance" confirming Petitioner carries insurance in the amounts and type this section requires. Petitioner shall obtain insurance only from insurers on the approved Federal Treasury List and authorized by the Kansas Commissioner of Insurance. The "Certificates of Insurance" shall include a clause requiring the insurer to notify Secretary thirty (30) calendar days in advance of a change in or cancellation of the insurance contracts.

10.3 Petitioner shall maintain the insurance required in Section 10.1 until the District Engineer releases the Petitioner from any Permit obligation.

11.0 DAMAGE TO UTILITIES: KDOT shall not be liable for damage to any utility not installed in the location authorized by any permit or agreement issued pursuant to the Utility Accommodation Policy.

12.0 PIPELINE LIABILITY: For attachments to bridges or other structures and for roadway crossings of PIPELINES CARRYING PETROLEUM, HAZARDOUS AND/OR CORROSIVE PRODUCTS, Petitioner shall solely assume all risk and liability for accidents and damages that may occur to persons, property or natural resources by reason of the operation of the pipeline attached to said bridge, structure or crossing of roadway.

12.1 Petitioner shall maintain the insurance required in Section 9.0 for as long as the pipeline remains attached to the bridge or other structure or for as long as the pipeline crosses the roadway. The insurance contract shall cover claims for such length of time as the law permits such claims.

13.0 ENVIRONMENTAL LIABILITY AND INDEMNIFICATION: Petitioner shall assume all risk and liability for all claims suits, actions, causes of actions, demands, rights, damages, costs, expenses, penalties, fines or compensation whatsoever, direct or indirect, which Petitioner now has or which Petitioner may have in the future on account of or arising out of or in connection with any known or unknown physical or environmental condition of the Petitioner's property or operation. Petitioner shall comply with federal, state and local statutes, rules and regulations. These include, without limitation, the Federal Clean Water Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Clean Water Act, the Oil Pollution Act, the Toxic Substances Control Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Clean Water Act, the Oil Pollution Act, the Federal Drinking Water Act, the Clean Air Act, the Resource Conservation Recovery Act, and the state analogs. Petitioner shall indemnify the Secretary against and from all damages, expenses and costs incurred by any person, the State of Kansas, or the United States Government for determining and undertaking investigation, clean-up, removal or remedial action, any fines or penalties assessed under state or federal laws, contract claims, personal injury claims, and damage of or loss of natural resources. For purposes of this provision, the term Petitioner includes Petitioner's employees, agents, subcontractors (at any tier), suppliers (at any tier), successors, and assigns.

14.0 HIGHWAY IMPROVEMENTS AND/OR MAINTENANCE: If Secretary makes any alteration or improvement along or upon the highway right-of-way which is the subject of this Permit, Petitioner shall hold Secretary harmless for any and all damage or injury to Petitioner's Facilities, whether finished or unfinished, as well as damage or injury to Petitioner's equipment, materials, employees, agents or contractees. Petitioner shall conduct all work involved on this permit in such a manner as not to interfere with construction or other work being performed by the KDOT (or City) or its contractors in the vicinity of Petitioner's work or project.

14.1 Within a reasonable time after receiving written notice from Secretary that Petitioner's Facilities are in conflict with KDOT's new construction or major maintenance operations, Petitioner shall alter, change location or move their construction work or Facilities without cost or expense to the Secretary. If Petitioner fails to relocate their Facilities within a reasonable time, KDOT may move the Facilities. Except for Rural Water Districts meeting the requirements of K.S.A. 68-415(c), Petitioner shall reimburse KDOT for the costs of relocating the Facilities upon receipt of an itemized statement. (See, K.S.A. 68-415). Petitioner shall reimburse KDOT for any construction costs, claims or expenses KDOT incurs as a result of Petitioner's failure to timely relocate the Facilities.

14.2 Written notice will not be required for KDOT's normal maintenance.

15.0 ABANDONED OR RETIRED IN PLACE: Petitioner shall notify Secretary when the Facilities will be abandoned or retired in place and shall submit a plan for abandonment or retirement in place to the District Engineer or designee for review and approval. Petitioner shall remove or abandon the Facilities in place in accordance with the approved plan. Petitioner shall pay all costs associated with removal of abandoned or retired in place upon highway right-of-way Facilities.

This Permit is hereby accepted and its provisions agreed to by the Parties.

APPROVED:

PETITIONER:

CITY OF

(when applicable)

☐ Mayor ☐ City Mgr. ☐ City Engr.

☒ City Clerk

Signature

Printed Name

Street Address (City, State, Zip Code)

☐ Agent ☐ Lesse ☐ Contractor

Street Address (City, State, Zip Code)

Contact Email

RECOMMENDED BY:

☐ Area/Metro Engr. ☐ Area Supt. ☐ Utility Coord.

PERMIT APPROVAL DATE:

SECRETARY OF TRANSPORTATION
OF THE STATE OF KANSAS

BY:

District Engineer

CASED UTILITY LINE WAIVER
REQUIRED COMPLIANCE FOR WAIVER
OF CASED LINE CERTIFICATION

The undersigned, in applying for joint use of highway right-of-way, has requested the waiver of cased lines as required by the Kansas Department of Transportation Utility Accommodation Policy (UAP). The undersigned acknowledges that approval of this waiver by the Kansas Department of Transportation (KDOT) is conditioned upon the undersigned's execution of this certification.

I hereby certify that I am a duly authorized representative of the _____
_____ (Utility), and the Utility and I
represent that the line qualifies for a waiver of casing as the line complies with the
conditions and provisions contained in the items below:

- a. Welded steel pipelines.
- b. Cathodically protected.
- c. Coated in accordance with accepted industry standards.
- d. Meets requirements of the Pipeline Safety Regulations—Code of Federal Regulations—Title 49—Transportation (Part 191 and 192—Natural Gas) or (Part 195—Liquid Petroleum Gas) with respect to wall thickness.
- e. Designed for operating stress levels in accordance with Federal Pipeline Safety Regulations.

I acknowledge that this certificate, which is factual and reliable, is furnished to KDOT in connection with this request for joint use of highway right-of-way and is subject to State and Federal laws, both criminal and civil.

By: _____

Name of Utility: _____

Address: _____

Date: _____

Permit or Agreement No. _____

Distribution:
☐ Const/Maint
☐ Petitioner
☐ District
☐ Area

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Const./Maint.
Design-Br. Sect.
Petitioner
District
Area
City or Sub-Area

KANSAS DEPARTMENT OF TRANSPORTATION

Bureau of Construction and Maintenance

HIGHWAY PERMIT

ATTACHMENTS TO BRIDGES
AND OTHER STRUCTURES OR INSTALLATIONS
NEAR RETAINING WALL SYSTEMS

Permit No. _____

Route _____

Co. _____

Br. Ser. No. _____

R/W Permit No. _____
(for work approaching bridge)

THIS AGREEMENT, made and entered into this _____ day of _____, 20____, by and between the
Secretary of Transportation of the State of Kansas, referred to as "Secretary," and _____
(Name of Firm or Individual)

_____, referred to as "Owner," and
(Telephone No.) (Street) (City)

_____, as Agent, Lessee
(Name-if not applicable, enter N/A) (Street No.) (City)

or Contractor of the Owner, referred to as "Agent". Owner and Agent are referred to collectively as "Petitioner," where both are applicable, otherwise Petitioner shall refer to Owner.

Secretary has jurisdiction over and control of all bridges and other structures on the State Highway System of Kansas, and
Secretary believes that it is in the interest of the Citizens of the State of Kansas to allow public or private utilities to utilize bridges or other structures on
the State Highway System under certain circumstances, and

Petitioner requests permission and authority from Secretary to construct and maintain a _____

(Describe: size, type and location on the bridge)

attached to (Bridge, Structure) Serial No. _____ on Highway Route _____ in _____ County, Kansas

at Reference Point _____, a part of the State Highway System, and

Secretary has delegated full and complete authority to the District Engineers of the Kansas Department of Transportation (KDOT) to execute Highway Permit
Agreements, referred to as "Permits," for and on Secretary's behalf.

In consideration of the permission granted by Secretary to utilize a bridge or structure or installation near a retaining wall system in the manner described
above, Petitioner agrees to the following terms and conditions:

1.0 PLANS: Petitioner shall furnish six (6) sets of comprehensive plans or sketches, 8 1/2" x 11" or 11" x 17", of the proposed work. Plans or sketches must
indicate the size, type, and nominal weight of the proposed installation, and include details of the location, method of attachment and type of attaching hardware or
method of installation as applicable.

2.0 DESIGN FOR ATTACHMENTS: A check in the amount of \$ _____ dollars, made payable to the Kansas Department of Transportation is
required from Petitioner for payment of additional structure cost to support the Utility Installation.

3.0 MATERIAL AND METHODS: Petitioner shall furnish all material, do all work, and pay all costs for the work described on this Permit.

3.1 All proposals for Utility Installations and other attachments to bridges or structures or installation near a retaining wall system must be
pre-approved in writing by the Bureau of Design, Bridge Section and the District Engineer.

3.2 All attachments to bridges or other structures or installation near retaining wall systems shall comply with the conditions and requirements of the
"Utility Accommodation Policy for KDOT", current edition which is herein incorporated by reference in its entirety.

3.3 All materials and construction methods used on work within the limits of the right-of-way shall be equal to or better than that required by the
Standard Specifications for State Road and Bridge Construction, current edition.

4.0 OBSTRUCTION OF TRAFFIC: Petitioner shall ensure highway (and connecting link) traffic will be free of interference unless specifically provided for
as a part of this Permit. All temporary traffic control devices and their installation and maintenance shall comply with the latest edition of the Manual on Uniform
Traffic Control Devices (MUTCD) for streets and highways which has been adopted by the Secretary. Whenever the Temporary Traffic Control Standards conflict
with the MUTCD, the Standards shall govern. Workers shall wear approved safety vests according to 23 CFR Part 634, Worker Visibility.

5.0 Right-of-Way. Petitioner shall restore the right-of-way to the condition existing prior to approval of the work described on this Permit.

5.1 Any sod, shrubs or trees destroyed by this work shall be replaced as directed by the District Engineer.

5.2 The right-of-way shall be kept free from parking, advertising signs or any other commercial activity.

6.0 MAINTENANCE: All Utility Installations shall be maintained or caused to be maintained by Petitioner.

7.0 PERMIT REVOCATION: In lieu of bond, Secretary may revoke the Permit and remove any work-performed. Petitioner shall reimburse Secretary for any
cost incurred by Secretary to restore the right-of-way. Secretary will not authorize any other highway permits until the Petitioner has either reimbursed the Secretary or
restored the right-of-way.

8.0 INITIATION AND COMPLETION OF WORK: Petitioner agrees to notify the District Engineer (and City) or their duly authorized KDOT
representative _____ before work is initiated and again when the work is completed.

8.1 An approved signed copy of this Permit shall be on the premises at the start and during the period any work is performed.

8.2 All work, including right-of-way restoration, shall be completed within _____ calendar days of APPROVAL DATE,
otherwise this Permit is null and void. The District Engineer or his duly authorized representative may grant an extension of time upon request of Petitioner. Any such
request must be submitted in writing and state the reasons for delay in completing the work.

9.0 LIABILITY: Petitioner shall indemnify and hold harmless Secretary from personal injury and property damage claims arising out of any act or omission of
Petitioner. If Secretary defends a third party's claim, Petitioner shall indemnify Secretary for personal injury damages, property damages, and related expenses.
Secretary incurs arising out of Petitioner's act or omission. For purposes of this provision, the term Petitioner includes Petitioner's employees, agents, subcontractors
(at any tier), suppliers (at any tier), successors, and assigns.

9.1 INSURANCE: Liability Insurance. Petitioner shall carry "General Liability" insurance under an occurrence policy that has a minimum combined single limit of \$2,000,000 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Premises-Operation, Underground Hazard, Products/Completed Operations Hazard, Contractual Insurance, Broad form Property Damage, Independent Contractors, and Personal Injury. Worker's Compensation. Petitioner shall carry "Worker's Compensation and Employer's Liability" insurance that complies with Kansas state law. Automobile Liability. Petitioner shall carry "Automobile Liability" insurance under an occurrence policy that has a minimum combined single limit of \$1,000,000.00 for personal injury and property damage and that contains the following coverage: Comprehensive Form, Owned, Hired, and Non-Owned.

9.2 "Certificate of Insurance". This Permit shall not take effect unless Petitioner provides Secretary a "Certificates of Insurance" confirming Petitioner carries insurance in the amounts and type this section requires. Petitioner shall obtain insurance only from insurers on the approved Federal Treasury List and authorized by the Kansas Commissioner of Insurance. The "Certificates of Insurance" shall include a clause requiring the insurer to notify the Secretary thirty (30) days in advance of a change in or cancellation of the insurance contracts.

9.3 Petitioner shall maintain this insurance until the District Engineer releases Petitioner from any Permit obligation.

10.0 DAMAGE TO UTILITIES: KDOT shall not be liable for damage to any utility not installed in the location authorized by any permit or agreement issued pursuant to the Utility Accommodation Policy.

11.0 PIPELINE LIABILITY: For attachments to bridges or other structures and for roadway crossings of PIPELINES CARRYING PETROLEUM, HAZARDOUS AND/OR CORROSIVE PRODUCTS, Petitioner shall solely assume all risk and liability for accidents and damages that may occur to persons, property or natural resources by reason of the operation of the pipeline attached to the bridge or structure or crossing the roadway.

11.1 Petitioner shall maintain the insurance required in Section 9.0 for as long as the pipeline remains attached to the bridge or other structure or for as long as the pipeline crosses the roadway. The insurance contract shall cover claims for such length of time as the law permits such claims.

12.0 ENVIRONMENTAL LIABILITY AND INDEMNIFICATION: Petitioner shall assume all risk and liability for all claims suits, actions, causes of actions, demands, rights, damages, costs, expenses, penalties, fines or compensation whatsoever, direct or indirect, which Petitioner now has or which Petitioner may have in the future on account of or in any arising out of or in connection with any known or unknown physical or environmental condition of the Petitioner's property or operation. Petitioner shall comply with federal, state and local rules and regulations. These rules include, without limitation, the Toxic Substances Control Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Clean Water Act, the Oil Pollution Act, the Federal Drinking Water Act, the Clean Air Act, the Resource Conservation Recovery Act and all state analogs. Petitioner shall indemnify Secretary against and from all damages, expenses and costs incurred by any person, the State of Kansas, or the United States Government for determining and undertaking investigation, clean-up, removal or remedial action, any fines or penalties assessed under state or federal laws, contract claims, personal injury claims, and damage of or loss of natural resources. For purposes of this provision, the term Petitioner includes Petitioner's employees, agents, subcontractors (at any tier), suppliers (at any tier), successors, and assigns.

13.0 HIGHWAY IMPROVEMENTS: If Secretary makes any alteration or improvement along or upon the highway right-of-way which is the subject of this Permit, Petitioner agrees to hold Secretary harmless for any and all damages or injury to said Petitioner's construction, whether finished or unfinished, as well as damage or injury to Petitioner's equipment, materials, employees, agents or contractees. Within a reasonable time after receiving written notice from Secretary that Petitioner's facilities are in conflict with KDOT's new construction or major maintenance operations, Petitioner shall alter, change location or move their construction work or facilities without cost or expense to the Secretary. If Petitioner fails to relocate their Facilities within a reasonable time, KDOT may designate a time which is not arbitrary or capricious for moving the Facilities. Petitioner shall reimburse KDOT for the costs of relocating the Facilities upon receipt of an itemized statement. (K.S.A. 68-415). In the alternative, Petitioner shall reimburse KDOT for any damages or liabilities or costs to accelerate it may incur as a result of Petitioner's failure to timely relocate the Facility.

13.1 Work approved on this Permit will be conducted in a manner as not to interfere with construction work being performed by KDOT or its contractors in the vicinity of Petitioner's work or project.

14.0 CANCELLATION: This Permit may be terminated or cancelled by either party upon thirty (30) days written notice to the other party and all rights and privileges accrued to Petitioner under the terms of this Permit shall cease forever, and upon termination or cancellation of this Permit Petitioner shall remove the attachments to the bridge or structure without damage or injury to the bridge or structure. Petitioner shall reimburse the Secretary for any and all damages or injury which results from the removal of attachments to the bridge or structure within thirty (30) days of receipt of an itemized statement of damages.

15.0 ABANDONED OR RETIRED IN PLACE: Petitioner shall notify Secretary when the Facilities will be abandoned or retired in place and shall submit a plan for abandonment or retirement in place to the District Engineer or designee for review and approval. Petitioner shall remove or abandon the Facilities in place in accordance with the approved plan. Petitioner shall pay all costs associated with removal of abandoned or retired in place upon highway right-of-way Facilities.

This Permit is hereby accepted and its provisions agreed to by the parties.

Signature

Printed Name

Owner

Street Address (City, State, Zip Code)

☐ Agent ☐ Lessee ☐ Contractor

Street Address (City, State, Zip Code)

Recommended _____
Date

Approved _____
Date

Petmit approved this _____ day of _____, 20____

Phone

Date

Title

Date

Contact Email

Area/Metro Engr. Area Supt. Utility Coord.

Bureau of Design-Bridge Section

SECRETARY OF TRANSPORTATION
OF THE STATE OF KANSAS

BY _____
District Engineer

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ADDITIONAL INFORMATION

Utility Accommodation Policy
Small Cell Antenna and Tower - Addendum

May 23, 2014

KDOT / Wireless Telecommunications
Distributed Antenna System (DAS) / Small Cell Antennas

This is an exception to paragraph I.A.5.

These seven requirements must be met in addition to other requirements contained in the KDOT Utility Accommodation Policy

1. The utility pole shall be a standard utility pole of wood, fiber glass, metal or concrete construction. Installed by direct bury, no foundation or footing.
2. Total height to the top of the antenna above the ground line shall not exceed 45 feet.
3. The Pole shall be placed within 2' of the right-of-way line, and be outside the designated clear zone of the highway.
4. Support equipment shall be in a NEMA housing attached to the pole, No equipment building allowed.
5. An external power disconnect attached to the NEMA cabinet shall be made available to de-energize the antenna and a second external disconnect shall be made available to de-energize the power supply to the equipment cabinet for KDOT and/or emergency personnel.
6. Parking is prohibited on shoulder, or edge of road, for service or routine maintenance. Evidence of an existing entrance, a side road, an accessible ditch (6:1 foreslope or flatter) or access from adjacent property (such as a parking lot) shall be available at the time of issuing the permit.
7. Installations shall not be allowed on fully controlled access highways. Installations on partially controlled access highway shall be at the discretion of the District Engineer.

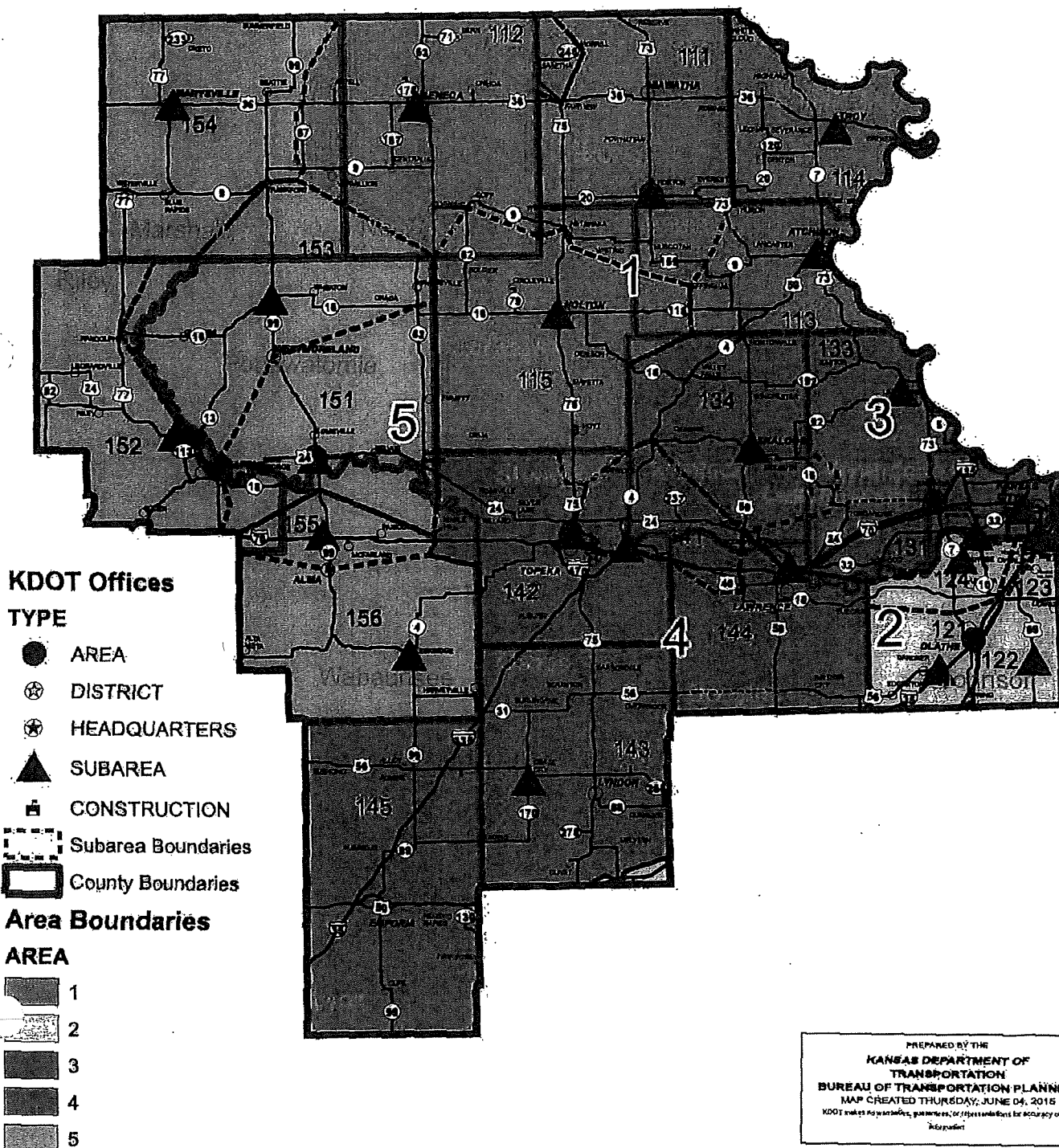
W. Clay Adams
Bureau Chief of Maintenance

DISTRICT ONE UTILITY COORDINATOR CONTACT LIST (rev. 9/21/16)

PLEASE CONTACT THE APPROPRIATE AREA REPRESENTATIVE
24 HOURS PRIOR TO ANY WORK WITH IN KDOT RIGHT OF WAY.
SEE DISTRICT ONE MAP BELOW SEPARATING EACH AREA

District 1 - Angel Fitzgerald, Dist. 1 Office Coordinator, 121 SW 21st St, Topeka, KS 66612, Phone 785-296-0335, Fax 785-296-1162, Angel.Fitzgerald@ks.gov
Area 1 - Terry Daniels, Utilities Coordinator, 1686 1st Ave, Horton, Ks 66439-0151, Phone 785-486-2142, Fax 785-486-3788, Cell 785-207-0723, Terry.Daniels@ks.gov
Area 2 - Martin Thomas, Utilities Coordinator, 1290 S Enterprise, Olathe, Ks 66061-5355, Phone 913-764-4525, Fax 913-764-7409, Cell 816-289-3826, Martin.Thomas@ks.gov
Area 3 - Steven Taylor, Utilities Coordinator, 650 N K-7 Hwy, Bonner Springs, KS 66012-1736, Phone 913-721-2960, Fax 913-721-5541, Cell 913-217-5793, Steven.Taylor@ks.gov
Area 4 - Scott Cushing, Utilities Coordinator, 101 Gage Blvd, Topeka, Ks 66606-2021, Phone 785-296-2291, Fax 785-296-1096, Cell 785-633-3418, Scott.Cushing@ks.gov
Blaine Smith, Utilities Coordinator, 101 Gage Blvd., Topeka, Ks 66606-2021, Phone 785-296-2068, Fax 785-296-1096, Cell 785-393-2231, Blaine.Smith@ks.gov
Area 5 - Don Campbell, Utilities Coordinator, 1425 W. US-24, Wamego, Ks 66547-0080, Phone 785-456-2353, Fax 785-456-9851, Cell 785-458-8276 Donald.Campbell@ks.gov

District 2 - Judy Wagner, District 2 Office Coordinator, P.O. Box 857 Salina, Ks 67402, Phone 785-823-3754, Judy.Wagner@ks.gov
District 4 - Mike Bright, District 4 Office Coordinator, P.O Box 198, Chanute, Ks 66720, Phone 620-431-1000, Mike.Bright@ks.gov
KTA (Turnpike R/W only) Marge Whelpley, KTA Engineering, (785) 266- 9414 x 3352, MWhelpley@kstumppike.com



PREPARED BY THE
KANSAS DEPARTMENT OF
TRANSPORTATION
BUREAU OF TRANSPORTATION PLANNING
MAP CREATED THURSDAY, JUNE 04, 2015
KDOT makes no warranty, guarantee, or representation for accuracy of this
information

Everything with "X"
should be completed

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER X	CONTACT NAME:	
	PHONE (A/C, No, Ext):	X
INSURED X	FAX (A/C, No):	X
	E-MAIL ADDRESS:	
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:		X
INSURER B:		
INSURER C:		
INSURER D:		
INSURER E:		
INSURER F:		

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
X	GENERAL LIABILITY			X	X	X	EACH OCCURRENCE \$ X
	☒ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$
	☐ CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person) \$ X
	GEN AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY \$
	☒ POLICY ☐ PROJECT ☐ LOG						GENERAL AGGREGATE \$ X
	AUTOMOBILE LIABILITY						PRODUCTS - COM/PROP AGG \$
	☐ ANY AUTO						COMBINED SINGLE LIMIT (Ea accident) \$
	☐ ALL OWNED AUTOS						BODILY INJURY (Per person) \$
	☐ HIRED AUTOS						BODILY INJURY (Per accident) \$
	☐ SCHEDULED AUTOS						PROPERTY DAMAGE (Per accident) \$
	☐ NON-OWNED AUTOS						
	UMBRELLA LIAB						EACH OCCURRENCE \$
	EXCESS LIAB						AGGREGATE \$
	☐ OCCUR						
	☐ CLAIMS-MADE						
	DED						WC STATUTORY LIMITS
	RETENTION \$						OTH-ER
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						E.L. EACH ACCIDENT \$
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICE/MEMBER EXCLUDED? (Mandatory in NH)						E.L. DISEASE - EA EMPLOYEE \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Include description of work that will be covered (ie: construct entrance on KDOT right of way for access to X)

CERTIFICATE HOLDER

CANCELLATION

Kansas Department of Transportation
Dwight D Eisenhower State Office Bldg
700 SW Harrison St
Topeka, KS 66603-3754 USA

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

X

KDOT must be
certificate holder. Use
this address

DATE (MM/DD/YYYY)
10/12/2009

Atchison KS 66002

INSURER E:

COVERAGES
THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS	
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Martin J Clements

CERTIFICATE OF INSURANCE

1/4/2017

Alphabetical Listing of Companies					
ID #	Company Name	City/State	Insurance Effective	Insurance Expires	Days Remaining
1842	A Plus Logistics	Wichita, KS	11/6/2016	11/6/2017	306
1981	A.M. Cohron & Son, Inc.	Atlantic, IA	7/1/2016	7/1/2017	178
1410	Adopt-A-Highway Litter Removal Service of America	Encinitas, CA	12/31/2016	12/31/2017	361
1400	Adopt-A-Highway Maintenance Corporation	Santa Ana, CA	10/1/2016	10/1/2017	270
1756	Advanced Workzone Services, LLC.	Muskogee, Ok	9/1/2016	9/1/2017	240
2061	Advantage Concrete, LLC	Hiawatha, KS	3/31/2016	3/31/2017	86
2062	AEC Services, Inc	San Francisco, CA	4/1/2016	4/1/2017	87
2040	AKA Energy Group LLC	Durango, CO	1/1/2017	1/1/2018	362
2196	Alan's Excavating, Inc.	Augusta, KS	3/9/2016	3/9/2017	64
1893	Alexander Warren, LC	Atlantic, IA	7/17/2016	7/17/2017	194
1210	Allied Environmental Consultants, Inc.	Wichita, KS	10/1/2016	10/1/2017	270
2039	Allied Retail Concepts LLC	Shawnee, KS	8/25/2016	8/25/2017	233
1467	Alpha Land Surveys, Inc.	Hutchinson, KS	10/17/2016	10/17/2017	286
2195	Alphabet Inc.	Mountain View, CA	6/1/2016	6/1/2017	148
2179	American Academy Family Physicians, Inc.	Leawood, KS	5/31/2016	5/31/2017	147
1846	American Fence and Security Company, Inc.	Phoenix, AZ	11/1/2016	11/1/2017	301
2104	American Surveying, LLC.	Oskaloosa, KS	11/1/2016	11/1/2017	301
1519	American Warrior, Inc.	Garden City, KS	9/5/2016	9/5/2017	244
1475	Amerline Utilities Construction, Inc.	Great Bend, KS	7/1/2016	7/1/2017	178
1733	Andrew P. Tanking	Circleville, KS	2/17/2016	2/17/2017	44
1829	Apex Companies, LLC	Rockville, MD	7/31/2016	7/31/2017	208
660	Ark Valley Electric Coop.	S. Hutchinson, KS	12/1/2016	12/1/2018	696
627	Asplundh Tree Expert Co.	Willow Grove, PA	8/1/2016	8/1/2017	209
1405	AT&T Inc. and Subsidiaries	Dallas, TX	6/1/2016	6/1/2017	148
1526	Atmos Energy	Dallas, TX	4/1/2016	4/1/2017	87
2153	B G Consultants, Inc.	Manhattan, KS	6/9/2016	6/9/2017	156
1669	B&B Lumber Co., Inc.	Wichita, KS	12/6/2016	12/6/2017	336
2180	B&K Auto	Rantoul, KS	6/19/2016	6/19/2017	166
2107	Barkley Constructions	Wichita, KS	11/14/2016	11/14/2017	314
1347	Bartlett and West Engineers, Inc.	Topeka, KS	7/1/2016	7/1/2017	178
1459	Baughman Company, P.A.	Wichita, KS	4/4/2016	4/4/2017	90
2152	Bayer Construcion Company, Inc.	Manhattan, KS	1/1/2017	1/1/2018	362
1913	Beck Resources, Inc.	Hennessey, OK	9/1/2016	9/1/2017	240
2108	BG Products, Inc.	Wichita, KS	10/1/2016	10/1/2017	270
1383	Black Hills Corporation and its Subsidiaries	Rapid City, SD	7/1/2016	7/1/2017	178
1802	Blackstone Envmimental	Overland Park, KS	1/1/2017	1/1/2018	362
1765	Blatner Energy Inc.	Avon, MN	3/1/2016	3/1/2017	56
1933	Blue Ridge Petroleum Corporation	Enid, OK	11/20/2016	11/20/2017	320
1432	Bluestem Electric Co-op, Inc.	Wamego, KS	9/1/2016	9/1/2017	240
1890	Border Management, Inc.	Lubbock, TX	8/1/2016	8/1/2017	209
2020	Bramhall Dozer Service, Inc.	Vermillion, KS	10/1/2016	10/1/2017	270
630	BRB Contractors, Inc.	Topeka, KS	4/1/2016	4/1/2017	87
1471	Brown-Atchison Electric Co-op	Horton, KS	8/1/2015	8/1/2017	209
1450	Butler RECA, Inc.	El Dorado, KS	9/1/2016	9/1/2017	240
1603	C.M.S. Electric Co-op	Meade, KS	7/1/2016	7/1/2018	543
2197	Cable One, Inc.	Phoenix, AZ	7/1/2016	7/1/2017	178
1415	Caney Valley Electric Co-op	Cedar Vale, KS	10/1/2016	10/1/2018	635
1894	Carrigan Excavating, LLC	Lamar, CO	3/1/2016	3/1/2017	56
1093	Casey's General Stores Inc.	Des Moines, IA	7/1/2016	7/1/2017	178
2154	CASO Homes, Inc.	Garden City, KS	3/1/2016	3/1/2017	56
1417	CenturyLink, Inc.	Monroe, LA	9/1/2016	9/1/2017	240
1761	Chaparral Energy, Inc.	Oklahoma City, OK	10/1/2016	10/1/2017	270
2064	Charlie's Construction Inc.	Frankfort, KS	6/29/2016	6/29/2017	176
1839	CHS Inc.	St. Paul, MN	9/1/2015	9/1/2018	605
1491	Cillessen & Sons, Inc.	Wichita, KS	8/2/2016	8/2/2017	210
1964	City of Augusta	Augusta, KS	4/1/2016	4/1/2017	87
1951	City of Haysville	Haysville, KS	4/1/2016	4/1/2017	87
2198	City of Hosington	Hosington, KS	4/1/2016	4/1/2017	87
1949	City of Nickerson	Nickerson	4/1/2016	4/1/2017	87
2155	City of Potwin	Potwin, KS	4/1/2016	4/1/2017	87
1948	City of South Hutchinson	South Hutchinson, KS	4/1/2016	4/1/2017	87
1539	Clark Land Surveying, P.A.	Troy, KS	7/1/2016	7/1/2017	178
1984	CLM Energy Services, LLC	Wichita, KS	6/22/2016	6/22/2017	169
2006	Comcast Business Services	Independence, MO	12/1/2016	12/1/2017	331
2111	Commerce Bancshares, Inc.	St. Louis, MO	5/12/2016	5/16/2017	132
1832	Community Wireless Communication	Lawrence, KS	5/16/2016	5/16/2017	132
1412	Conco Inc.	Wichita, KS	5/1/2016	5/1/2017	117
2112	Conley Sitework & Utilities, Inc.	Linwood, KS	5/4/2016	5/4/2017	120
2222	Consolidated Communications, Inc.	Matton, IL	12/30/2016	12/30/2017	360
1453	Cook Flatt & Strobel Engineers, PA	Topeka, KS	4/15/2016	4/15/2017	101
1272	Cox Communications	Atlanta, GA	1/1/2017	1/1/2018	362
1682	Crafton Tull & Associates	Rogers, AR	10/30/2016	10/30/2017	299
1632	Crossland Construction Company, Inc.	Columbus, KS	4/30/2016	4/30/2017	116
2199	D&M Investments LLC; Dirt Diggers LLC.	Hays, KS	11/10/2016	11/10/2017	310
1401	D&R Koch Enterprises, Inc.	Axtell, KS	12/9/2016	12/9/2017	339

CERTIFICATE OF INSURANCE

1/4/2017

Alphabetical Listing of Companies					
ID #	Company Name	City/State	Insurance Effective	Insurance Expires	Days Remaining
1842	A Plus Logistics	Wichita, KS	11/6/2016	11/6/2017	306
2058	Davis Electric Inc.	Cimarron, KS	7/1/2016	7/1/2017	178
1778	DCP Midstream, LLC.	Denver, CO	4/1/2016	4/1/2017	87
2116	Deepwell Energy Services, LLC.	Waynesboro, MS	10/1/2016	10/1/2017	270
1777	Deines Construction, Inc.	WaKeeney, KS	3/18/2016	3/18/2017	73
1563	Dick Construction, Inc.	Garden City, KS	6/7/2016	6/7/2017	154
1448	Doniphan Electric Co-op Assn., Inc.	Troy, KS	5/1/2016	5/1/2018	482
1718	Downstream Casino and Resort	Quapaw, OK	10/1/2016	10/1/2017	270
2141	DS&O Electric Cooperative, Inc.	Solomon, KS	10/1/2016	10/1/2018	635
1399	Eagle Communication, Inc.	Hays, KS	12/31/2016	12/31/2017	361
1903	Earthsmart Construction, Inc.	Catoosa, OK	7/23/2016	7/23/2017	200
2000	Eddie Dean dba Trail-wood Co., Inc.	El Dorado, KS	2/6/2016	2/6/2017	33
2200	EDP Renewables North America, LLC.	Houston, TX	6/30/2016	6/30/2017	177
2030	Ervin Cable Construction LLC	Sturgis, KY	7/31/2016	7/31/2017	208
1910	Excel Constructors, Inc.	Overland Park, KS	10/1/2016	10/1/2017	270
1527	Fair Point Communication Missouri, Inc.	Charlotte, NC	3/31/2016	3/31/2017	86
1409	Flint Hills REC, Assn.	Council Grove, KS	4/1/2015	4/1/2017	87
2014	Foley Company	Kansas City, MO	9/30/2016	9/30/2017	269
1918	Four Way House Movers, Inc.	Lubbock, TX	2/6/2016	2/6/2017	33
1989	Frank's Plumbing, Inc.	Alma, KS	3/18/2016	3/18/2017	73
2067	Freeman Concrete Construction LLC	Shawnee Mission, KS	4/22/2016	4/22/2017	108
1990	Fulsom Brothers, Inc.	Cedar Vale, KS	8/1/2016	8/1/2017	209
1967	Gabel Lease Services	Ness City, KS	1/27/2016	1/27/2017	23
2102	Gardner, City of	Gardner, KS	7/1/2016	7/1/2017	178
2068	GeoCore, Inc.	Salina, KS	6/1/2016	6/1/2017	148
1655	Geokinetics, Inc.	Houston, TX	7/31/2016	7/31/2017	208
1676	George Butler Associates, Inc.	Lenexa, KS	9/15/2016	9/15/2017	254
1482	George Lay Signs, Inc.	Wichita, KS	10/1/2016	10/1/2017	270
1607	Geotech Inc.	Emporia, KS	3/19/2016	3/19/2017	74
1435	Giant Communications, LLC.	Holtan, KS	11/1/2016	11/1/2017	301
2201	Glass Services, Inc.	Salina, KS	6/30/2016	6/30/2017	177
1956	Global Geophysical Services, Inc.	Missouri City, TX	4/1/2016	4/1/2017	87
1514	Goedecke Engineering	El Dorado, KS	10/31/2016	10/31/2017	300
2202	Golden State Foods dba: Kan-Pak LLC	Wichita, KS	2/1/2016	2/1/2017	28
621	Great Plains Energy, Inc and Kansas City Power & Light	Kansas City, MO	11/15/2016	11/15/2017	315
1858	Green Environmental Services	Erie, KS	3/16/2016	3/16/2017	71
1546	Griffin Max Constructon, Inc.	Towanda, KS	7/1/2016	7/1/2017	178
2069	GSI Engineering, LLC	Carmel, IN	5/1/2016	5/1/2017	117
1940	Hancock Electric, LLC	Hugoton, KS	6/6/2016	6/6/2017	153
2072	Haupt Construction Co.	Spring Hill, KS	5/14/2016	5/14/2017	130
1540	Haviland Telephone Company	Haviland, KS	11/1/2016	11/1/2017	301
1249	Haz-Mat Response, INC.	Olathe, KS	12/18/2016	12/18/2017	348
1673	HDR Engineering, Inc.	Omaha, NE	6/1/2016	6/1/2017	148
1977	Heartland Mill, Inc.	Marienthal, KS	8/16/2016	8/16/2017	224
1946	Heartland Plumbing, Inc.	Gardner, KS	1/15/2016	1/15/2017	11
2203	Higgins Stone Company, Inc.	Wamego, KS	9/13/2016	9/13/2018	617
2183	Howard Drig Co.	Beaver, OK	6/1/2016	6/1/2017	148
1950	Hutton Construction Corp.	Wichita, KS	4/1/2016	4/1/2017	87
1685	ITC Great Plains, LLC	Novi, MI	2/28/2016	2/28/2017	55
1954	Iteris, Inc.	Santa Ana, CA	4/1/2016	4/1/2017	87
2181	J&K Contracting, LC	Junction City, KS	11/1/2016	11/1/2017	301
2144	J.F. Electric, Inc.	Edwardsville, IL	12/31/2017	12/31/2017	361
514.	J.M. Fahey Construction Company	Grandview, MO	4/1/2016	4/1/2017	87
1565	Jacobs Backhoe Service	Arkansas City, KS	6/15/2016	6/15/2017	162
1246	Jennings Trenching & Backhoe, LLC.	Pittsburg, KS	4/1/2014	4/1/2017	87
1953	Jennings Trenching & Backhoe, LLC.	Kismet, KS	3/10/2016	3/10/2017	65
1246	Jim Randell Construction	Pittsburg, KS	4/1/2014	4/1/2017	87
1869	Joe Conroy Contractor, Inc.	Topeka, KS	4/1/2015	4/15/2018	466
2205	John F Watson & Co.	Midland, TX	9/24/2016	9/24/2017	263
2159	Joiner Construction, Inc.	Ellinwood, KS	4/30/2016	4/30/2017	116
1379	K & W Underground, Inc	Olathe, KS	4/28/2016	4/28/2017	114
1379	K & W Underground, Inc	Olathe, KS	4/28/2016	4/28/2017	114
1744	K.C. Construction Inc.	Basehor, KS	1/1/2017	1/1/2018	362
1535	KanOkla Telephone Association, Inc.	Caldwell, KS	9/1/2016	9/1/2017	240
2077	Kansas Fiber Network, LLC	Wichita, KS	4/8/2016	4/8/2017	94
1247	Kansas Gas Service (ONE Gas, Inc)	Tulsa, OK	11/1/2016	11/1/2017	301
1027	Kaw Valley Elec. Coop. Co., Inc.	Topeka, KS	4/1/2015	4/1/2017	87
1451	Kaw Valley Engineering, Inc.	Junction City, KS	6/1/2016	6/1/2017	148
2191	Kearney & Son, Inc.	Valley Falls, KS	5/1/2016	5/1/2017	117
1971	Kearney Construction, Inc.	Atchison, KS	9/1/2016	9/1/2017	240
1524	Kenny's Construction Inc.	Wilson, KS	6/1/2016	6/1/2017	148
1545	Key Construction, Inc.	Wichita, KS	11/1/2016	11/1/2017	301
2223	Killough Construction, Inc.	Ottawa, KS	6/2/2016	3/1/2017	56

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ID #	Alphabetical Listing of Companies Company Name	City/State	Insurance		Days Remaining
			Effective	Expires	
1842	A Plus Logistics	Wichita, KS	11/6/2016	11/6/2017	306
2122	Kinder Morgan, Inc.	Houston, TX	8/1/2016	8/1/2017	209
1487	Kirkham-Michael, Inc.	Omaha, NE	1/31/2016	1/31/2017	27
1569	Kissick Construction Co., Inc.	Kansas City, MO	8/17/2016	8/17/2017	225
1875	Kleinfelder Group, Inc.	San Diego, CA	4/1/2016	4/1/2017	87
1713	KOK Holding - ACI Concrete	Spring Hill, KS	1/1/2017	1/1/2018	362
2173	Krispy Kreme Doughnuts, Inc.	Winston-Salem, NC	5/1/2016	5/1/2017	117
1353	Krob Trenching, Inc.	Stockton, KS	12/1/2016	12/1/2017	331
2182	K-W Trucking, Inc.	Osborne, KS	5/1/2015	5/1/2017	117
1841	L D Drilling, Inc.	Great Bend, KS	11/12/2016	11/12/2017	312
1365	Lamar Advertising Company	Baton Rouge, LA	1/1/2017	1/1/2018	362
2037	Lan-Del Water Department	Lansing, KS	7/1/2016	7/1/2017	178
1560	LandPlan Engineering, PA	Lawrence, KS	6/1/2016	6/1/2017	148
1641	Lan-Tel Communications & Underground Services, Inc.	Independence, MO	11/24/2016	11/24/2017	324
1053	Larson Construction Inc.	Manhattan, KS	4/30/2016	4/30/2017	116
1375	Level 3 Communications, Inc.	Broomfield, CO	5/1/2016	5/1/2017	117
1466	LJEC (Leavenworth-Jefferson Electric Co-op)	McLouth, KS	5/1/2016	5/1/2017	117
1492	Lobo Procusion Inc.	Goodland, KS	9/19/2016	9/19/2017	258
1208	Lockhart Geophysical Co	Denver, CO	12/11/2016	12/11/2017	341
1947	Lovelace & Associates, LLC.	Lees Summit, MO	7/2/2016	7/2/2017	179
1871	Loves Travel Stops & County Stores, Inc.	Oklahoma City, OK	12/1/2016	12/1/2017	331
1424	Lyon-Coffey Electric Co-op	Burlington, KS	10/1/2016	10/1/2018	635
2026	Magellan Midstream Partners L.P.	Tulsa, OK	10/1/2016	10/1/2017	270
2174	Mai Excavating, Inc.	Russell, KS	4/15/2016	4/15/2017	101
1979	Mark's Custom Signs, Inc.	Great Bend, KS	11/1/2016	11/1/2017	301
1917	Martin Underground Construction, Incl.	Raytown, MO	1/11/2016	1/11/2017	7
2081	Mcafee Henderson Solutions Inc.	Lenexa, KS	4/4/2016	4/4/2017	90
2175	McCormick Excavation & Paving, LLC.	Stratton, CO	3/12/2016	3/12/2017	67
1837	McInroy Construction, Inc.	Nevada, MO	3/21/2015	3/21/2018	441
1945	MCON, LLC	Wathena, KS	3/10/2016	3/10/2017	65
1867	Merestone Surveying Company	Andover, KS	1/6/2016	1/6/2017	2
2160	Merit Energy Company, LLC.	Dallas, TX	2/1/2016	2/1/2017	28
977	Mid-American Pipeline Co.	Houston, TX	4/18/2016	4/18/2017	104
1799	Mid-Continent Market Center, LLC.	Tulsa, OK	9/1/2016	9/1/2017	240
1615	Mid-Kansas Electric Company	Holcomb, KS	4/1/2016	4/1/2017	87
1463	Midland Surveying, Inc	Maryville, MO	10/4/2016	10/4/2017	273
750	Midwest Energy, Inc.	Hays, KS	6/1/2016	6/1/2017	148
2185	Midwest Water Line Service, LLC	Hays, KS	6/19/2016	6/19/2017	166
1757	Mies Construction, Inc.	Kearney, NE	4/7/2016	4/7/2017	93
1404	Missouri Forest Products Assoc.	Jefferson City, MO	7/26/2015	7/16/2017	193
1473	MKEC Engineering, Inc.	Wichita, KS	7/1/2016	7/1/2017	178
2208	Mound City Ag	Mound City, KS	3/1/2016	3/1/2017	56
2012	Musselman & Hall Contractors, LLC	Kansas City, MO	11/1/2016	11/1/2017	301
2161	Neece Concrete Construction, Inc.	Miami, OK	3/1/2016	3/16/2017	71
1368	Nemaha-Marshall Electric Co-op	Axtell, KS	9/30/2015	9/30/2017	269
2209	NGL Energy Partners, LP	Tulsa, OK	6/30/2016	6/30/2017	177
2082	Nowak Construction Company, Inc.	Goddard, KS	5/1/2016	5/1/2017	117
1576	NPL Construction Co.	Phoenix, AZ	4/1/2016	4/1/2017	87
1386	NuStar Pipeline Operating Partnership LP	San Antonio, TX	9/1/2016	9/1/2017	240
471	Olsson Associates	Lincoln, NE	1/1/2017	1/1/2018	362
2210	Outfront Media, LLC	New Your, NY	6/1/2016	6/1/2017	148
1354	Overland Pass Pipeline, LLC	Tulsa, OK	9/1/2016	9/1/2017	240
2127	P & S Electric & Roustabout Services, Inc.	Great Bend, KS	10/26/2016	10/26/2017	295
1892	Padgett Excavation, Inc.	Kechi, KS	8/7/2016	8/7/2017	215
610	Panhandle Eastern Pipeline (See Subs List)	Houston, TX	9/15/2016	9/15/2017	254
2049	Panzner, Inc.	Dighton, KS	1/27/2016	1/27/2017	23
1196	Paragon Geophysical Svs., Inc.	Wichita, KS	8/14/2016	8/14/2017	222
2211	Patton House & Bulding Movers, Inc.	Paola, KS	6/21/2016	6/21/2017	168
1830	Paul-Wertenberger Construction Inc.	Hays, KS	3/22/2016	3/22/2017	77
1973	Pearson Construction LLC	Wichita, KS	9/4/2016	9/4/2017	243
1762	Peoples Telecommunications, LLC	LaCygne, KS	9/4/2017	6/1/2017	148
1930	Phelps Engineering, Inc.	Olathe, KS	7/11/2016	7/11/2017	188
2213	Phil-Mar, Inc. dba Howard Drig	Beavear, OK	6/1/2016	6/1/2017	148
1820	Pinnacle Transportation Systems, Inc.	Elkhart, IN	9/12/2016	9/12/2017	251
1490	Pioneer Electric Co-op	Ulysses, KS	10/1/2015	10/1/2017	270
1662	Poor Boy Tree Service, Inc.	Fair Play, MO	8/8/2016	8/8/2017	216
1414	Prairie Land Electric Cooperative, Inc..	Norton, KS	10/1/2015	10/1/2017	270
2036	Primary Care Landscape, Inc.	Olathe, KS	3/17/2016	3/17/2017	72
1496	Professional Engineering Consultants	Wichita, KS	10/1/2016	10/1/2017	270
440	Pyramid Contractors, Inc.	Olathe, KS	4/22/2016	4/22/2017	108
1714	R/S Electric Utility Services, Inc.	St. Joseph, MO	4/1/2016	4/1/2017	87
1425	Radiant Electric Co-op	Fredonia, KA	3/1/2015	3/1/2017	56
2164	Railroad Controls Limited	Benbrook, TX	7/1/2016	7/1/2017	178
2029	RDR Excavating Inc./ ADR	Topeka, KS	2/24/2016	2/24/2017	51

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ID #	Alphabetical Listing of Companies Company Name	City/State	Insurance	Insurance	Days
			Effective	Expires	Remaining
1842	A Plus Logistics	Wichita, KS	11/6/2016	11/6/2017	306
1786	Reif Welding & Construction, LLC.	Planville, KS	10/2/2016	10/2/2017	271
1817	Renaissance Infrastructure	Riverside MO	5/3/2016	5/3/2017	119
1811	Resource Service Solutions	Olathe, KS	1/11/2016	1/11/2017	7
1999	Rimkus Consulting Group, Inc.	Houston, TX	11/27/2016	11/27/2017	327
2086	Ritchie Exploration Inc.	Wichita, KS	6/1/2016	6/1/2017	148
2176	RMA Engineering, LLC.	Minneapolis, KS	5/1/2016	5/1/2017	117
2128	Roger Engemann Drainage Co.	Troy, KS	7/1/2016	7/1/2017	178
1995	Ron's Welding & Pipeline Service Inc.	Russell, KS	7/2/2016	7/2/2017	179
1902	Rose Design Build, Inc.	Olathe, KS	6/1/2016	6/1/2017	148
1843	Rose Rock Midstream Crude, L.P.	Tulsa, OK	6/1/2016	6/1/2017	148
2022	Roy Mies dba Mies Excavating	Belle Plaine, KS	11/18/2016	11/18/2017	318
1184	Royer Brothers Tree Service	Sterling, KS	7/1/2016	7/1/2017	178
2193	RSC Construcion, Inc.	Fort Scott, KS	9/27/2016	9/27/2017	266
1499	Ruggles & Bohm, P.A.	Wichita, KS	11/1/2016	11/1/2017	301
651	Rural Telephone Service Co., Inc., et al	Lenora, KS	6/1/2016	6/1/2017	148
6006	RWD - Atchinson County - RWD #5	Lancaster, KS	10/15/2016	10/15/2017	284
6023	RWD - Bully County - RWD #3	Rosalia, KS	6/9/2016	6/9/2017	156
6024	RWD - Doniphan County RWD #5	Troy, KS	9/28/2016	9/28/2017	267
6026	RWD - Douglas County - RWD #3	Berryton, KS	6/20/2016	6/2/2017	149
6028	RWD - Jefferson County - RWD #13	Lawrence, KS	2/1/2016	2/1/2017	28
6027	RWD - Leavenworth County - Water District #7	Bonner Springs, KS	6/25/2016	6/25/2017	172
1251	RWD - Nemaha County - RWD #3	Seneca, KS	7/20/2016	7/20/2017	197
6025	RWD - RWD #7	Gardner, KS	2/1/2016	2/1/2017	28
2165	S&R Betts Construction Co. Inc.	Atchison, KS	2/24/2016	2/24/2017	51
2215	S&S Oil, LLC.	Chase, KS	9/6/2016	9/6/2017	245
2129	SBB Engineering, LLC.	Topeka, KS	8/31/2016	8/31/2017	239
1812	Schulz Welding Services, Inc.	Canton, KS	8/1/2016	8/1/2017	209
1468	Sedgwick County Electric Co-op	Cheney, KS	5/1/2015	5/1/2017	117
2166	SEMKE Consulting Inc. DBA SEMK Forensic	Saint Charles, MO	1/14/2016	1/14/2017	10
2130	Sharkey Construction, Inc.	Otis, KS	11/18/2016	11/18/2017	318
1458	SMH Consultants, PA	Manhattan, KS	3/1/2016	3/1/2017	56
2214	Snodgrass & Sons Construction Co., Inc.	Wichita, KS	9/1/2016	9/1/2017	240
2177	Sonci Restaurants, Inc.	Oklahoma City, OK	5/1/2016	5/1/2017	117
1816	Southeast Nebraska Communication, Inc.	Falls City, NE	6/16/2016	6/16/2017	163
1543	Southern Pioneer Electric Company	Ulysses, KS	10/1/2015	10/1/2017	270
1355	Southern Star Central Corp.	Owensboro, KY	11/15/2016	11/15/2017	315
2092	Southwestern Bell Telephone Co.	Dallas, TX	6/1/2016	6/1/2017	148
1507	Spirit Aerosystems, Inc.	Wichita, KS	12/31/2017	12/31/2017	361
2216	St. Joe Sign, LLC.	Saint Joseph, MO	11/1/2016	10/1/2017	270
2168	Steinle Construction, Inc.	Bunker Hill, KS	5/3/2016	5/3/2017	119
2093	Stephens Construction Inc.	Colby, KS	4/28/2016	4/28/2017	114
2194	Steve Bevins Tree Experts	Arkansas City, KS	8/17/2016	8/17/2017	225
2169	Stewart Excavation, LLC.	Hugoton, KS	3/22/2016	3/22/2017	77
623	Sumner-Cowley Electric Cooperative Inc.	Wellington, KS	3/17/2015	3/17/2017	72
2206	Sundance Trucking	McCune, KS	11/9/2016	11/9/2017	309
1474	Sunflower Electric Power Corp.	Holcomb, KS	8/1/2016	8/1/2017	209
2217	Superior Erosion Control, Inc.	Hesston, KS	11/18/2016	11/18/2017	318
2096	Tapstone Energy, LLC	Oklahoma City, OK	4/1/2016	4/1/2017	87
2095	Targa Pipeline Partners, LP	Tulsa, OK	10/31/2016	10/31/2017	300
1880	Teeter Irrigation, Inc. & Pipe Company	Ulysses, KS	3/31/2016	3/31/2017	86
1970	The Davey Tree Expert Company	Kent, OH	9/1/2016	9/1/2017	240
2204	The Hub of Syracuse	Syracuse, KS	9/12/2016	9/12/2017	251
2212	The Plains Equity Exchange & Cooperative Union	Plains, KS	1/1/2017	1/1/2018	362
2098	Theis Dozer Service, Inc.	Spivey, KS	3/31/2016	3/31/2017	86
2132	TKO Gas Company	Dalhart, TX	8/28/2016	8/28/2017	236
2192	TLC Construction, LLC.	Plattsmouth, NE	2/26/2016	2/26/2017	53
1711	Torgeson Trenching Services, Inc.	Topeka, KS	7/1/2016	7/1/2017	178
1548	Traffic Engineering Consultants	Oklahoma City, OK	10/28/2016	10/28/2017	297
1509	TranSystems Corporation	Kansas City, MO	10/1/2016	10/1/2017	270
1557	Treco, Inc.	Ulysses, KS	11/10/2016	11/10/2017	310
1585	Tri-County Telephone Association	Council Grove, KS	8/19/2016	8/19/2017	227
1738	Twin Valley Electric Co-op	Altamont, KS	7/1/2015	7/1/2017	178
1833	Underground Cavern Stabilization, LLC.	Great Bend, KS	8/4/2016	8/4/2017	212
1690	Underground Specialists, Inc.	Garden City, KS	5/7/2016	5/7/2017	123
1888	Union Valley Petroleum Corp.	Enid, OK	8/1/2016	8/1/2017	209
1438	United Telephone Association Inc.	Dodge City, KS	8/1/2016	8/1/2017	209
2170	Univeral Communications, LLC.	Olathe, KS	2/1/2016	2/1/2017	28
1003	Utility Contractors, Inc.	Wichita, KS	1/1/2017	1/1/2018	362
2219	Valu-Net, LLC.	Emporia, KS	6/1/2016	6/1/2017	148
1759	Vance Brothers, Inc.	Kansas City, KS	1/1/2017	1/1/2018	362
1581	Venture Corporation	Great Bend, KS	3/26/2016	3/26/2017	81
2038	Verizon Communications Inc.	New York, NY	6/30/2016	6/30/2017	177
1633	Verizon Wireless, Celco Partnership	Bedminster, NJ	6/30/2016	6/30/2017	177
1478	Victory Electric Co-op Assn., Inc.	Dodge City, KS	3/1/2015	3/1/2017	56

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Alphabetical Listing of Companies					
ID #	Company Name	City/State	Insurance Effective	Insurance Expires	Days Remaining
1842	A Plus Logistics	Wichita, KS	11/6/2016	11/6/2017	306
1822	Vincent Oil Corporation	Wichita, KS	9/21/2016	9/21/2017	260
1868	W & L Dirt Constructions, Inc.	Wichita, KS	1/1/2017	1/1/2018	362
2059	W B S, Inc.; W B Supply Co.	Pampa, TX	7/1/2016	7/1/2017	178
1800	Wagner Backhoe & Excavating Inc.	Easton, KS	8/10/2016	8/10/2017	218
842	Wamego Telephone Co., Inc., et al	Wamego, KS	4/9/2016	4/1/2017	87
2178	WANRack, LLC.	Shawn Mission, KS	5/1/2016	5/1/2017	117
2190	WCI Inc.	Paola, KS	6/1/2016	6/1/2017	148
1684	WehKamp Excavating, Inc.	Garden City, KS	5/9/2016	5/9/2017	125
2171	West Bay Exploration Company	Traverse City, MI	1/30/2016	1/30/2017	26
1896	West Wichita Gas Gathering, LLC	Durango, CO	10/1/2016	10/1/2017	270
1344	Westar Energy	Topeka, KS	10/19/2016	10/19/2017	288
1369	Western Co-op Electric Assn	WaKeeney, KS	7/1/2016	7/1/2018	543
1522	Wheatland Electric Co-op	Scott City, KS	4/1/2015	4/1/2017	87
1883	WideOpenWest	Englewood, CO	11/15/2016	11/15/2017	315
1975	Wiechman Land & Cattle	Scott City, KS	9/1/2016	9/1/2017	240
2009	Wiedenmann Inc.	Belton, MO	12/1/2016	12/1/2017	331
1406	Wilson & Company, Inc.	Salina, KS	6/1/2016	6/1/2017	148
2054	Woodson County Coop. Assn	Yates Center, KS	8/1/2016	8/1/2017	209
1749	Woolsey Operation Company, LLC	Wichita, KS	8/1/2016	8/1/2017	209
2135	Xerox Corporation	Norwalk, CT	1/1/2017	1/1/2018	362
1411	Young Backhoe & Trenching Inc.	Seneca, KS	10/8/2016	10/8/2017	277
2221	Young Sign Co., LLC.	Leavenworth, KS	9/16/2016	9/16/2017	255
2136	Zayo Group, Inc.	Boulder, CO	1/1/2017	1/1/2018	362
2224	Clean Country	Omaha, NE	11/5/2016	11/5/2017	305
2225	Wildcat Concrete Services, Inc.	Topeka, KS	1/1/2017	1/1/2018	362
1583	Muller Construction, Inc.	Coffeyville, KS	12/31/2016	12/31/2017	361

Highway Permit List of Subsidiaries

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KDOT Highway Permit Agreement, Use of Right of Way
LIST OF SUBSIDIARIES
ON PERFORMANCE BOND AND CERTIFICATES OF INSURANCE
#1238 American energy Services/ Key Energy
Subsidiaries are: Brooks Well Servicing, Dawson Production Key Energy Drilling KEG, Key Four corners, Key rocky
#1383 Black Hills Corporation and its Subsidiaries
Black Hills Energy
#1633 Cellco Partnership
Verison Wireless
#1417 CenturyLink, Inc.
Subsidiaries are: Embarq, Century Tel, Inc.
#1839 CHS Inc. / (Cenex Harvest States)
Subsidiaries are: Jayhawk Pipeline, LLC.
#777 COASTAL CORPORATION, See El Paso Energy Corp
Subsidiaries are: National Co-op Refinery Assn dba NCRA; Jayhawk Pipeline Corporation; ANR Pipeline Company;
#1147 ENRON CORPORATION
Subsidiaries are: Enron Liquids Pipeline Co.; Northern Gas Products Pipeline Co.; Northern Natural Gas Co.; EOTT Energy
#1431 Garney Companies, Inc.
Subsidiaries are: Grimm Construction Company Inc.
#1228 HOUSTON INDUSTRIES INCORPORATED
Subsidiaries are: Arkls Gas Co., Nor Am Energy Corporation, Reliant Energy Resources Corporation, Relient Energy, Inc.,
#1095 HURST COMMUNICATIONS, INC.
Subsidiaries are: Hurst Cable of Florida; Alltech Cable TV, Inc.; Alltech Cable Construction, Inc.
#722 Kinder Morgan (formally KN energy)
Subsidiaries are: Ks-Nebraska Natural Gas Co., Inc.; Excelsior Oil Corp.; Midlands Trans. Co.; Midlands Gas Corp.; Helium Inc.; N. Central Energy Co.; Northern Gas Co.; Northern Mountain Gas Co.; Northern Utilities, Inc.; Slurco Corp.; Slurco Inc.; South, Knight Inc., Kinder Morgan Interstate Gas Transmission, LLC., Rockies Express Pipeline, LLC.
#641 KOCH INDUSTRIES, INC.
Subsidiaries are: Koch Oil Co.; Koch Gathering Systems, Inc.; Koch Pipelines, Inc.
#1247 ONEOK, Inc.
Subsidiaries are: Kansas Gas Services, ONEOK Hydrocarbon, L.P.
#610 PANHANDLE EASTERN PIPE LINE COMPANY
A subsidiary of: PanEnergy Corporation, formerly Panhandle Eastern Corp., Southern Union Company

Highway Permit List of Subsidiaries

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#685 PHILLIPS PETROLEUM COMPANY
Subsidiaries are: Phillips Pipeline Co. and GPM Gas Corp. (Formerly named GPM Gas Operating Corp.)
#1490 Pioneer Electric Co-op
Subsidiaries: Southern Pioneer Electric Company
#1343 Quest Resource Corporation
Subsidiaries are: Bluestem Pipeline, LLC.
#997 Ritchie Resource Management Corp.
Subsidiaries are: Ritchie Companies, Ritchie Corp., Allen's concrete, Inc., Ritchie Paving, Inc., Ritchie Paving & Construction, Inc., Ritchie Sand, Inc., Tarp Bow Solutions, Inc., concrete Accessories, Inc., Concrete Accessories, Inc.-Rich Mix Products, Inc., Rich Mix Products, Inc.-Kansas Division, Rich Mix Products, Inc.-Kansas City Division, Rich Mix Products, Inc.-Oklahoma Division, Rich Mix Products, Inc.-Texas Division, Rich Mix of Springfield, Inc., Rich Mix of Tulsa,
#651 Rural Telephone Service Co., Inc., et al
Subsidiaries are: Nex-Tech, Inc.
#1419 SCI Cable, Inc.
Subsidiary is: KAK Construction
#891 TELE-COMMUNICATIONS, INC.
Subsidiaries are: TCI of Kansas, Inc.; Communication Services, Inc.; Pittsburg Cable TV Co.; Beatrice Cable TV Co.
#1395 TransCanada Keystone Pipeline LP
Subsidiaries are: TC Oil Pipeline Operations, Inc. Kansas City, KS, Keystone Pipeline LP, ANR Pipeline Company, Calgary,
#882 West Plaines now UtiliCorp
#893 WILLIAMS COMPANIES, INC, THE
Subsidiaries are: Northwest Pipeline Corp.; Williams Field Svcs Co.; Williams Info. Svcs. Corp.; Williams Natural Gas Co; Williams Pipe Line Co. (Previously listed as #1066) Louisiana Resources Co. and Williams Energy Co., Mid-Continent