This rule was filed as 17 NMAC 4.2.

TITLE 17: PUBLIC UTILITIES AND UTILITY SERVICES
CHAPTER 4: UTILITY RIGHTS OF WAY AND EASEMENTS
PART 2 REQUIREMENTS FOR OCCUPANCY OF STATE HIGHWAY SYSTEM RIGHT-OF-WAY BY UTILITY FACILITIES

17.4.2.1 ISSUING AGENCY: New Mexico State Highway and Transportation Department, P.O. Box 1149, Santa Fe, New Mexico 87504-1149, (505) 827-5357,
[11/15/96; Recompiled 12/31/01]

17.4.2.2 SCOPE: This utility accommodation policy shall apply to all publicly, privately, cooperatively, municipally or governmentally owned facilities used for the carriage, transmission or distribution of electric power, telephone, telecommunications, telegraph, water, gas, oil, petroleum products, steam, chemicals, sewage, drainage, irrigation and similar lines, that are to be accommodated, adjusted or relocated within the right-of-way of highways, roads or streets under the jurisdiction of the New Mexico State Highway and Transportation Department.

A. This utility accommodation policy is provided for the regulation of the location, design and methods for installing, adjusting or relocating, accommodating and maintaining physical utility facilities on highway rights-of-way.

B. Where laws or orders of public authority or industry codes prescribE a higher degree of protection or construction than provided by this utility accommodation policy, such laws, orders or codes shall prevail.
[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.3 STATUTORY AUTHORITY: NMSA 1978, Sections 62-1-2, 67-3-12, 67-8-15, 67-8-1, 67-8-17, 67-8-18, 67-8-19, 67-8-20, 67-8-21, 67-8-22.
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17.4.2.4 DURATION: Permanent.
[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.5 EFFECTIVE DATE: November 15, 1996, unless a later date is cited at the end of a Section or Paragraph.
[11/15/96; Recompiled 12/31/01]

17.4.2.6 OBJECTIVE: To prescribe conditions under which utility facilities may be accommodated on all public highway right-of-way under the jurisdiction of the New Mexico State Highway and Transportation Department improved by State or Federal funds and to set forth the regulations covering the relocation of utility facilities in conflict with the construction of highways. The principle objectives of these regulations are to achieve maximum public use of such right-of-way, consistent with the laws of New Mexico and to insure that utility relocations on highway construction projects are accomplished in accordance with New Mexico Statutes, Regulations and Federal Codes. These regulations shall also provide for maximum public safety, maintenance of the roadways, and should minimize future conflicts between the public highway systems of New Mexico and utilities serving the general public in this State.
[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.7 DEFINITIONS

A. AASHTO -- American Association of State Highway and Transportation Officials.

B. Access control -- The condition where access rights of owners or occupants of abutting land adjacent to highways are fully or partially controlled or limited by public authority, with no right to obtain a driveway permit.

C. Aerial facilities -- Pole mounted utility lines or other above ground structures for the transmission or distribution of electric power, communications, traffic control lights and street lighting.

D. **Agreement** -- Pertains to the New Mexico State Highway and Transportation Department standard form Utility Relocation Agreement or other specifically written agreements pertaining to the relocation of utilities in conflict with highway construction, but not limited only for these purposes.

E. **Archaeological clearance** -- Legally required documented finding and/or field investigation procedure to insure the protection of known and unknown cultural/historic sites. It must be performed prior to any construction excavation, subsurface clearing or ground surface disturbance in connection with highway construction projects, or the accommodation of utilities or other facilities within public highway right-of-way.

F. **Average daily traffic** -- The average 24 hour vehicular traffic volume, derived from the total volume divided by the number of days in a one year (usually) period. Commonly abbreviated as ADT.

G. **Backfill** -- Placement and compaction of material around and/or over a structure such as a pipe, conduit, casing or gallery.

H. **Barrier** -- A device which provides a physical limitation through which a vehicle could not normally pass. It is intended to contain or redirect the movement of an errant vehicle away from roadside or median obstacles, ravines, ditches, etc.

I. **Bored or boring** -- A construction procedure for pushing or jacking a pipe or conduit under the highway, without disturbance to the highway structure or prism.

J. **Breakaway** -- A design feature which allows a device such as a utility pole, sign post, luminaire, or traffic signal support to yield or separate upon impact. The release mechanism may be slip plains, planes hinges, fracture elements, or a combination thereof.

K. **Cap** -- Rigid structural element surmounting a pipe, conduit, casing or gallery.

L. **Carrier** -- Pipe that directly contains a transmitted fluid (liquid or gas).

M. **Casing** -- A larger pipe enclosing a smaller pipe.

N. **Catch point** -- The point on the undisturbed ground surface where highway backslopes and foreslopes terminate after being cut or filled by construction equipment; usually established by a slope stake.

O. **CBC** -- Concrete Box Culvert.

P. **Clear roadside area or clear zone** -- That roadside border area, starting at the edge of the traveled way , available for use by errant vehicles, wherein no fixed obstruction or above ground utility facility may be placed unless protected by a barrier, or by incorporating a Department approved breakaway feature.

Q. **CMC** -- Corrugated Metal Culvert.

R. **CME** -- Construction and Maintenance Easement; document providing for use of non-Department owned land on which to construct and maintain permanent facilities.

S. **Coating** -- Protective material applied to, or wrapped around a pipe.

T. **Communication Facilities** -- Includes, but not limited to, telephone, telegraph, TV cable, microwave and fiberoptics.

U. **Compaction** -- A measure of the density of soil, achieved by mechanical means on highway surfaces and on backfill in trenches to harden the material to a predetermined density. Density is the soil weight maximum, in a measured (Modified Proctor Method "C" T-99) volume, with a pre-determined water content, plus a uniform compaction effort.

V. **Condemnation** -- The process by which private property is acquired for public purposes through legal proceedings, under the power of eminent domain.

W. **Conductor** -- Various types of electrical wire used for the transmission and distribution of electricity.

X. **Conduit or Duct** -- An enclosed tubular runway for protecting wires or cables.

Y. Control number or CN -- Four digit number assigned to specific highway projects and used for identification and tracking purposes.

Z. **Cost of relocation** -- The entire amount properly attributable to relocation of a utility facility after deducting therefrom the value of any betterment of the new facility and any salvage value derived from the old facility.

AA. **Cover** -- Depth to the top of a pipe, conduit, casing or gallery below the ground surface.

AB. **Cradle** -- Supporting structural element below a pipe.

AC. **Cultural resource study and clearance** -- To determine the impact of construction to any known or unknown cultural/historic sites; see Archaeological Clearance.

AD. Density -- Compaction of soil by mechanical means on highway surfaces and for backfill in trenches to harden the fill material to a predetermined density. Density is the soil weight maximum, in a measured volume, with a pre-determined water content, plus a uniform compaction effort.

AE. Department -- The New Mexico State Highway and Transportation Department, sometimes identified herein as NMSHTD, State Highway Department, State, and Highway Agency.

AF. Direct burial -- Installing a utility facility underground without trenching separately, i.e., plowing. A method usually used for installing flexible cable.

AG. Distribution lines -- Intermediate utility lines or arterials that supply natural gas, steam, electricity, telephone communications, water and TV cable services to local customers. These systems do not include the service connections.

AH. District engineer -- The engineer in charge of one of the Department's six construction and maintenance districts.

AI. Drain -- Appurtenance to discharge liquid contaminants from casings.

AJ. Drop inlet (D.I.) -- An underground storm water collector with surface grating at curbside, in medians or at other locations in and around highways and streets. It connects to storm water trunk lines usually running parallel to the highway.

AK. Easement -- The document that grants the right to use land (usually in corridors or strips) owned by others, and that defines the conditions of such use.

AL. Eminent domain -- The right of government, utilities and other public entities to take land for public use (upon the payment of just compensation) from land owners unwilling to sell the land after a negotiation for purchase has failed.

AM. Encasement -- A structural element surrounding a pipe. See Casing.

AN. Encroachment -- Unauthorized and illegal use of highway right-of-way or other lands owned or administered by the Department, State or other Public Agencies.

AO. Engineer -- Secretary of New Mexico State Highway and Transportation Department. Identified in the past as State Highway Engineer and Chief Highway Administrator, acting directly or through his/her designee.

AP. Entrance ramp -- A one-direction vehicular traffic lane for entering freeways, access controlled highways, and other highways at interchanges and at other authorized locations.

AQ. Environmental impact statement (EIS) -- A study that determines the total impact of any proposed construction on the environmental system, and the proposed action to mitigate the anticipated impacts.

AR. Exit ramp -- A one-direction vehicular traffic lane for exiting a freeway or controlled access highway, and other highways at interchanges and at other authorized locations.

AS. Expressway -- A divided arterial highway for through traffic with full or partial control of access, generally with grade separations (bridges) at major interSections.

AT. Field design inspection -- The Department's initial highway project inspection to insure agreement on design items and to furnish any additional design criteria.

AU. Federal-aid highways -- All roads constructed in whole or in part with federal aid.

AV. FHWA Federal Highway Administration.

AW. Flexible pipe -- A plastic, fiberglass, or metallic pipe having a large ratio of diameter to wall thickness that can be deformed without undue stress.

AX. Frangible -- A structure readily or easily broken upon impact.

AY. Freeway -- An expressway with full control of access.

AZ. Frontage road -- A local street or road auxiliary to, and located on the side of, an arterial highway for service to abutting property, adjacent areas, and to aid in maintaining access control of the adjoining arterial highway.

BA. Force account -- A daily record of expenditures. Records construction labor, materials, equipment usage, transportation costs and other costs such as commercial travel, per diem and other legitimate administrative costs incidental to utility relocation construction work performed by a utility with their own personnel, at actual costs incurred, without profit.

BB. Gallery -- An underpass (Concrete Box Culvert, or the like) for numerous utility lines, cables or pipes crossing beneath or running parallel under a street, highway or road.

BC. Grade & drain inspection -- The Department's highway project inspection to establish the final grade line, drainage design and review of the overall project design.

BD. Grade separation structure -- A highway, railroad or other type bridge, underpass or large culvert.

BE. **Grounded** -- Connected to earth or to some extended conducting body which serves as a conductor instead of the earth, whether the ground connection is intentional or accidental. Usually pertains to an electrical ground.

BF. **Grout** -- A cement mortar or a slurry of fine sand or clay.

BG. **HA** -- Highway Agency or State Highway Agency (SHA) or other named State Highway Organizations.

BH. **Highway, street or road** -- A general term denoting a public way for the purpose of vehicular and other modes of travel. The names usually apply to the entire area within the right-of-way limits.

BI. **Hot work** -- Work by field electricians on an electrical system that is energized and dangerous.

BJ. **I-Project** -- Interstate Highway Project.

BK. **Inlet** -- The graded and contoured approach to a storm water drainage system or culvert. The entrance through a drop inlet to a buried storm water pipeline drainage system.

BL. **Insert** -- A steel or cast iron cylinder with a female threaded hole in one end. These cylinders are installed in the concrete deck bottom of a bridge to suspend a threaded rod and suspension saddle to support pipelines and other conduits permitted on the bridge crossing.

BM. **Jacket** -- Encasement by concrete poured around a pipe.

BN. **Joint use agreement** -- An Agreement between the Department and a utility owner that provides for one future utility relocation and replacement right-of-way payment when a utility facility that occupies a private easement (corridor or strip of land) is taken for new highway right-of-way but no utility relocation is immediately necessary. The utility remains in place since there is no conflict with the highway features.

BO. **Longitudinal barrier** -- A barrier primarily to prevent penetration and safely redirect errant vehicles away from a roadside or median hazards, such as above ground utility structures.

BP. **Longitudinal installation** -- A utility facility or system located within or out of the right-of-way limits of a highway, where the facility runs parallel to the highway.

BQ. **MUTCD** -- Manual on Uniform Traffic Control Devices. The standard highway, street or road traffic marking and signing directive implemented by the U.S. Department of Transportation, for standard use throughout the United States.

BR. **Manhole** -- An opening to an underground utility that allows workmen to enter, repair and inspect the system.

BS. **Median** -- The portion of a divided highway separating the opposing traffic lanes.

BT. **Natural ground** -- Undisturbed ground not affected by construction or other disturbing factors.

BU. **Normal** -- Crossing at a right angle (90 degrees).

BV. **Oblique** -- Crossing at an acute angle.

BW. **Outlet** -- Downstream channel beyond the end of a drainage pipe or the end of the pipe itself.

BX. **P& PSheets** -- Construction plan and profile sheets.

BY. **PS & E review** -- Final plans, specifications and estimate reviews by the Department, just before letting a highway project to contract.

BZ. **Partial control of access** -- The condition where access rights of owners or occupants of abutting land adjacent to highways are partially controlled or limited by the public authorities.

CA. **Pavement structure** -- The combination of subbase, base course and surface course placed on a highway, street or road subgrade to support the traffic load.

CB. **Permit** -- Department document that provides for the occupancy of public right-of-way by utilities, entitled New Mexico Public Highway Utility Accommodation Permit, also called a use and occupancy agreement, in the references.

CC. **Pipe** -- A tubular steel, cast iron, concrete, plastic or other material product designed for the transmission of liquid or gaseous substances.

CD. **Plan in hand inspection** -- The Department's final field inspection to review the completed highway project plans.

CE. **Plowing** -- *See*, Direct Burial.

CF. **Police power** -- The right of government to legislate, regulate and limit the rights of individuals, corporations, companies and others when prompt and prudent action is necessary for the public good, health, safety or welfare. Its application to utility/highway relations is that certain New Mexico statutes provide the Department with specifically defined enforcement powers for utility relocation performance so that highway construction work can be completed without delay and with minimum legal conflict.

CG. Private utility -- A system owned by an individual, corporation, company or others not devoted to public service but for private use to deliver, transmit electricity, communications, natural gas, water or sewage disposal in a closed, private or confined area, such as an industrial site, mine, ranch, mobile home park or other remote location. The utility product(s) can be generated by the private owner or purchased from others (for example, a public utility) for delivery within the private entity.

CH. Public highway -- Any federal, state, county or city highway, street, road or other public way devoted to vehicular and other modes of travel including the entire area within the right-of-way.

CI. Questionnaire -- Utility Relocation Questionnaire. A Department standard form a utility owner uses to provide pertinent information concerning their eligibility to be reimbursed, construction method to be used, right-of-way ownership, and other information needed by the Department.

CJ. Reimbursement -- For the purposes of this regulation, shall mean payment by the Department for eligible costs properly attributable to the highway construction, pursuant to State and Federal regulations.

CK. Relocation -- Means and includes any horizontal or vertical movement of utility facilities intact and any protective measures taken or, where found by the Department to be necessary, the construction of new or additional facilities (with or without contemporaneous removal and salvage of old facilities) in this state, including, in any case, adjustment or protection of connecting off-highway utility lines to the extent necessary.

CL. Right-of-way, R/W or R.O.W. -- A general term or abbreviations for right-of-way, denoting land, property or interest therein; usually referring to a strip or corridor acquired for transportation or utility purposes.

CM. Roadside -- A general term denoting the area adjoining the outer edge of the roadway but within the right-of-way. Extensive areas between lanes of a divided highway may also be considered roadside.

CN. Roadway prism -- A road bed Section from toe of slope to toe of slope, or borrow ditch bottom, that includes the compacted subgrade, subbase and the paved surface of the highway.

CO. Scenic overlook -- A roadside area provided for motorists to stop their vehicles beyond the shoulder, usually with parking areas, primarily for viewing spectacular scenes.

CP. Secondary highway -- Minor roads, rural and/or urban, farm to market roads and the like that are designated secondary state highways, and are either paved or unpaved.

CQ. Secretary -- Secretary of the New Mexico State Highway and Transportation Department.

CR. Semi-rigid pipe or rigid pipe -- Pipe designed to tolerate from 1% to 3% (semi-rigid) diametric deflection or less than 1% (rigid).

CS. Service drop or service connection -- A utility service connection from a distribution line to a house, business or other entity.

CT. Skew or skewed -- Usually refers to a highway drainage structure set at oblique angles (not at 90 degrees) to the centerline of a highway. Could also be used to describe utility crossings.

CU. Slab, floating -- A concrete slab set between the ground surface and the top of a pipeline to protect the pipeline segment from static and dynamic load damage.

CV. Sleeve -- *See* Casing.

CW. Specifications or "Specs" -- Refers to technical design parameters written to define construction methods, materials quality and durability requirements, inspection and certification procedures, test procedures, and other mandatory procedures incidental to construction quality in general.

CX. Special district -- Any single or multipurpose district organized as a local public body of the state for the purpose of constructing and furnishing any urban-oriented service which another political subdivision of the state is authorized to perform, including but not limited to the services of water, sewage, garbage, refuse collection and recreation, but excluding the functions or services of drainage, irrigation, recreation, reclamation, soil and water conservation or flood control.

CY. Storm sewer trunk line -- Usually a large diameter storm water pipeline underground and parallel to the centerline or adjacent to the roadway or street, and fed by curb or median drop inlets.

CZ. Structure -- A bridge, drainage culvert or irrigation facility in highway usage, and a power or telephone pole in utility usage. Many other items are identified as structures in other industries.

DA. Structure profile sheets -- Construction plan sheets showing the size, depth and flow line gradient of proposed highway drainage culverts plus the inlet and outlet profiles.

DB. Subsurface utility engineering or SUE -- An engineering discipline, whereby records research, geophysical techniques and soft digging methods are used to accurately locate subsurface utilities. The process is intended to collect utility data very early in the design (FDI) process so as to mitigate conflicts between highway construction features and utilities.

DC. Temporary construction permit (T.C.P.) -- A land use agreement that terminates when the construction work within the permitted area is completed.

DD. Termini -- The written description of the location of a highway project.

DE. Traffic control plan (T.C.P.) -- A plan designed to guide drivers safely through a construction area; such plan must meet MUTCD minimum requirements.

DF. Transmission system -- Refers to a utility system which transmits a substantial volume of electric current, telephone calls, fluid or gaseous products from a generation location, source point, major storage point, well or the like to a location where actual distribution to the consumer will begin.

DG. Traveled way -- The portion of the roadway for the movement of vehicles, exclusive of the shoulders and auxiliary lanes.

DH. Trenched -- Installed in a narrow and open excavation.

DI. Turn-out -- A delineated roadway exit from a street or highway to allow access to private or other property; usually paved or improved with gravel.

DJ. Use and occupancy agreement -- See Permit.

DK. Utility -- All publicly, privately and cooperatively owned utilities, without distinction, for the rendition of water, electric power, sanitary sewer, storm sewer, steam, fuel gas, telephone or telegraph service through a system of pipes or wires devoted to public utility service. The systems can include natural gas; sanitary sewage collection systems; electricity; communication systems, including telephone, telegraph, TV cable, microwave, fiberoptics and others. The term "utility" does not apply to utility systems devoted solely to private use, or when the product of the private utility system is not for sale or for use by the general public as a whole.

DL. Vent -- Appurtenance to discharge gaseous contaminants from a pipe casing.

DM. Vertical clearance -- The difference in elevation, without obstruction, from the lowest point of the superstructure (bridge or box culvert, usually bottom of roof or deck bottom) or a wire conductor to the highest point of the traveled-way, river or railroad track, or below the bottom of a corrugated metal culvert or concrete box culvert or other utility underground facility to the top of another utility pipeline, conduit or cable built beneath the drainage structure or other utility facility.

DN. Walled -- Partially encased by concrete poured alongside the pipe.

DO. Wet-bore -- Illegal method of boring a hole beneath a highway using a water jet or sluicing method.

DP. Work order system -- A procedure for accumulating and recording all costs related to relocations into separate accounts.

DQ. X-ing -- Abbreviation for crossing. Refers to a railroad and/or utility crossing.

[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.8 ORGANIZATION

A. The Railroads and Utilities Section of the New Mexico State Highway and Transportation Department is managed by the Railroads and Utilities Section Manager who is directly responsible to the Right-of-Way Bureau Chief, and is a part of the Engineering Design Division, headed by the Division Director. The Section Manager is responsible for the direction of all work undertaken by the Railroads and Utilities Section, and for the supervision of the various Railroad and Utility Relocation Agents and other personnel who may be assigned to perform designated functions of the Section.

[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.9 FUNCTION: The Railroads and Utilities Section is responsible for the coordination and functional control pertaining to all aspects of public utility and railroad related construction considerations, accommodations and installations affecting the New Mexico State Highway and Transportation Department. These functions include, but are not limited to:

A. The relocation of utilities and railroad facilities in conflict with the construction of highway projects.

B. The control of utility occupation of public highway right-of-way, including utility permits, coordination, regulation and central administration.

C. General liaison with public and private utilities and railroad companies.

D. Assist other New Mexico State Highway and Transportation Department functionaries concerning matters pertaining to the administration of utility company occupation of public right-of-way, utility and railroad relocations on construction projects, and other matters relative to railroad safety.

E. Coordinate, develop and administer the Railroad Safety Program.
[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.10 GENERAL POLICY It is the general policy of the Department to accord utilities certain legal rights pertaining to the occupation of public right-of-way as outlined below:

A. It is in the public interest for utilities to be accommodated within the public right-of-way of highways and, under limited conditions, within access controlled freeways, including interstates under the jurisdiction of the New Mexico State Highway and Transportation Department when such use does not adversely affect the highway features, aesthetic quality, public use, or safety of the traveling public. NMSA 1978, Section 67-8-15.

B. Public utilities have the power of eminent domain, which gives them a quasi-public status. In addition, a public utility operating in New Mexico has a legal right to install its facilities within highway right-of-way, subject to the regulations of this Department. Public utility facilities are not right-of-way encroachments, nor may they be treated as such. Therefore, the administrative intent of the Railroads and Utilities Section is to provide reasonable, efficient and economic solutions to conflicts between the requirements of highway design, construction operations and safety and the location of public utility facilities. Railroads and Utilities Section Agents, Technicians and other assigned personnel should engage in constant liaison with utilities and railroads, to ensure that the communication and interrelations with them are an on-going function of their work performance.

C. The location or the relocation of public utility facilities within existing New Mexico public highway right-of-way, or right-of-way to be acquired for highway construction purposes, shall be governed by all applicable State laws, rules and regulations, Federal Codes and the Department policy set forth herein.
[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.11 UTILITY ACCOMMODATION POLICY

A. Application: This utility accommodation policy shall apply to all publicly, privately, cooperatively, municipally, or governmentally owned facilities used for the carriage, transmission or distribution of electric power, communication facilities, water, gas, oil, petroleum products, steam, chemicals, sewage, drainage, irrigation and similar items, that are to be accommodated or relocated within the rights of way of highways, roads or streets under the jurisdiction of the New Mexico State Highway and Transportation Department.

(1) This utility accommodation policy is provided to regulate the location, design and methods for installing, accommodating and maintaining physical utility facilities within public highway rights-of-way. This Section provides for the continuation of past regulations, State law and modifies and adds new regulations where necessary to comply with new State Laws and/or Federal Codes pertaining to the accommodation and relocation of utilities on State and Federal Aid Projects. The accommodation policy does not address the financial responsibility for replacing right-of-way or relocating the facilities of utilities in conflict with planned highway construction. The reimbursement policy of this Department is set forth in Section 19 [now 17.4.2.19 NMAC] of this manual.

(2) When laws or orders of public authority or industry codes prescribe a higher degree of protection for utility facility construction than provided for in the accommodation procedures set forth in this regulation, such laws, orders, or codes shall prevail.

B. General utility design requirements: Except when a higher degree of protection is required by industry or governmental codes, laws, or by regulations of this Department, or orders of the public authority having jurisdiction over the utility, all utility facility installations on, over, along or under the surface of the rights-of-way of State highways, including attachments to highway structures shall, as a minimum, meet the following utility industry and governmental requirements:

(1) Electric power and communication facilities installations shall conform with the current applicable National Electric Safety Code.

(2) Water, sewage and other effluent lines shall conform with the requirements of the American Public Works Association or the American Water Works Association.

(3) Pressure pipelines shall conform with the current applicable Sections of the standard code of pressure piping of the American National Standards Institute, 49 CFR 192, 193 and 195, and/or applicable industry codes.

(4) Liquid petroleum pipelines shall conform with the current applicable recommended practice of the American Petroleum Institute for pipeline crossings under railroads and highways.

(5) Any pipeline carrying hazardous commodities shall conform to the rules and regulations of the U.S. Department of Transportation governing the transmission of such materials.

C. Pipelines located in casings, galleries, utility tunnels or highway structures shall be designed to withstand expected internal pressures, and to resist internal and external corrosion; casings or uncased pipelines shall be designed to withstand external pressures as well.

D. Joints in carrier pipe lines operating under pressure shall be of a mechanical or welded leak-proof construction.

E. Ground-mounted utility facilities shall be of a design compatible with the scenic quality of the specific highway segment being traversed.

F. All utility installations, on, over, along or under highway rights-of-way, and attachments to highway structures, shall be of durable materials, designed for a long service-life and relatively free from routine maintenance.

G. On new installations or relocation of existing facilities, provisions shall be made for expansion of the facilities, particularly those underground or attached to highway structures. These provisions shall be planned so as to avoid interference with highway traffic when additional facilities are installed in the future.

H. Utility installations that are required for highway purposes, such as highway lighting, traffic signals, pump stations, telecommunications services for rest areas, etc. shall be handled as highway project construction items on proposed highway projects. As such, coordination by the appropriate Department design unit and the affected utility is required so as to ensure that proper bid items are included in the highway construction plans/documents, and that appropriate agreements are developed for addressing service, maintenance and other costs. Where no highway project is proposed, but utility services for highway purposes are required, coordination between the Department unit requesting the service, the utility and the affected highway district shall be required, and appropriate documentation developed so as to outline the responsibilities of each party. In all cases, the location of such facilities within highway right of way shall be properly established and included in the District's utility data base.

I. The utility owner shall be responsible for compliance with industry code, the conditions and/or special provisions specified in the permit, applicable statutes and regulations of the State of New Mexico, and the U.S. Department of Transportation Code of Federal Regulations.

J. The utility shall be responsible for the design, construction, and maintenance of all facilities to be installed within highway rights-of-way. All elements of these facilities are subject to review and approval by the Department, particularly the materials, location and method of installation. The utility is responsible for, and will provide all measures as required to preserve the safe and free flow of traffic, structural integrity of the roadway or highway structure, ease of highway maintenance and appearance of the highway, resulting from their installation. Traffic Control Plans and signing shall be approved by the Department prior to any utility work within the highway right-of-way.

[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.12 GENERAL UTILITY CONSTRUCTION REQUIREMENTS: Disturbance of areas within highway rights of way by utility operations shall be kept to a minimum and restored to the satisfaction of this Department. All utility construction methods used within the highway right-of-way shall be performed in accordance with current Standard Specifications for Highway and Bridge Construction, the provisions of this regulation, and utility accommodation permit requirements. All unsatisfactory installation or construction work performed by the utility on highway right-of-way will be corrected or reconstructed upon written notification by the Department that identifies the deficiencies. The Utility shall promptly initiate the restoration work and shall work continuously until the installation complies with the regulations and specifications. If the restoration is not performed within a reasonable specified time, the Department may perform the restoration work and the utility shall be responsible for all costs incurred.

A. The utility shall avoid disturbing or damaging existing highway drainage facilities and shall be responsible for repairs and restoration of any damage, including restoration of ditch flow lines, as determined by the Department. Wherever necessary, the utility shall provide drainage away from its own facilities to avoid damage to the highway. Construction or compaction by means of jetting, puddling, or water flooding is prohibited within all highway rights-of-way.

B. The utility is prohibited from spraying, cutting or trimming of trees or other landscaping elements, unless specific written permission is given by this Department. The approval of a utility accommodation permit does

not include approval of such work, unless the cutting, spraying and trimming is clearly indicated on the permit application. In general, when permission is given, only light trimming will be permitted. When tree removal is approved, the stump shall be removed and the hole properly backfilled to natural ground density, and/or other Department approved landscape elements provided. The work site shall be left in a clean and trash free condition and all debris shall be removed. Reseeding shall be performed as per schedule outlined in Paragraph 12.5 [now Subsection E of 17.4.2.12 NMAC].

C. Traffic Control for utility construction and maintenance operations shall conform with the Manual on Uniform Traffic Control Devices (MUTCD). All utility construction and maintenance operations shall be planned to keep interference with traffic to an absolute minimum. On heavily traveled highways, utility operations interfering with traffic shall not be conducted during periods of peak traffic flow. All such work shall be planned so that closure of intersecting streets, road approaches or other access points is held to a minimum. Traffic Control Plans for each installation are mandatory and must be attached to each utility accommodation permit application. No utility installation work shall commence until the permit and Traffic Control Plans are approved by the District Engineer or his/her representative.

D. All utility facilities located on public rights-of-way shall be kept in an adequate state of repair. Minor maintenance of existing facilities may be performed without notification. However, any physical revisions, relocations, additions, excavations, impedance of traffic or other disturbances within the right-of-way shall require the submittal of a new utility accommodation permit application. No remedial work may commence until the new utility accommodation permit is approved. Repairs of an emergency nature, necessary for the safety of the traveling public, may be immediately performed without prior approval, to be followed by formal written notification to the appropriate District Engineer or his/her representative. When such emergency repairs may constitute a traffic hazard, the proper District Highway Office and the New Mexico State Police shall be officially notified to coordinate any safety measures required.

E. Restoration of the highway right-of-way disturbed by excavations or grading work performed by the utility shall include reseeding. This work shall consist of seeding all areas which are denuded of vegetation during the utility's construction operations. The reseeding work by the utility will be subject to inspection and acceptance by a representative from the Department. All affected areas shall be treated with Class "A" seeding of standard Department specifications. Fertilizer shall be used on all areas at the rate of 200 pounds per acre, Department Specification 16-20-0. The various species, origin and seed required for each Highway District area are shown on the following schedule:

(1) Districts 1 and 2

SANDY SOILS

Species	**Origin**	Pounds Pure Live Seed **Per Acre**
Lehman's Lovegrass	Any	2.0
Sand Dropseed	New Mexico	2.0
Sideoats Grama	Vaughn	4.0
Fourwing Saltbrush	New Mexico	3.0

HEAVY CLAY SOILS

Blue Grama	Lovington	2.0
Sideoats Grama	Vaughn	6.0
Fourwing Saltbrush	New Mexico	3.0

HIGHER RAINFALL

Blue Grama	Lovington	2.0
Sideoats Grama	Vaughn	6.0
Western Wheatgrass	Arriba	6.0

(2) Districts 3 and 6

SANDY SOILS

Species	**Origin**	Pounds Pure Live Seed **Per Acre**
Lehman's Lovegrass	Any	3.0
Indian Ricegrass	Paloma	4.0
Sand Dropseed	New Mexico	2.0

HEAVY CLAY SOILS

Blue Grama	Lovington	2.0
Sideoats Grama	Vaughn	6.0
Fourwing Saltbrush	New Mexico	3.0

HIGHER RAINFALL

Blue Grama	Lovington	2.0
Sideoats Grama	Vaughn	6.0
Western Wheatgrass	Arriba	6.0

(3) Districts 4 and 5

SANDY SOILS

Species	**Origin**	Pounds Pure Live Seed Per Acre
Indian Ricegrass	Paloma	3.0
Sand Dropseed	New Mexico	2.0
Sideoats Grama	Vaughn	5.0

HEAVY CLAYS

Blue Grama	Lovington	2.0
Sideoats Grama	Vaughn	5.0
Alkali Sacaton	New Mexico	2.0
Fourwing Saltbrush	New Mexico	4.0

HIGHER RAINFALL

Western Wheatgrass	Arriba	6.0
Blue Grama	Pastura	3.0
Sideoats Grama	Vaughn	4.0

FERTILIZER REQUIRED: ALL DISTRICTS

200 pounds per acre, Specification 16-20-0.

F. Scenic enhancement: The following provisions for scenic enhancement shall apply for utility facility installation in cited areas:

(1) The type and size of the utility facilities and the manner and extent to which they are permitted within areas of scenic enhancement and natural beauty may materially alter the scenic quality, appearance and view of highway roadsides and adjacent areas. Such areas include scenic strips, overlooks, rest areas, recreation areas and

the rights-of-ways and adjacent highways. Also included are Sections of highways which pass through public parks, recreation areas, wildlife and waterfowl refuges and historic sites. Whenever possible, new utility installations within all such strips overlooks and areas shall be avoided.

(2) New underground utility installations may be permitted within such strips, overlooks, scenic areas or in the adjacent rights-of-way when they do not require extensive removal or alteration of trees and other shrubbery visible to the highway user, or do not impair the scenic appearance of the area.

(3) New overhead (aerial) installations of communication and electric power lines are to be avoided at such locations unless there is no feasible and reasonable alternative. Any such installation shall be fully justified to the Department by demonstrating that:

(a) Other utility locations are not available or present unusually difficult construction constraints or are unreasonably costly or are less desirable from the standpoint of visual quality.

(b) The placing of underground utility facilities is not technically feasible or economical, or is more detrimental to the scenic appearance of the area.

(c) The proposed installation can be made at a location and in a manner that will not detract from the scenic quality of the area being traversed, utilizes suitable design, and uses materials aesthetically compatible to the scenic area.

(4) It is within the Department's sole discretion as to whether adequate justification has been demonstrated to it by the utility, which decision shall be final and accepted by the utility.

(5) When a utility desires to construct a facility through or within scenic enhancement areas, the request for a utility accommodation permit shall be submitted to the appropriate District Traffic Engineer, providing substantial leadtime, because the permit must be carefully evaluated to determine the impact upon the scenic area involved.

(6) Utility accommodation permit applications for installations in scenic enhancement areas must be accompanied by comprehensive and detailed supporting documentation. The design and materials should be aesthetically pleasing to the eye and the installation should not intrude in such a manner as to detract from the Scenic quality presented for viewing by the traveling public. Permits not adequately supported will be rejected by the Department.

(7) Utility installations through scenic enhancement areas that are required for highway purposes, such as highway lighting, service to weigh stations, rest and recreation areas, and other official sites shall be located and designed to conform with these scenic enhancement provisions. Such installations shall be coordinated with the utility, the appropriate Department design unit, and included as bid items in the highway construction plans if they involve a new highway project.

(8) archaeological or cultural resources clearances: To comply with the New Mexico State Law, The Cultural Properties Act, NMSA 1978, Sections 18-6-1 through 18-6-17 and specific Federal Law Historic Preservation Act of 1966, relating to the protection and preservation of historic and cultural resources, it shall be mandatory for utility facility owners to obtain an archaeological survey prior to any installation within highway right-of-way or property or new right-of-way to be acquired for highway construction. This survey shall be required for utility installations or relocations which include any utility structure, overhead or underground utility systems, either pipeline or ditch and/or any clearing operations, and any or all other ground surface disturbing construction activities across or through any obvious or suspected archaeological site. The survey report shall be submitted to the Department for its review and approval. No utility permit shall be issued without archeological clearance from the Department. No survey will be necessary if the utility has determined by inquiry and written substantiation from the Department that an acceptable archaeological survey was previously done by the Department or others approved by the Department.

(9) environmental clearances: It shall be the utility's responsibility to comply with all Federal, State, and local laws and regulations controlling pollution of the environment. Prior to the start of utility construction, the utility shall contact the Department's Environmental Section to establish if any action is necessary by the utility for adhering to air, noise, and water quality control regulations. It shall also be the responsibility of the utility owner to insure compliance with National Pollutant Discharge Elimination System (NPEDS) Regulations on all utility work within highway right-of-way, where any ground disturbance activities involve areas exceeding five (5) acres. A Notice of Intent (NOI) must be filed with the Environmental Protection Agency (EPA) before the utility work can begin, and approval of the sediment control and reclamation plan from the NMSHTD Landscape Architect must be secured. The Landscape Architect shall also be responsible for final acceptance of permanently established

vegetation as required by NPDES and as provided for by the utility owner. Information on these environmental regulations is available from the Roadside Environment Design Unit of the NMSHTD.

G. New Mexico public highway utility accommodation permit:

(1) General requirements: A utility owner who desires to install segments of their utility systems, or needs to relocate an existing facility already installed within the rights-of-way of public highways under the jurisdiction of the NMSHTD, must apply for a New Mexico Public Highway Utility Accommodation Permit. No utility construction shall commence on public highways right-of-way until the utility owner has obtained the approved permits, approval of their insurance, with coverages and face amounts shown in Paragraph 12.11 [now Subsection K of 17.4.2.12 NMAC], and added the NMSHTD as an additional insured. After receiving approval, the utility owner shall notify the Department in writing, five days in advance of the date their installation or relocation construction will commence.

(2) The utility owner seeking a utility permit must provide as-built plans, within thirty (30) days of completion of the installation pertaining to the location of the facility installed. The location must be tied by a survey, performed and certified by a registered New Mexico Land Surveyor, to the Department's monuments and referenced to Department's mileposts and/or to the highway construction project stationing. The Utility shall provide a map to the Department detailing location and elevation of each break point along the facility. Where utility owners fail to establish documentation and provide survey maps to the Department, and Department maintenance crews damage utilities, the utility shall be responsible for all costs associated with repair, but only if Department requested a utility locate prior to beginning maintenance activities.

(3) Information on the horizontal and vertical survey ties may be obtained from the Department's Aerial and Lands Survey Section, Monumentation Unit, located in the Department's General Office (G.O.); mailing address: NMSHTD, Aerial and Lands Survey Section, Monumentation Unit, P.O. Box 1149, Santa Fe, NM 87504-1149.

(4) Survey monumentation and project stationing survey information may also be obtained from the appropriate District Engineer, along with the New Mexico Public Highway Utility Accommodation Permit Forms. The Railroad and Utility Section of the G.O., in Santa Fe also can provide permit forms (see G.O. address in above Paragraph). The addresses and phone numbers of the Department's six District Offices are:

NMSHTD
District One Office
P.O. Box 231
Deming, NM 88031-0231
(505) 546-2603

NMSHTD
District Two Office
P.O. Box 1457
Roswell, NM 88202-1457
(505) 624-3300

NMSHTD
District Three Office
P.O. Box 91750
Albuquerque, NM 87119-1750
(505) 841-2700

NMSHTD
District Four Office
Box 30
Las Vegas, NM 87701-0030
(505) 425-7527

NMSHTD
District Five Office
Box 4127, Coronado Sta.
Santa Fe, NM 87502-4127
(505) 827-9500

NMSHTD
District Six Office
P.O. Box 2159
Milan, NM 87021
(505) 285-6623

(5) The utility owner applying to place utilities within the right-of-way of public highways must determine in which Highway District the installation will be constructed. Completed utility accommodation permit forms should be submitted to the appropriate District Engineer, to the attention of the District Permit Agent, at the address previously listed. The boundaries of each District may be obtained from the appropriate District Permit Agent.

(6) The utility seeking a utility accommodation permit from the Department will provide the Department with comprehensive plans that depict the utility installation by plan view and profiles. Details that clarify complicated features of the installation shall be added as appropriate. In addition to the detailed plans, the utility owner shall provide all the information required on the permit form. Utility Permit Instructions are available to assist in preparation of all required documents.

(7) The utility who has received authorization to proceed with their installation/relocation shall strictly adhere to performing the work in accordance to the approved plans. No deviation from the plans, without prior written approval from the Department, shall be allowed.

(8) It shall be the responsibility of the utility owner to renew each permit prior to its expiration. The utility shall submit a renewal permit, along with plans that reflect the current location of the utility relative to existing roadway features. If the plans are as-built and reflect the actual current condition, a certification stating that this is the case shall accompany the as-built plans. Any costs to repair damage to utility facilities by highway maintenance crews due to inconsistencies between the as-built plans and the actual utility location shall be borne by the utility.

(9) All changes in ownership of a utility facility shall require the new owner to submit fully executed and approved assignment documents between the utility owners involved to the Department, along with new State utility permit applications and plans of the assigned facility located within Department's highway right-of-way. If the plans are as-built and reflect the actual current location of the facility, a certification stating that this is the case shall be required; otherwise new plans that reflect the actual location relative to existing roadway features shall be provided. Any requirements stipulated by the underlying fee owner in cases where a change of ownership occurs shall be the sole responsibility of the new facility owner and may require the new owner to obtain appropriate approvals from the fee owner. Any costs to repair damage to utility facilities by highway maintenance crews due to inconsistencies in the as-built plans and the actual utility location shall be borne by the utility.

(10) Utility work shall commence within six (6) months of the date of issuance of the utility permit, otherwise the permit shall become null and void. Any work not started within this six month period shall require new permit applications and associated documentation, as well as Department approval of the new submittal before the utility work can commence.

H. Other required permits: In areas where highways pass through land controlled by the U.S. Forest Service, Bureau of Land Management, U.S. Military Bases, Indian Lands and other designated Federally controlled lands, and certain New Mexico state lands under the jurisdiction of the New Mexico State Land Office, and/or other state agencies, the utility owner must also obtain a permit, written permission, or other documented authorization from these agencies for utility installations. This written authorization is required in addition to the Department's Utility Accommodation Permit, and shall accompany the Department's permit request for new installations, or as determined by the Department.

I. Traffic control plans: Utility owners shall provide Traffic Control Plans in accordance with the Manual on Uniform Traffic Control Devices, and shall comply with the approved Traffic Control Plan during the utility installation, relocation or maintenance work within the highway right-of-way. The Traffic Control Plan must be accompanied by an approved utility accommodation permit and utility construction authorization.

J. Indemnification: The utility owner must indemnify and hold harmless the Department from loss due to any negligent act of the utility, the utility's employees, any agent acting on the utility's behalf, and anyone else engaged by the utility to work on the utility installations, maintenance or relocations of their facilities. Any contractor or subcontractor engaged by the utility to perform utility installations or relocations in conjunction with or prior to highway construction must also indemnify and hold harmless the Department from loss due to any negligent act of the utility's contractor or subcontractor.

K. Insurance requirements: Utility owners shall carry insurance in amounts not less than those below specified and as outlined in Section 107.25 of the Standard Specifications for Highway and Bridge Construction, 1994 Edition, (hereinafter, "Specifications"), as may be updated from time to time. In the event of conflict between the specification, and this regulation, owner shall carry the larger amount of insurance. If a utility is self-insured, the utility shall provide an Owner's Protective Liability Insurance Policy, in favor of the Department, in the amounts below specified.

(1) general liability: Bodily injury liability and property damage liability insurance applicable to the utility installation or relocation work shall be provided as follows, which amounts may be changed, by the Department, from time to time: Insurance coverage in the amount of $1,000,000.00 for each occurrence; $1,000,000.00 aggregate for Bodily Injury Liability and $500,000.00 each occurrence; $1,000,000.00 aggregate for Property Damage Liability, written on a comprehensive General Liability Form or Commercial General Liability Form which must include the following:

(a) Coverage for liability arising out of the operation of independent contractors;

(b) Completed operations Coverage;

(c) Attachment of the Broad Form Comprehensive General Liability Endorsement.

(2) In the event that any use of explosives is required during the installation or relocation, the insurance shall include coverage for injury to or destruction of property arising out of: The collapse of, or structural injury to any building or structure due to excavation, including borrowing, filling or backfilling in connection therewith, or to tunneling cofferdam work or caisson work, or to moving or shoring, underpinning, raising or demolition of any building or structural support thereof.

(3) Coverage must be included for injury to or destruction of any property arising from injury to or destruction of wires, conduits, pipes, mains, sewers or other similar property or any other apparatus in connection therewith below the ground. If such injury or destruction is caused by or during the use of mechanical equipment for the purpose of excavating, digging or injury to or destruction of property at any time resulting therefrom.

(4) automobile liability insurance: Coverage for the utility, its contractor or subcontractor (whether included in the policy providing General Liability insurance or in a separate policy) must provide liability for the ownership, operation and maintenance of owned, non-owned, and hired cars. The limits of liability for Automobile Liability insurance shall be provided in the following amounts, which amounts may be changed from time to time:

(a) Bodily Injury Liability $500,000 each person; $1,000,000 each occurrence.

(b) Property Damage Liability $1,000,000 each occurrence.

(5) Department as additional named insured: The utility, its contractor or subcontractor shall have the New Mexico State Highway and Transportation Department added as an additional named insured on the Comprehensive General Liability Form or Commercial General Liability Form furnished by the Utility.

(6) proof of insurance: The utility shall provide to the appropriate Department District Engineer a certified copy of the utility owner's insurance policy and certificate of insurance, or in the event the utility is self-insured, a copy of the Owner's Protective Liability Insurance Policy or a Certificate of Insurance at the time the original utility accommodation permit application is submitted for approval. The utility owner shall also be responsible for and require that any contractor or subcontractor engaged by them shall provide the Department with a certified copy of their insurance policy or certificate of insurance in the amounts and with the provisions as herein provided. If a bond is required, the utility shall provide a proof of that bond to the appropriate Department District Engineer.

(7) worker's compensation insurance: The utility, its contractor or subcontractor shall also carry Worker's Compensation Insurance or otherwise comply with the provisions of the New Mexico Workmen's Compensation Act and Occupational Disease Disablement Law.

(8) liability insurance, automobile liability insurance and worker's compensation Insurance: For the utility, its contractor or subcontractor shall be kept in force for the duration of the utility facility installation, relocation, remedial or clean up work required due to Department authorized utility relocation or utility installation.

(9) insurance required during utility relocations: The insurance listed herein shall be provided by the utility, its contractor or subcontractor on all utility relocation work authorized by the Department. If the utility owner is otherwise eligible for utility relocation reimbursement, the premium cost can be added to the utility's cost estimate; if not eligible for reimbursement, the premium(s) shall be paid by the utility owner. A certified copy of the utility owner's insurance policy(s), or a certificate of insurance for and covering the utility relocation work, shall be provided to the Section Head, Railroad and Utilities Section, NMSHTD, P.O. Box 1149, Santa Fe, NM 87504-1149.

L. Compliance with regulations: Any utility owner that installs its utility facilities within the Department rights-of-way shall comply with the provisions of these regulations. Violation of any regulation pertaining to the installation and maintenance of utility facilities placed within the Department rights-of-way may result, at the discretion of the Department, in:

(1) An order requiring the utility owner to make prompt corrections or take the appropriate remedial action as directed in writing by the Department;

(2) A written order declaring utility's New Mexico Public Highway Utility Accommodation Permit, applicable to the violation, as null and void. In such case, the utility owner may be required to vacate the public highway right-of-way if prompt remedial action is not completed by the utility owner. If the utility fails to correct the problem, all costs as a consequence of a vacation order, including the total cost of removal of the permitted facility, plus all administrative costs, shall be at the expense of the utility owner. Failure of the utility or its agent to comply with such order can result in the utility owner being denied further utility permits until they are able to satisfy the Department District Engineer or appropriate Department representative that they are in compliance or are making a good faith effort to comply;

(3) Violations may also preclude the issuance of additional utility permits until such time as the utility is in compliance.

[3/10/71, 11/15//96; Recompiled 12/31/01]

17.4.2.13 PHYSICAL LOCATION OF FACILITIES: The following requirements apply to the physical location of utility facilities on non access-controlled highways; additional requirements for access-controlled highway facilities are set-out in Paragraph 17 [now 17.4.2.17 NMAC], "The Accommodation of Utility Facilities Within Freeway or Interstate Right-of-Way."

A. Aerial facilities, parallel: The proposed installation of aerial utility facilities parallel to a state highway shall be located no more than .3048 m (1 foot) within the right-of-way line on a uniform alignment, wherever practical. Down guys and anchors shall not project into the cut or fill slopes. Minor variations will be considered on an individual basis upon substantiation submitted by the utility.

B. Aerial facilities crossing: Proposed installations of aerial facilities crossing a highway shall cross the highway at an angle near ninety (900) degrees whenever practical. Poles, anchors and other appurtenances shall be located at, near, or outside the highway rights-of-way. No crossing components shall obtrude upon the roadway prism unless approved by the Department, and all vertical clearances shall conform to the National Electric Safety Code as a minimum, but shall not be less than twenty feet (20'). Minor variations will be considered on an individual basis, or upon substantiation submitted by the utility.

C. Buried facilities, parallel: The proposed installation of buried utility facilities parallel to a highway shall be located no more than 1.52 m (5 feet) within the right-of-way line, whenever practical. Surface components of buried facilities, i.e., valves, manholes, vents, etc., shall be located as close as possible to the right-of-way line. The high point of structural elements such as manholes, vaults and anchor blocks shall be at or below the grade of the right-of-way surface. Minor variations will be considered on an individual basis, on substantiation submitted by the utility. All buried facilities shall be installed at a minimum depth of .91 m (36 inches) from natural ground elevation to the top of the buried facility. All trenches and ditches will be backfilled and compacted to the satisfaction of the Engineer. All excavations outside the roadway foreslopes shall be compacted to a density equal to the surrounding undisturbed soil. All excavations within the toes of the foreslopes shall be compacted to 95% maximum dry density (modified Proctor method "C" T-99 or equivalent) as determined by an approved standard compaction test. Parallel trenches shall be backfilled and compacted during the some work period in which they are excavated. Excavations on or near the traveled way shall not remain open overnight.

D. Buried facilities, crossing: The proposed installation of buried utility facilitiescrossing a highway shall cross the highway at an angle of ninety (900) degrees, wherever practical. All Surface components or proposed buried facility crossings shall be located within 1.52 m (5 feet) of the right-of-way line. All buried facility crossings shall be installed at a minimum depth of .91 m (36 inches) or more from the lowest point of the right-of-way surface to the top of the facility. Minor variations will be considered on an individual basis, on substantiation submitted by the utility.

(1) Unless otherwise permitted, installation of buried facilities crossing a state highway shall be performed by boring or jacking under the roadway. Installations by open cut of the pavement structure may be permitted only where boring or jacking is not feasible due to soil conditions, or where the pavement structure is aged, deteriorated or in generally poor condition. Open cut installations will be considered on an individual basis, on substantiation submitted by the utility.

(2) In cases where the utility owner is allowed an open cut installation, the utility shall be responsible for the restoration and maintenance of the pavement structure, until such time that the Section of roadway is improved by resurfacing, as approved by the Department.

(3) All proposed buried carrier pipes crossing a state highway shall be constructed of steel, cast iron, or reinforced concrete and/or shall be cased (or encased), and shall be of such materials and design as may be approved by the Engineer. Each question of carrier pipe material and/or casement pipe requirements shall be considered on an individual basis, on design data submitted by the utility. As a minimum, the casement shall extend at least from just outside the toe of foreslope to just outside the toe of the opposite foreslope.

(4) The utility shall be responsible for the backfill, compaction and surface restoration of utility trenches outside the roadway prism, and for the restoration and protection of the pavement structure if open cut trenching across the existing roadway is approved by the Engineer, District Engineer or his/her representative. The utility is also responsible for the safety and progress of the traveling public. All backfill, compaction, materials, and pavement structure restoration shall be performed to the satisfaction of Engineer. Backfill in trenches excavated outside the roadway prism shall be compacted to a density equal to the surrounding undisturbed soil. All excavations within the roadway prism shall be compacted to 95% of maximum dry density (Modified Proctor, method "C", T-99 or

equivalent) as determined by a standard compaction test. Any portion of the pavement structure which is broken, disturbed, cut or otherwise damaged in any way, shall be removed and replaced to a design equal to or better than the condition that existed prior to the damage to the pavement structure, as determined by the Department.

(5) Where the party making the installation either is not equipped or fails to properly repair any damage to the pavement structure, the Department will repair the damage and shall bill the utility the actual cost of restorations, plus administrative costs incurred.

(6) All buried utility facilities crossing Department maintained highways shall be identified by the installation of weather proof signs that provide the type of facility, the facility owner and a phone number where maintenance personnel may be contacted. The signs shall be set over the facility at both right-of-way lines. [3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.14 DEFINITIVE DESIGN REQUIREMENTS

A. Pipeline installations; location and alignment: From the highway viewpoint, there are sound reasons for requiring pipeline crossings at right angles to the roadway alignment. Oblique angle highway crossing pipeline installations have many detrimental characteristics as they increase the interference with traffic during construction, are more liable to conflict with highway drainage and structures, upset distribution of live loads to the subgrade and across pavement joints, are considerably harder to control as to line and grade when boring or jacking the pipeline beneath the highway, and they usually create more damage to the pavement structure and subgrade on open cut installations. Diagonal crossings usually require more maintenance and repairs; therefore, all pipeline crossings shall be at or near ninety (900) degrees. Minor variations will only be considered on a case by case basis, upon justification submitted to the Department by the utility. Conditions which are generally unsuitable for pipeline crossings should be avoided, such as locations in deep cuts, across cuts and fills on steep slopes, near the footings of bridge piers, abutments, retaining walls and other structures, across interSections at grade or entrance and exit ramp terminals, at cross drains (transverse drop inlets) where flow may be obstructed, or in locations requiring extensive rock excavations to provide the minimum bury.

B. Pipeline casings; encasement: A carrier pipe is said to be cased (or encased) if it is installed freely inside in a larger diameter pipe. Encasement may also be complete or partial, designed to protect the carrier pipe, lighten its burden, facilitate its insertion and withdrawal and guarantee the integrity of the roadway structure or prism. Common types of casements are those carriers cased or sleeved inside a larger pipe, cradled by a continuous concrete seat fitting the pipe (cradling), walled by a continuous concrete sidefill (walling), boxed or jacketed by concrete completely surrounding the pipe (boxing), capped by a continuous concrete topping or slab (capping)), coated or wrapped by a substantial girdling cover (wrapping), grouted by mortar filling borehole annulus and overbreak (grouting), or tunneled by installation in a utility subway.

(1) Of these methods, only the casing, tunnel, utility subway or gallery provide the complete independence of the carrier pipe from the surrounding roadway structure, and adequate protection to the roadway from leakage of the pipeline. These methods also provide means for insertion and replacement of carriers without access or disturbance to through-traffic roadways.

(2) The following encasement methods do not provide all of the above benefits, but may be utilized subject to individual approvals, on substantiation submitted by the utility: Concrete cradling enhances the load supporting capability of rigid pipes, but accomplishes little else. Walling does the same for semi-rigid and flexible pipes. Capping strengthens both rigid and flexible pipes, and somewhat protects from highway operations penetrating the overfill. When applied to weak or brittle pipes, concrete boxing or jacketing provides protection to the pipe from earth loads, leakage, corrosion or abrasion to some degree. Adequate coating or wrapping prevents contact with corrosive water, soil or vapors. Grouting aids in restoring the continuity and integrity of the earth supporting the pavement structure.

C. Uncased carriers: An uncased carrier crossing a highway becomes an integral part of the embankment supporting the pavement structure. Just as for a culvert, the Department must be assured of adequate structural design. All uncased carriers shall be designed to withstand all combinations of earth and live load, internal pressure, earth and live load plus internal pressure, and earth and live load plus alterations to full and zero internal pressure. Rigid carriers will generally be satisfactory, if they meet culvert design criteria and withstand the internal pressure. Semi-rigid and flexible carrier pipes shall be cased within a rigid pipe encasement.

D. Hazardous transmittants: Transmittants which are flammable, corrosive, expansive, unstable, at high pressure, and/or possibly hazardous to the traveling public or the roadway itself, shall be encased on all highway crossings of carrier pipes over 2 inches in diameter. Uncased crossings of welded steel pipelines may be

permitted, provided additional protective measures are taken in lieu of encasement. Such measures may include higher safety factors in design, materials and construction, coating, and wrapping of carriers in accordance with industry standards, and cathodic protection, subject to the approval of the Engineer, District Engineer or his/her representative. Requirements for uncased carriers: Uncased hazardous or corrosive product pipeline crossings on state highways will be allowed provided they are:

(1) welded steel pipelines;

(2) cathodically protected;

(3) coated in accordance with industry standards;

(4) meet requirements of the pipeline safety regulations -- 49 Code of Federal Regulations, Parts 191 and 192, or Parts 191 and 195 with respect to wall thickness;

(5) designed for operating stress levels in accordance with federal pipeline safety regulations;

(6) appropriately marked with permanent signs at each right-of-way line indicating ownership, type of facility, and an emergency telephone number; and

(7) owner provides an official signed written statement certifying that the facility complies with the conditions and provisions required in this Section, Paragraph 14.4.1 [now Subsection D of 17.4.2.14 NMAC].

(8) It should be noted that each request for waiver of casing will be considered on an individual bases. The ultimate decision to approve or reject a waiver will not be subject to pipeline owner criteria, but will be based on the following casing considerations:

(a) as an expediency in the insertion, removal, replacement, or maintenance of carrier pipe crossings of freeways, expressways, and other controlled access highways and at other locations where it is necessary to avoid trenched construction;

(b) as protection for carrier pipe from external loads or shock, either during or after construction of the highway;

(c) as a means of conveying leaking fluids or gases away from the area directly beneath the traveled way to a point of drainage in the highway ditch or a natural drainage way; and

(d) traffic safety considerations and maintaining the structural integrity of the roadway.

E. Restriction against varied use: Subject to the safety requirements of the various regulatory bodies, the following precautionary measures are required for pipeline crossings:

(1) Pipeline crossing utility accommodation permit applications shall specify the class of transmittants, the maximum working or test pressure, and the design standards for the carrier pipe.

(2) Prior approval shall be obtained from the Department before the utility is allowed to change the type of transmittant or raise the working or potential pressures beyond those provided for in the design and the utility accommodation permit. Non-compliance by the utility with any of the provisions of this regulation shall be grounds for rejection of the utility accommodation permit or the revocation of an existing permit.

F. Trenched construction and backfill: In trenched construction, bedding is the subgrade soil and its surface, as prepared to support a pipe. Backfill is the material that refills the rest of the trench, consisting of sidefill up to the level of top of facility, and of overfill above that level. The latter specifically includes restoration of the pavement structure and the road surface. From the Department's viewpoint, the pavement structure which is broken, disturbed, cut or otherwise damaged in any way, shall be removed and replaced to a design equal to or greater than the surrounding undisturbed pavement structure, as determined by the Department.. Open cut trenched construction on State roads shall be limited to areas where the pavement structure is deteriorated and in generally poor condition and only when justified in writing by the utility and subsequently approved by the District Traffic Engineer or his/her representative.

(1) In cases where the utility owner is allowed an open cut installation, the utility shall be responsible for the restoration and maintenance of the pavement structure, until such time that the Section of roadway is improved by resurfacing as approved by the Department.

(2) Where the utility or other party making the installation is not equipped to or fails to properly repair the damage to the pavement structure, the Department shall repair the damage and will bill the utility owner the actual costs incurred, including any administrative costs.

(3) open trench installations crossing the highway: From the Department's viewpoint, the essential features of open trench construction are detailed as follows:

(a) Restoration of the structural integrity of the roadbed.

(b) Security of the pipe against deformation and leakage.

(c) Assurance that the trench does not become a drainage channel, and that the backfill does not block road drainage.

(d) Open-cut trenched installations shall not be permitted unless it is not feasible to bore, push or jack under the roadway. All trenched or other utility installations shall conform to the applicable provisions of the current construction requirements of the Department, i.e., The New Mexico State Highway and Transportation Department Standard Specifications for Road and Bridge Construction, and any supplemental provisions thereto.

(e) Trenches shall be cut to have vertical faces with a maximum width of .61 m (2 feet), or the outside diameter of the pipe plus .46 m (1.5 feet) on each side, or as approved by the Engineer or his representative. The trench shall be shored where necessary to prevent cave-ins or sloughing, and shall meet OSHA requirements.

(f) Bedding should be provided to a depth of half the diameter of the pipe. Bedding shall consist of granular material, free from rocks, lumps, clods, cobbles, or frozen materials and shall be graded to a firm surface without abrupt change in bearing value. Unstable soils and rock ledges shall be sub-excavated from beneath the bedding zone and replaced with suitable granular material.

(g) Backfill shall be placed in 150.6 mm (6 inch) layers of granular materials, and each layer shall be consolidated (compacted) by mechanical tamping equipment and with a controlled addition of moisture, to a density of 95% maximum dry density (modified proctor method "C," T-99 or equivalent) determined by a standard compaction test. Consolidation by super-saturation, ponding or flooding will not be permitted in any circumstance. Materials and methods of compaction shall be adapted to achieve rapid restoration of traffic service. There shall be additional cutback of base and surfacing courses to minimize later development of sag in the replaced pavement over the trench.

(h) Pavement replacement may be performed by either the utility, or a contractor engaged by the utility, (constructed to a specification approved by the state) or by Department forces at the expense of the utility. The utility shall be liable from the date of completion of the pavement replacement, for the cost of repairs if the backfill subsides or the patched pavement fails, until such time that the roadway cut is resurfaced as approved by the Department. .

G. Untrenched construction and grout: Methods for installing a utility under a highway or roadway without disturbing the pavement surface are as follows:

(1) A pipe with a pilot shoe may be driven through compressible soil by steady thrust, hammering or vibration. Driven pipe must be smooth and uncoated, thus a casing or corrosion resistant carrier pipe should be used. Line and grade are difficult to control on long drives.

(2) Coring -- A casing without a pilot shoe can be drilled into more difficult soil, which enters the casing as it advances. The core is removed during and after the drilling. Control of line and grade is fairly easy.

(3) Boring -- A pipe can be jacked through a slightly oversized bore carved progressively ahead of the leading edge of the advancing pipe as the spoil is mucked back through the pipe. Line and grade control is excellent, but annular voids and overbreaks may be large and must be backfilled.

(4) Wet Boring -- A hole is sluiced by a jet of slurry and kept full of pressurized slurry to avoid collapse. The pipe is pushed through the slurry evacuating the excess. Soils may soften, expand or disintegrate from saturation by slurry moisture. This method is absolutely forbidden on all highways and roads under the jurisdiction of the Department.

(5) Untrenched installations (boring, coring or driving) will be required for all pipeline crossings of access controlled and other major highways. Open trench installations on other highways and roads will be permitted only where bad soil conditions or extremely difficult rocky conditions preclude untrenched construction, or where older pavement is severely deteriorated. All untrenched pipeline installations should extend under and across the entire roadway prism to a point 1.22 m (4 feet) beyond the toes of the foreslopes or borrow ditch bottom or across the access control lines, or as otherwise required by the Engineer or his/her representative.

(6) The oversize of boring operations is restricted to the minimum size necessary for the pipeline installation. The boring hole shall not exceed the pipe installation diameter by more than five percent (5%) oversize. The oversize excavation shall be backfilled to the satisfaction of the Engineer or his/her representative.

(7) All overbreaks, unused holes or larger diameter abandoned casings or pipes shall be backfilled with grout. The composition of the grout shall be cement mortar, a slurry of fine sand, or other fine granular materials, as local conditions dictate, and subject to the approval of the Engineer or his/her representative.

H. Relocation of existing pipelines: Highway design and construction requirements generally preclude compromise of proposed highway alignment or grade for new construction projects in order to avoid conflict with the line and grade of an existing pipeline. The feasibility of minor adjustments in the highway design to avoid extensive conflicts with existing utility facilities will be investigated, but in most instances a utility relocation or

added pipeline protection will be required. Specific case factors are so varying as to make each such crossing unique. Therefore, standardized solutions are not uniformly applicable, but the following items will be considered:

(1) An existing pipeline should be relocated in alignment and/or grade, where the angle of the crossing is too acute, the top of the pipe is too close to the designed highway gradient, or its bedding will be depressed by static and dynamic highway loadings.

(2) An existing or relocated pipeline shall be encased or otherwise protected as would normally be required for a future pipeline installation, built under the same conditions.

(3) An existing pipeline, inadequate to support highway loadings, shall be sheltered by an adequately designed casing or reinforced by a jacket, cap, or replaced with heavier weight pipe.

(4) An existing pipeline which would lack adequate cover for protection from vehicular loads or highway construction operations, may be protected by a floating slab in lieu of encasement.

(5) Notwithstanding utility facility protection, the highway construction contractor shall be warned of, and made responsible for the security of utility facilities located within the construction limits of a project. Where there are unusual utility hazards, or where heavy construction equipment will cross a facility, the highway contractor shall provide a temporary earth cover, or other such protection as may be required.

(6) Further clarification of the responsibility of highway contractors to protect utilities and for the relocation of utilities concurrently with highway construction and other utility/highway contractor relationships, are defined as to the joint responsibilities required, in the New Mexico State Highway and Transportation Department Standard Specification for Highway and Bridge Construction, and any modifying provisions or rule changes applicable thereto.

I. Other design requirements:

(1) Overhead Power and Communication Lines: The type of utility construction, vertical clearances, the lateral location of poles and down guys and related ground mounted utility facilities along the roadside are factors of major importance in preserving a safe traffic environment, the appearance of the highway, and the efficiency and economy of highway construction and maintenance. As such, the physical location of aerial utility facilities shall be as close to the right-of-way line as possible, normally .3048 m (1 foot) inside the right-of-way line.

(2) Aerial utility lines to be installed longitudinally on highway rights of way will usually be limited to single pole construction. Joint-use single pole construction is encouraged at locations where more than one utility or type of facility are involved. Except in very unusual circumstances and for short distances only, duplication of utility facility aerial pole-line installations on the same side of the highway will not be permitted.

(3) The vertical clearance for overhead power and communication lines above the highway, and the lateral and vertical clearances from structures shall conform to the National Electrical Safety Code as a minimum, except where greater clearances are required by the utility, or where required by other industry or governmental codes or regulations.

(4) On and along conventional highways in rural areas, poles and related facilities shall be located at or as near to the right-of-way line as possible, normally within .3048 m (1 foot) thereof. Down guys, anchors or other components shall not project into cut and fill slopes, nor shall such surface mounted obstacles intrude into the clear roadside area for the segment of the highway involved.

(5) In keeping with the nature and extent of roadside development along conventional highways in urban areas, aerial or buried utility facilities shall be located at, or as near as possible to the right-of-way line. On curbed Sections, the utilities shall be located as far as possible behind the face of the outer curbs, and preferably behind the sidewalks. Utilities located within sidewalks shall not be permitted unless no other viable alternative can be identified; however, under no circumstances shall their location compromise ADA requirements. Utilities must be protected in accordance with the AASHTO guide insofar as possible. Variations must be fully justified to the Engineer or his/her representative. The Department may require certain details of the method and manner of relocation in order to accommodate aesthetic, environmental, ecological and historical considerations (i.e. commitments contained in EIS or other documents) or in order to obtain consistency with local zoning, codes or ordinances.

(6) Locations of aerial utility facilities on highways with exceptionally narrow rights-of-way, or on urban streets with abutting improvements are special cases that must be resolved in a manner consistent with prevailing limitations and conditions. Locations behind sidewalks are required where feasible. Before a utility requests Department approval of a location other than near the right-of-way line, consideration shall be given to designs utilizing self-supporting armless single pole construction, with vertical alignment of wires and cables, or other techniques permitted by the utility, industry or governmental standards or codes that are also conducive to a safe

traffic environment. Exceptions to these clearances may be made where poles and guys may be placed behind existing barriers, guardrails, beyond deep drainage ditches, the toe or top of steep slopes, retaining walls and other similar protected locations, or when poles are of a breakaway type manufacture.

(7) Where irregularly shaped portions of the right-of-way lines extend beyond the normal right-of-way limits, individual consideration will be given to requests for variations to maintain a reasonably uniform alignment for longitudinal, aerial or underground utility facility installations.

(8) Longitudinal installations of utility facilities shall not be permitted in the highway median. In rare instances, aerial components of utility crossings may be permitted in a highway median in excess of 24.38 m (80 feet) in width, if the highway is not access controlled.

[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.15 INSTALLATIONS ON HIGHWAY STRUCTURES: Attachment of utility lines to a highway structure can materially affect the capacity of the structure, the safe operation of traffic, the efficiency of maintenance and reducing the aesthetic appeal of the structure.

A. Where it is feasible to locate utility lines elsewhere, attachments to highway structures should be avoided. However, when installation of the utility at an alternate location proves to be extremely difficult or unreasonably costly, consideration will be given for an attachment of utility lines to a highway structure. The attachment shall be made by a method acceptable to the Bridge Engineer of this Department.

B. All proposed attachment methods shall conform to adequate engineering considerations for preserving the highway structure's integrity, safety, ease of maintenance, and its appearance. In this respect, the following considerations shall govern:

C. Due to variations in highway structure designs and site specific considerations, it is not feasible to completely standardize the method by which utilities are attached to structures. Therefore each proposed attachment shall be considered on its individual merits, and shall be individually designed for the specific structure.

D. Utility line attachments to a highway structure shall not be considered unless the structure in question is of a design, age, and physical condition that is adequate to support the additional load and accommodate the utility without any compromise of the highway features, including reasonable ease of maintenance.

E. Attachment of a pipeline carrying a hazardous transmittant to a highway structure shall be avoided whenever possible. When such an attachment is permitted, the facility design shall be at a level to provide maximum safety.

F. Utility positioning on a highway structure which will inhibit access to any structure part for maintenance shall not be allowed. Utility access manholes shall not be allowed in a structure deck or load carrying member.

G. The entire utility installation on a highway structure shall be so located as to not reduce the vertical clearance otherwise available above river, stream, roadway surface or rails. In general, acceptable utility installations are those designed to occupy a position beneath the deck an in an interior bay of an I Girder Beam, or within a cell of a Box Girder Bridge. Installations shall always be above the bottom of girders on a Girder Bridge or above the bottom of the bottom cord on a Truss Bridge.

H. Utility line attachments to the visible outer portions of structures are unsightly, susceptible to damage, and shall not be permitted unless there is no reasonable alternative.

I. Utility line mountings shall be of sufficient strength to carry the weight of the utility and shall be of a type which will not rattle or loosen through vibrations caused by vehicular traffic. This is a matter of particular concern on steel structures. Utility attachments shall be designed to accommodate differences in thermal movements between the highway structure and the utility.

J. Where a utility facility is to pass through an abutment wingwall or other wall of a highway structure, the utility is required to neatly restore the disturbed construction by approved methods which shall preclude any leakage of water or backfill through the substructure elements. Where such construction is approved, any hole created in the highway structure shall be of a minimum size necessary for the installation. The annular space between the structure and pipe shall be completely filled with grout so as to seal the opening and effectively preclude the leakage of any moisture or backfill material through the substructure. Where a pipe or conduit is to be sleeved (cased) through the structure, the sleeve shall be tight sealed into the opening, and the annular space between the pipe conduit and the sleeve shall be sealed with a Department approved material.

K. Acceptable utility attachment methods are hangers or roller assemblies suspended from the underside of the bridge deck, or from hanger rods clamped to the flange of some superstructure member. Bolting

through the bridge floor or deck shall not be permitted. Where there are transverse floor beams sufficiently removed from the underside of the deck to allow adequate clearances for the utility, the Bridge Engineer may consider a proposal to support the utility line on top of the floor beams.

L. Clearances of utility facilities from bridge members shall conform to all governing codes, and shall be such as not to render any portion of the structure inaccessible for any maintenance or other highway function.

M. The utility shall be required to make satisfactory provisions for lineal expansion and contraction of its facility as a result of temperature and pressure differentials. Line bends or expansion couplings are generally used for this purpose.

N. The utility shall restore or repair any portion of the structure or highway disturbed or damaged by utility installation or use.

O. If weatherall steel is utilized in the highway structure, utility attachments shall be of similar material.

P. A pipeline carrying volatile fluids, pressurized gas, water or sewage poses an element of risk when mounted on a highway structure. When such a carrier is placed in a casing pipe of leakproof construction, the hazard to the utility, the highway facility, and the traveling public can be minimized. It is good practice to case all such pipeline attachments through the highway structure. The casing pipe should be carried beyond the back of the structure abutment and be effectively vented at each end to detect leakage and prevent possible build-up of pressure. In addition, all welds shall be tested by non-destructive means.

Q. Where a casing is not provided for a pipeline attachment to a bridge, additional protective measures shall be taken. Such measures shall include, but are not limited to, higher safety factors in design and pressure testing. The safety design factor shall be twice that normally used.

R. Communication and electric power line attachments shall be suitably insulated, grounded and carried in a protective steel conduit or pipe from below the point of ground exit, to below the point of ground re-entry. Carrier pipe and casing pipe shall be suitably insulated from electric power lines.

S. All pipeline attachments carrying gas or liquid under pressure, which by nature of the transmittant might cause damage or injury if the transmittant escapes on or in the vicinity of the highway structure, shall be provided with emergency shutoff valves of automatic design. Such valves shall be placed within an effective distance on each side of the structure. Exceptions to this rule may be considered by the Engineer, upon written justification submitted by the utility.

T. The responsibility of the utility owner requesting a bridge or highway structure attachment cannot be over stressed. The utility shall ascertain the extent of the Department's design requirements prior to initiating the design for attachment. A Registered Professional Engineer experienced in structural design shall be responsible for the design effort. Complete plans showing all details of the proposed work, together with pertinent design documents shall be prepared and submitted, along with the New Mexico Public Highway Utility Accommodation Permit Application. Traffic control plans must also accompany the permit. The plans must be complete and adequate enough to show in detail the full extent of the proposed work.

U. All materials integrated into the design must be certifiable for quality and strength, and full specifications must be provided in support of the design.

U. A complete written justification must support the need for attachment and demonstrate that there is no viable cost effective alternative.

V. All components of the utility attachment shall be protected from corrosion. Steel components shall be galvanized or painted in accordance with current Standard Specifications For Highway And Bridge Construction. [3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.16 CLEAR ROADSIDE POLICY: The Department discourages the installation or relocation of any utility facilities within the designated clear zones of highways in this state. However, if severe space limitation precludes any other viable option, consideration will be given when the public need for utility services and access to properties adjacent to highways or streets is evaluated.

A. Specific installation guidelines: Utilities may be permitted to install facilities within the clear zones of highways in this state if the installation design:

(1) Is approved by the Engineer, District Engineer, District Traffic Engineer, or the Traffic Design Engineer of this Department.

(2) Provides for the installation of the utility facilities, including all supporting appurtenances, below the ground surface of the clear zone area involved.

(3) Provides for the protection of the above ground utility facility by the installation of an intervening barrier or barriers, crash cushions, impact attenuators or longitudinal barriers approved for the use as per the current Roadside Design Guide.

(4) Protects errant vehicles from collision with utility poles, luminaire standards or masts, or any other above ground structures supported by poles, by the incorporation of break-away features in the structure design. Break-away features may include a hinge design, slip plate design, slotted fuse plate design, frangible coupling design and other accepted designs. The utility owner must comply with the design standards set forth in the AASHTO designs and specifications when accepted by the Traffic Design Engineer, or District Traffic Engineer.

B. General requirements: In evaluating whether to allow utilities in the clear zone, utility owners must provide the Department with a complete justification in support of a request to install utilities within the clear zone. This justification must include:

(1) Comprehensive information to support the utilities contention that no other viable location is available.

(2) That an installation on nearby adjacent right-of-way would be prohibitively expensive.

(3) That a right-of-way corridor nearby would adversely affect wetland or agricultural lands or areas of scenic enhancement.

(4) The utility must provide the Department with completed and comprehensive plans and specifications, including:

(a) Grades and elevations tied by survey to the design grade of the highway segment involved.

(b) A clearly defined clear zone, shown on the utility's plans, along with details and elevation views.

(c) Plan, profile and details of underground utility installations.

(d) Any additional information in support of the design.

[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.17 THE ACCOMMODATION OF UTILITY FACILITIES WITHIN FREEWAY OR INTERSTATE RIGHT-OF-WAY: Pursuant to Federal Highway Administration (FHWA) regulations regarding the accommodation of longitudinal utility facilities within the access control limits of Freeways and Interstate Highway rights-of-way, the Department will allow under controlled circumstances, the placement of longitudinal utility facilities within the access control limits of the Interstate System or other fully access controlled Freeways. These regulations do not apply to utility lines for servicing facilities required for the operation of the Freeway.

A. Term and cost of permit: Permits for longitudinal utility facilities within the access controlled Freeways shall have a term as set by the Engineer, but in no event shall the term exceed twenty-five (25) years. The Engineer may impose charges, fees or other compensation or consideration as may be reasonable for the occupancy of the right-of-way by the utility. The permit shall be subject to any other reasonable conditions deemed appropriate by the Department under the circumstances. Even though payment may be made by the utility to the Department, no permit shall be exclusive, meaning the Department may issue additional permits to other utilities within the same Freeway right-of-way.

B. Physical location of new longitudinal utility facilities along interstate highways and freeways: New utilities to be installed longitudinally within the control of access lines of any freeway shall be subject to controlled conditions, and the utility requesting permits must meet the following requirements:

(1) The accommodation will not adversely affect the safety, design, construction, maintenance or stability (integrity) of the Freeway.

(2) The accommodation will not interfere with or impair the present or future use, or future expansion of the Freeway.

(3) Any alternative location would be contrary to the public interest. This determination must include an evaluation of the direct and indirect environmental and economic impacts resulting from disapproval of the use of such right-of-way for the accommodation of the facility.

(4) If by reason of any change in the location, construction, grade or by any other matter affecting the highway upon which any facility is located because of changing traffic conditions or otherwise, it shall become advisable in the opinion of the Engineer that said facility be removed, relocated or otherwise modified, the utility, upon written notice from the Engineer, shall remove, relocate or modify such facility without undue delay in such manner as the Engineer may direct or approve, at the utility's expense and at no cost to the Engineer. All facilities located on public right-of-way under the dual jurisdiction of the State and a subordinate governmental entity shall

comply with all applicable rules and regulations of such entity properly and lawfully in force and including but not limited to provisions of local franchises not in conflict with the rules and regulations of the Engineer. The Engineer makes no warranty, either express or implied, as to the continued existence of any highway in any particular location and expressly assumes no obligation with regard to the facility upon change, vacation or abandonment of any highway or portions thereof.

(5) If approval for installation is granted, any and all utility installations and components associated thereto shall be buried parallel to the Freeway, and shall be located within 1.52 m (5 feet) of the access control line, wherever practicable. Surface components of buried facilities, i.e., valves, manholes, vents, etc., shall be located as close as possible to the access control line. The high point of structural elements such as manholes, vaults, and anchor blocks, shall be at or below the natural ground line of the right-of-way surface. All buried facilities will be installed at a minimum depth of 0.91 m (36 inches) or more from the right-of-way surface to the top of the facility. All trenches and ditches will be backfilled and compacted by the facility installer to the satisfaction of the Engineer. All excavations outside the roadway foreslopes shall be compacted to a density equal to the surrounding soil. All excavations within the toes of the foreslopes shall be compacted to ninety-five percent (95%) of maximum dry density as determined by a Standard Compaction Test, Modified Proctor Method T-99 or equivalent. Parallel ditches in excess of 106.68 m (350 feet) in length shall not remain open over 24 hours. Any excavations on or near the traveled way shall not remain open overnight. All future relocations or adjustments shall be the responsibility of the utility and shall be at the sole expense of the utility.

(6) No service connections shall be allowed from within access controlled facilities.

C. Existing utility facilities along proposed interstate highways or freeways: Where a utility facility already exists within the proposed right-of-way of an Interstate Highway or Freeway and it can be serviced, maintained and operated without access from the through-traffic roadways or ramps, it may remain as long as it does not adversely affect the safety, design, construction, operation, maintenance or stability of the Interstate Highway or Freeway; otherwise it must be relocated.

D. Major valley crossings, grade separation structures: Where an Interstate Highway or Freeway crosses a major valley or river on an existing structure, any utility facility carried by said structure at the time the highway route is improved may continue to be so carried when a relocation of the facility would not be cost effective, and provided that the utility facility could be serviced without interference with road users. All such approvals must be first cleared by the Department's Bridge Engineer.

(1) The expansion of a utility facility carried by an existing structure may be permitted provided the utility installed on the existing structure fulfills the methods of installation required by the Department's Bridge Engineer, and that any such installation can be serviced without interference with the road users.

(2) A new utility facility will not be permitted to be installed on a structure at or after the time the highway route is improved, except for special cases as covered in Paragraph 15 [now 17.4.2.15 NMAC], **supra**.

E. Utility facilities crossing interstate highways: New utility facility installations or the relocations of existing facilities may be permitted to cross Interstate Highways or Freeways. To the extent feasible and practical, they should cross on a line generally normal (crossing at 90 degrees) to the highway alignment and preferably under the Interstate Highway or Freeways.

F. Utilities along roads or streets crossing freeways: Where a utility follows a crossroad or street which is carried over or under a Freeway, provision shall be made for the utility to cross the Freeway at the location of the crossroad or street in such a manner that the utility can be serviced without access from the through-traffic roadways or ramps. Generally, the utilities are to be located within the right-of-way of the crossroad or street (existing or relocated) and may cross over or under the Freeway or be carried on or through the highway grade separation structure, provided the installation and servicing thereof can be accomplished without access from the through-traffic roadways or ramps. Where distinct advantage and appreciable cost saving are effected by locating the utilities outside the right-of-way of the crossroad or street, they may be so located, with written approval of the Department, in which case they shall be located and treated in the same manner as utility lines crossing the Freeway at points removed from grade separation structures, as in Paragraphs 17.7 [now Subsection G of 17.4.2.17 NMAC] and 17.8 [now Subsection H of 17.4.2.17 NMAC].

G. Overhead utility crossings: Overhead utility lines crossing a Freeway at points removed from grade separation structure, or those crossings near a grade separation but not within the right-of-way of a crossroad or street, in general, shall be adjusted so that the supporting utility pole and structure are located outside the outer edges of the through-traffic roadway side slopes and preferable outside the access control lines. In any case,

supporting poles shall not be placed within the appropriate clear zone as designated in the current AASHTO publication "Roadside Design Guide, 1989," and as may be updated from time to time.

(1) Supporting poles may be placed in medians of sufficient width to provide for the previous mentioned clear zones from the edges of both roadways. If additional lanes are planned, the clear zone shall be determined from the ultimate edges of the roadway to be built. Where control of access and right-of-way lines are not one and the same, and where frontage roads are provided, supporting poles may be located in the areas between them. In extraordinary cases where such spanning of the roadway is not feasible, consideration may be given to conversion to underground facilities to cross the highways.

(2) At interchange areas, in general, support for overhead utility facilities will be permitted only where all of the following conditions are met:

(a) A clear zone is provided with respect to the freeway through-traffic lanes;

(b) The appropriate clear zone from the edge of the ramp is provided as designated for the specific condition in the AASHTO publication, "Roadside Design Guide, 1989," which may be updated from time to time;

(c) Essential sight distance is not impaired;

(d) The conditions of Paragraph Section 17.12 [now Subsection L of 17.4.2.17 NMAC] "Access for Servicing Utilities" are satisfied; and

(e) The vertical clearance to overhead utility lines crossing freeways shall be determined by the Department, but in no case shall they be less than the vertical clearances required by the current National Electrical Safety Code.

H. Buried utility crossings: Buried utilities shall be of durable materials and so installed as to virtually preclude any necessity for disturbing the roadways to perform maintenance or expansion operations. The design and type of materials shall conform to standards and installations outlined in Paragraphs 13 and 14 [now 17.4.2.13 NMAC and 17.4.2.14 NMAC] of this regulation, or to the appropriate governmental or industry codes, rules and specifications, whichever is more restrictive. Manholes and other points of access to underground utilities may be permitted within the right-of-way of a freeway if (1) they are located beyond the shoulder of the through-traffic roadways or ramps, and (2) can be serviced or maintained without access from the through-traffic roadways or ramps.

I. Irrigation ditches and water canals: Except for necessary crossings, irrigation ditches and water canals shall be excluded from the right-of-way of Freeways, except for special cases as covered in Paragraph 17.2 [now Subsection B of 17.4.2.17 NMAC]. Crossings may be made by underground siphon or through culverts or on bridges as appropriate to the size of the canal, topographic condition and highway safety aspects. In general, locations and structure are to be selected and designed in the same manner as are facilities for natural transverse drainage. All ingress and egress for servicing or patrolling such irrigation facilities shall be from outside the control of access lines. The procurement of necessary ingress and egress is the responsibility of the irrigation ditch and water canal owners. Ditch-walkers or ditch-riders shall not be permitted to indiscriminately cross the Freeway at grade. Under appropriate traffic control arrangements, special ditch cleaning equipment may be permitted to cross in those cases where considerable travel distance would otherwise be required to utilized grade separation structures.

J. Provisions for expansion of utilities: When existing utilities are relocated in conjunction with the construction of a Freeway, provision shall be made for known and planned expansion of the utility facilities, particularly those underground. They shall be planned to avoid interference with traffic at some future date when additional or new overhead or underground lines are installed.

K. Utilities in vehicular tunnels: As a general rule, utilities shall not be permitted to occupy vehicular tunnels on freeways at new locations, except in special cases as covered in Paragraph 17.2 [now Subsection B of 17.4.2.17 NMAC].

(1) Utilities which transmit a hazardous commodity shall not be allowed in a vehicular tunnel under any circumstances.

(2) When a utility is located in an existing vehicular tunnel that is converted to a freeway, relocation of the utility may not be required, at the Department's discretion. Utilities not occupying an existing vehicular tunnel that is incorporated into a freeway shall not be permitted therein, except in special cases as covered in Paragraph 17.2 [now Subsection B of 17.4.2.17 NMAC].

L. Access for servicing utilities: Access for servicing a utility along or across a freeway shall be limited to access via frontage roads where provided; nearby or adjacent public roads or streets; or trails near the highway right-of-way lines, connecting only to an intersecting road, from any one of which entry may be made to the outer portion of the freeway right-of-way.

(1) In those special cases where utility supports, manholes or other appurtenances are located in medians or interchange areas, access to them from through-traffic roadways or ramps may be permitted, but only by utility accommodation permits issued by the Department to the utility owner setting forth the conditions for policing and other controls to protect the traveling public.

(2) Utilities requiring maintenance from within the Freeway right-of-way must obtain an approved utility accommodation permit from the Department before accessing the utility from within the Freeway.

(3) Advance arrangements, when practicable, shall be made between the utility and the Department for emergency repair and maintenance work within the rights-of-way of Freeways.

M. Construction and location details: The Department shall review and approve the location and the design of all utility installations and relocations affecting highways under the jurisdiction of this Department and issue New Mexico Public Highway Utility Accommodation Permits for any contemplated work on these highways.

N. Manner of making utility installations and relocation: In general, utility installations and relocations are to be made with consideration for highway and utility costs; maximum safety to the traveling public; the least possible interference with the highway facility and its operation; not increasing the difficulty or cost of highway maintenance to the Department; and all installations and/or relocations must have prior review, appropriate approvals and the associated documentation required by Departmental Authority.

[3/10/71, 6/15/96, 11/15/96; Recompiled 12/31/01]

17.4.2.18 SAFETY MARKERS FOR IDENTIFICATION OF ABOVE GROUND UTILITY APPURTENANCES, WITHIN PUBLIC HIGHWAY RIGHT-OF-WAY: Buried utility facilities with supporting above ground appurtenances shall be marked as follows:

A. All existing buried utilities, including pipeline carriers, delivering natural gas or other gaseous products, water, sewage, steam, buried electric lines, telephone and other communication systems, petroleum products, and any other buried facilities with above ground appurtenances thereto located within the rights-of-way of highways under the jurisdiction of the Department shall have such above ground appurtenances clearly marked with the appropriate warning markers as described herein.

B. Above ground appurtenances to all buried utility systems such as pipeline valves, regulators and the like, pad mounted transformers, telephone pedestals, junction boxes and the like, shall be identified with a yellow, red, orange or other appropriate industry colored flexible fiberglass restorable blade, four feet six inches (1.65 m) minimum height above the ground surface. It shall be color coded a minimum of six inches (150 mm) in height and three inches (75 mm) width at the top of the blade. The blade shall be visible in all directions. The color coded portion of the marker shall be at least two feet (.61 m) above the surrounding high grass, weed or shrubbery line.

C. The utility owner shall maintain the markers in good condition; color faded markers shall be replaced as necessary so that their visibility to maintenance crews and others is not impaired. The markers shall not be placed within the Access Control Lines of Interstate Highways or Freeways in a manner that would create a safety hazard, or by methods contrary to this regulation.

D. The utilities shall commence the placement of these markers on new facility installations within public highway rights-of-way thirty (30) days after the date this new statutory regulation is approved and becomes effective (the approval and effective date is that date inscribed on page one (1) of this rule). The utilities are also directed to make these marker installations on existing utility facilities on a continuing basis whenever their maintenance crews are repairing or maintaining their existing facilities located within the public highway right-of-way of this State in rural areas and/or on certain designated public highways within municipalities.

E. Variances not involving significant changes to the marker specifications detailed herein or the rules governing the installation of utilities within the access control lines, set forth in Paragraph 17 [now 17.4.2.17 NMAC] herein, may be approved by the Engineer or their representatives, upon the submittal by the utility owner of a written detailed justification supporting the variance requested.

F. During this marker installation process, the utility shall observe all appropriate regulations stipulated herein pertaining to the installation of utility facilities within the public highway right-of-way under control of this Department.

[11/15/96; Recompiled 12/31/01]

17.4.2.19 UTILITY RELOCATIONS AND REIMBURSEMENT: The Department develops their annual highway construction schedule based upon engineering studies conducted on an ongoing basis, that determines when and where highway construction projects will be let to contract. In the early stages of development, the

Railroad & Utility Section of the Department or its approved representative will begin discussions with utility owners who are thought to have portions of their facilities in conflict with the proposed highway construction features. This Section sets forth the regulations pertaining to eligibility for utility relocation reimbursement, methods and scheduling of the utility relocation work required, and the documentation and record keeping required when the expenditure of public funds is involved.

A. Public and private utilities: Statutory reimbursement regulation pertains only to utilities. Utilities that have to be relocated or removed from the right-of-way will be handled in accordance with the terms of the New Mexico Public Highway Utility Accommodation Permit and these regulations. The relocation of a private utility, situated on private land and not dedicated to public use, is to be handled as a right-of-way taking consideration. A private utility on public right-of-way will be handled in accordance with terms of the permit and these regulations.

B. Interstate highway projects: On Interstate highway projects only, the required relocation of public utility facilities within existing public right-of-way is generally eligible for reimbursement by the Department, unless the facilities were installed with knowledge of future conflict, or as documented in an approved New Mexico Public Highway Utility Accommodation Permit which defines the future obligation of the utility owner. Facilities owned by a public utility that are situated on lands, easements or other properties, in which the owners have a documented compensable property right thereto, and which utilities shall be relocated because of conflict with highway features are also reimbursable to the utility owner.

C. Other state highway projects: On any type of state highway project (other than Interstate Highways) where the utilities are located on private right-of-way, and the owner holds a documented compensable property interest therein, the relocation required of the owner is compensable to the owner under the Department's regulations providing for reimbursement. On any Non-Interstate Projects where public utility facilities are located within existing public rights-of-way, the relocation cost is not eligible for reimbursement, unless the utility facility occupies the right-of-way under a Joint Use Agreement, issued and approved by the Department, which authorizes reimbursement issued and approved by the Department.

D. Other highway projects involving public funds: On any highway project where public utility facilities have once been relocated to the satisfaction of the Department for a specific highway project, but due to a revision or change in plan on the same highway project an additional complete or partial relocation is required, and the Department directs the utility to relocate all or some of their facilities by written instruction, then the additional complete or partial relocation costs are reimbursable to the utility owner by the Department.

(1) If additional relocations are required due to errors, omissions or faulty workmanship performed by the utility owner, their personnel and/or those engaged by the utility, or if any of these parties fail to complete the relocation in accordance with the Utility Adjustment Agreement, the utility relocation plans, specifications, and/or contract documents, the utility shall make any correction required as directed in writing by this Department. This remedial work will be at the sole expense of the utility owner, including administrative costs incurred by the Department pertaining to the remedial work, regardless of the cost responsibility for the previous relocation.

(2) On projects where overhead utilities that occupy public right of way have to be buried because of safety, environmental, archeological, aesthetic, or highway construction considerations, such relocation from overhead to underground shall be performed at the expense of the utility owner.

(3) Should any highway construction delay claims be paid by the Department because of unreasonable actions or inaction by the utility owner, all costs associated therewith shall be reimbursed to the Department by the utility within ninety (90) days of receipt of a reimbursement request.

E. Special districts, municipalities and counties: Pursuant to NMSA 1978, Section 67-8-21, financial assistance will be provided by the Department to special districts, municipalities and counties to relocate utilities if they can demonstrate they are unable to pay for the relocation costs themselves. To qualify for relocation costs, the special districts, municipalities and counties must officially notify the Department in writing that they have made a determination that utility relocation will be necessary as a result of a highway project. The notification must be explicit in terms of the need to relocate specific utilities and the need for financial assistance. It must also be specific as to whether the need is for engineering and design services, relocation construction or both. All reimbursement requests shall be considered on their individual merits and shall be forwarded to the Department for handling. All requests shall include the following as a minimum:

(1) A written request for reimbursement by an authorized representative of the utility.

(2) Letter of Transmittal, along with the following items:

(a) Copies of Utility Permits or other instruments authorizing the placement of utilities in their present location.

(b) Resolution by the appropriate governing body regarding the need to relocate utilities and the need for financial assistance, pursuant to relevant State statutes.

(c) Financial Statement that is current and sufficiently detailed for the State Department of Finance and Administration to perform an analysis and make an informed decision regarding the entity's financial condition.

(d) Current fiscal year budget as required by the local Government Division of the Department of Finance and Administration.

(i) Reimbursement for the cost of relocation shall be made only after the provisions of this regulation have been fulfilled and after the State Department of Finance and Administration, Local Government Division issues an official finding.

(ii) In the event the Department of Finance and Administration is unable to make a determination as to financial condition or the determination is not made in a timely manner, the Department shall then make such a determination.

F. Documentation required to determine eligibility for reimbursement: It is mandatory that a utility facility owner provide the Department with copies of their land use documentation to substantiate their right to occupy the public and private land affected by the proposed highway construction. If a utility owner is seeking reimbursement under New Mexico State Law, the right to compensation must be justified and substantiated by documented proof of the utilities existing compensable property rights. The Department will not reimburse a utility owner for any utility relocation occasioned by the construction of highway project unless the utility can prove their right to be paid. The documentation shall include copies of any land use conveyances, including Deeds, Easements, Permits, Land Use Agreements and any other documentation acceptable under the Laws of the State of New Mexico providing for transfer, sale and use of land, including a claim for prescriptive rights or adverse possession.
[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.20 UTILITY RELOCATION PROCEDURES: The following procedures shall be followed to assure the proper completion of utility relocation necessitated by the State Highway Program. To provide uniformity and avoid duplication, these procedures shall be followed on all State Highway Projects whether or not Federal Aid participation is involved. The FHWA's reimbursement to the New Mexico State Highway and Transportation Department will be governed by State Law and State Regulations, as well as the Code of Federal Regulations, Title 23, Part 645, Subpart A and Subpart B. When State Law or Regulation differs from the aforementioned Code, (Part 645, Utilities), a determination shall be made by the Department, subject to concurrence by FHWA, as to which standards shall govern, and the record will be documented accordingly for each relocation in which the differing procedural action is undertaken. The Department shall develop a Utility Cooperative Agreement for handling the relocation of utilities. The Agreement shall clearly stipulate the responsibilities of each party for financing and accomplishing the relocation work, shall incorporate the appropriate regulation(s) by reference and designate the method to be used for performing the work. The method for developing all relocation costs, including engineering and relocation construction, shall be acceptable to the Department and to the Federal Highway Administration on Federal Aid projects. When applicable, the Agreement shall specify the terms and amounts of any contributions or repayments made or to be made by the utility to the Department under eligibility provisions of State Laws and Federal Regulations. When the relocation involves both work to be done at the Department's expense and work to be done at the expense of the utility, the Agreement shall state the share to be borne by each party. Except as otherwise provided by this Agreement, authorization by the Department to the utility to proceed with the relocation work may be given after it has been included in an approved program and fulfills State and Federal requirements. If the utility does not have the necessary resources to perform the relocation, such work may be done as follows: (1) a contract awarded by the utility to the lowest qualified bidder based on appropriate procurement procedures; (2) inclusion as part of the Department's highway construction contract let by the Department as agreed to by the utility; or (3) an existing continuing contract, provided the costs to the Department are reasonable. All contract work performed for the utility under a contract let by the Department shall be reported separately from the other contract items on the highway project. All utility relocation costs shall be recorded by means of work orders in accordance with a work order system approved by the Department, except when another method of developing and recording costs, such as a lump-sum agreement, has been approved by the Department, and the Federal Highway Administration when applicable. The utility shall keep its work order system or other accounting procedure approved by the Department in such a manner as to show the nature and cost of each item. The current Federal Aid Policy Guide shall be used as a guide for all cost development and reimbursement matters. All reimbursed costs shall be subject to state audit for a period of three years following the date of final payment.

A. Locating utilities: On all proposed highway construction and/or maintenance projects, utilities shall be located horizontally, vertically, shall be identified as to type and ownership, and their locations tied to the project center line. The locating process should meet, as a minimum, survey requirements outlined in the Department's Survey Manual, unless otherwise specified. Railroad facilities must also be treated as a utility, the facilities located and tied to the center line of track or other railroad structure, and referenced to existing railroad mile posts. The location should be conducted early enough in the project development process so as to allow for inclusion of the utility and/or railroad information in the highway construction Field Design Inspection plans.

B. Location stage: The Railroad and Utility Section of the Department shall become involved at the inception of each State Highway Project. The earliest conceptual design information available shall be reviewed to determine whether possible serious utility conflict can be avoided by minor highway alignment revisions without undue added cost. The assigned Agent should discuss the possibility of alignment changes with the assigned Project Development and Design Engineers as appropriate, and any other observations that have been made that might improve cost benefits to the project concerning the utility facilities. Liaison with the utility owners involved shall begin at this stage to avoid the installation of new utilities by the utility owners that could conflict to an even greater extent. If preliminary right-of-way maps are available, a preliminary review could disclose the extent of the utility involvement and give the Agent a workable idea as to the eligibility each owner may have for utility relocation reimbursement. Preliminary coordination meetings with all of the affected utilities in attendance should serve to avoid future problems concerning where each utility owner must place their relocated utilities to avoid conflict with the other utilities involved.

C. Project programming procedures: Utility adjustments eligible for reimbursement on Federal-Aid Highway Projects shall be programmed in accordance with the requirements set forth in Title 23 of the Code of Federal Regulations, Part 630(A). Generally, utility relocations and utility relocation engineering will be programmed when the initial state highway project programming is accomplished. Preliminary Engineering for the use of Consultant Engineers engaged by the utility owner will be programmed each time these services are required and authorized by the Department and the FHWA. The utility lead time cannot commence until the Utility Section has access to plans sufficiently completed to permit the utilities to design their relocations. Therefore, the plans should be in the post Grade & Drain or pre-Plan-in-Hand stage, with definite line grades, right-of-way, access control and other major features shown before they may be sent to the utilities with the formal authorization to proceed with their preliminary engineering. Prior to this stage, any plans provided to utilities must clearly be marked as "preliminary" with a statement that they are not yet authorized to proceed on any basis.

D. Preliminary engineering: Before preliminary engineering is authorized on a project, the basic eligibility for reimbursement of utility adjustment cost must be determined from a plan review. This eligibility is to be in conformity with the reimbursement policy set forth in Paragraph 19 [now 17.4.2.19 NMAC] herein. Plan review will, in most cases, resolve questions of such eligibility.

E. Engineering by utility's staff, or a consultant engineer: Preliminary engineering for utility relocation design can be accomplished by any of the following methods:

(1) By utilization of the utility owner's engineering staff;

(2) By utilization of a consultant engineer selected by the Department after consultation with the utility owner; contract shall be administered by the Department with the consent of the utility; or

(3) By the utilization of a consultant engineer selected by the utility owner under a contract approved by the Department and FHWA; the contract shall be administered by the utility owner.

(4) When the utility is not adequately staffed to perform the necessary preliminary engineering work related to the utility relocation on a State Highway Construction Project, Department and Federal funds may be used to reimburse the utility owner for amounts paid to engineers, architects, and others for allied services, provided such amounts are not based on a percentage of the relocation costs. The Department, utility owner and the engineering consultant shall agree in writing as to the services to be performed and the fee amount to be paid for the work in advance of the commencement of the engineering services agreed upon. The approval of these arrangements by the FHWA shall be obtained on all Federal Aid Projects.

(5) State and Federal funds may participate in the cost of consultant engineering services performed on existing continuing contracts between the utility and the consultant when it can be demonstrated that such work is performed regularly for the utility at a reasonable cost.

(6) The basic eligibility for reimbursement for the utility relocation costs must be determined from near final highway construction Plan and Profile Sheets developed after the Department's Grade and Drain Inspection. A utility owner must be otherwise entitled to utility relocation reimbursement costs to be eligible for payment for utility

relocation preliminary engineering (PE). The PE written authorization is a commitment by the Department to reimburse the utility for PE, subject to compliance with these regulations.

(7) If the utility relocation preliminary engineering is determined to be ineligible for reimbursement after the plan review, a non-reimbursable PE notice will be sent to the utility owner requesting that they commence their relocation design effort at their own expense, and on a schedule which would insure that the utility relocation construction would be completed in a timely manner.

(8) If the project should be abandoned, postponed, or delayed by the Department, the utility is entitled to be paid for their design effort from the date of the PE authorization to the date of abandonment, but only if the utility was eligible initially for utility relocation PE.

(9) If a highway project is delayed, substantially revised or even abandoned and the utility has incurred engineering costs at the request of the Department, such costs are not eligible for reimbursement if the relocation is not reimbursable.

(10) It should be noted by the utility owner that any costs incurred by the utility owner in the initial negotiation phase, including early engineering reviews and relocation planning, will not be reimbursed. The Department shall not be liable for reimbursing any utility PE costs prior to notification and proof by the utility of its compensable property rights and after the Department has provided the utility written authorization of its intent to reimburse the utility for its costs of relocation.

[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.21 UTILITY RELOCATION ESTIMATES

A. Developing and recording costs: It shall be necessary to develop a cost estimate for the utility relocation engineering and construction. All reimbursable utility relocations shall be in sufficient detail to permit analysis and evaluation of all anticipated costs and all such costs shall be recorded by means of work orders in accordance with an approved work order system except when another method of developing and recording costs, such as a lump-sum agreement, has been approved by the Department and the FHWA.

(1) Each utility shall keep its work order system or other approved accounting procedure in such a manner as to show the nature of each additions to or retirement from the facility, the total costs thereof, and the source of cost. As a minimum, each utility shall conform to the requirements of the Federal Aid Policy Guide on federal aid projects and/or to the Department's Estimate/Billing Guide.

(2) In the event there are changes in the scope of the reimbursable utility work covered by the approved Agreement, plans and estimate, state and/or federal reimbursement shall be limited to costs covered by a modification of the Agreement, a written change order or extra work order approved by the Department, FHWA or both.

B. Salvage, accrued depreciation, betterments:

(1) Credit to the highway project shall be required for the cost of any betterments to the facility being replaced or relocated and for the salvage of the materials removed.

(2) Credit to the highway project will be required for the accrued depreciation of utility facility being replaced such as a building, pumping station, filtration plant, power plant, substation, or other similar operational unit. Such accrued appreciation is that amount based on the ratio between the period of actual length of service and total life expectancy applied to the original cost. Credit for accrued depreciation shall not be required for a segment of the utility's service, distribution, or transmission lines. When the facilities, including equipment and operating facilities, described in Paragraphs 21.2.1 and 21.2.2 [now Paragraphs (1) and (2) of Subsection B of 17.4.2.21 NMAC] are not being replaced but rehabilitated and/or moved, as necessitated by the highway project, no credit for accrued depreciation is needed.

(3) Betterment credit shall not be required for additions or improvements which are:

(a) Required by the highway project;

(b) Replacement devices or materials that are of equivalent standards although not identical;

(c) Replacement of devices or materials no longer manufactured with next highest grade or size;

(d) Required by law under governmental and appropriate regulatory commissions code; or

(e) Required by current design practices regularly followed by the company in its own work, and there is a direct benefit to the highway project.

(4) In no event shall the total of all credits required under the provisions of this regulation exceed the total costs of relocation exclusive of the costs of additions or improvements necessitated by the highway project.

[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.22 RIGHT-OF-WAY DISPOSITION

A. Replacement right-of-way: The Department and/or the FHWA may approve the acquisition of replacement right-of-way if the utility has the right of occupancy in its existing location because it holds the fee, an easement or other real property interest, and the damaging or taking is compensable in eminent domain, and is necessary to meet the requirements of the highway project. Such replacement right-of-way shall only be allowed where no change to the project for the utility's existing right-of-way, being transferred to the Department for highway purposes, is made.

(1) Any replacement right-of-way being paid for with state and/or federal funds shall be evaluated as to fair market value by a qualified and licensed New Mexico Real Estate Appraiser. A written evaluation/appraisal shall be accomplished and approved by the Department prior to acquisition.

(2) Acquisition of replacement right-of-way by the Department on behalf of the utility may be accomplished when it can be demonstrated by the utility that it is not staffed to accomplish the acquisition or consultant services are prohibitively expensive or unavailable. Acquisition by the Department should coincide with other Department acquisition functions, if at all possible, and shall be approved by the Right-of-Way Bureau Chief.

B. Joint use of right-of-way: When a utility occupies a utility corridor by virtue of an easement or other property interest, that is compensable under eminent domain laws, and the Department's highway project will envelop the utility corridor, the following regulation shall apply:

(1) If the utility's facilities are in physical conflict with proposed highway construction features, the utility may opt to vacate the Department's newly acquired right-of-way, obtain replacement right-of-way and relocate its facilities to the newly acquired utility corridor/easement. All eligible costs incurred by the utility in this situation are reimbursable when properly documented and supported.

(2) If the utility facilities do not conflict with proposed highway construction features and no relocation is necessary, they shall remain in place. When it becomes necessary to relocate the utility facilities, the Department shall reimburse the utility owner for all eligible expenses incurred for replacement right-of-way and relocation construction, if allowed under the terms of the permit. This one time future reimbursement obligation shall be documented by the issuance of a Joint Use Agreement, which defines future obligations of the Department to the utility. The Joint Use Agreement shall have no other purposes than those detailed herein, and shall not otherwise be issued by this Department.

(3) In the event a utility relocation is necessary and vacation of the existing utility corridor/right-of-way to replacement right-of-way is not a viable option, the utility may opt to relocate to another location within the newly acquired highway right-of-way if no conflict between the utility facilities and highway features exists. The costs for this utility relocation from utility right-of-way to highway right-of-way are reimbursable. Since this option has been granted for the benefit of the utility, at the utility's request, the Department will issue a New Mexico Highway Utility Accommodation Permit, after which time the utility owner shall be subject to the Permit provisions. This option does not deprive the utility owner of any land rights previously held, as the terms of the Permit grant the use of public right-of-way for a specific renewable time period. In the alternative, the utility may elect the option of locating completely outside highway right-of-way and under that option the utility would be eligible for relocation costs and replacement right-of-way costs.

[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.23 UTILITY RELOCATION/CONSTRUCTION DOCUMENTATION: A complete review of all utility relocation documents shall be performed upon submittal to the Railroads and Utility Section by the utility. The review should demonstrate that the Agreement, Estimate and associated documents comply with State regulations and/or the Federal Aid Policy Guide.

A. Force account: When work will be performed by utility forces, the documentation shall include, 1) three (3) executed copies of the Utility Relocation Agreement, NMSHTD Form A-366; 2) three (3) completed copies of the completed Utility Relocation Questionnaire, NMSHTD Form A-365; 3) four (4) fully executed copies of the New Mexico Highway Utility Accommodation Permit Application, NMSHTD Form M-202 for each crossing and each longitudinal run, five (5) each if on the Interstate System); 4) four (4) executed copies of the Joint Use Agreement (if applicable), NMSHTD Form A-421; and 5) three (3) copies of the cost estimate; (6) three (3) copies of land use documents.

B. Continuing contract work: In addition to items in Paragraph 23.1 [now Subsection A of 17.4.2.23 NMAC], a copy of a fully executed Continuing Contract that is in force and effect, along with appropriate cost

estimates associated thereto, shall be provided if work is to be performed by an outside contractor under contract with the utility.

C. Contract let out to bid: If a contract is to be let out to bid to the lowest qualified bidder by the utility, the utility shall provide to the Department three (3) copies of each utility's relocation cost estimate, construction plans and contract documents. Such documents may be prepared by the utility owner or a consultant engineer engaged by the utility.

(1) fWhen the relocation will be let to contract with an ultimate award to the lowest qualified bidder, the utility's engineering staff or a consultant engineer engaged by the utility must prepare a construction plan assembly that provides adequate location plans and profiles, structure installation details, technical specifications, and other plans and details appropriate to the type of facility being relocated. One set of reproducible transparencies of these plans and/or acceptable electronic files shall be provided to the Department.

(2) The consultant or utility shall also prepare a written contract which includes the administrative terms of the contract, definition of the scope of the work, clauses for liquidated damages, clauses for labor relations, materials and construction performance specifications, bidding documents with bid unit tabulation sheets, materials quality certifications, special provisions, if any, and other contractual arrangements, usually assembled in the form of a bound book.

(3) Prior to the advertisement and solicitation of bids, the utility owner shall supply the documents specified above and a list of prospective and qualified contractors to whom the utility has provided information concerning the utility relocation project that will be opened for bids. This documentation will be reviewed and approved by the Department. Prior to the actual solicitation of bids, the Utility must receive the Department's Authority to solicit bids, and an additional written authorization to award the contract after the bid opening. The Department's authorization to award the contract will be based upon the utility owner's written recommendation, stating that the contract is in order, and the amount bid is not excessive for the work to be performed.

D. Utility Relocation As Part of the Highway Construction Project shall be documented as follows:

(1) If the utility relocation is to be performed as part of the NMSHTD Highway Construction Project by the highway contractor, the utility must provide the Department with complete utility relocation construction plans in acceptable electronic and/or hard copy format, adequate enough to include/merge in the highway construction plan assembly. The utility must also provide complete installation specifications, which must be numbered to adhere to the specification numbering system used by the Department, and unit bid tabulations, for insertion in the highway bid units.

(2) Each unit of the bid proposal must be estimated and an overall total obtained so the Department can review the unit cost of each construction item and program the overall utility relocation costs. A contract with a single lump sum bid item, for the total project, is not acceptable to this Department.

(3) Close coordination with the Department's Contracts Specifications Section, and/or the Road, Bridge and Traffic Design Sections will be necessary to integrate the utility relocations into the highway construction project. Two (2) copies of all contract and bid documentation and one (1) set of the utility relocation plans in the form of reproducible transparencies and/or electronic file are required.

[11/15/96; Recompiled 12/31/01]

17.4.2.24 UTILITY CONSTRUCTION AUTHORIZATION: After review and approval of the utility relocation documents, authorization to proceed with construction shall be provided by the utility owner. The authorization letter, over the signature of the Department's Railroads and Utilities Section Manager, shall detail the specific authorization being provided, i.e., by Force Account, by lowest qualified bidder, by a contractor under a continuing contract, or authorizing the utility to commence utility relocation in accordance with an approved Lump Sum Agreement between the Department and the utility; a Lump Sum Agreement shall not exceed $100,000.00, unless authorized by the Department or FHWA. On non-reimbursable utility relocations, the Department shall authorize the utility owner to proceed with the relocation by written notice. The coordination between the Department and the utility should be no less than that required for reimbursable utility relocations. All authorizations to relocate shall include an advisory for the utility to coordinate their work with the appropriate District Construction Engineer and other utilities as appropriate. The notice of authorization to proceed with relocation construction to the utility shall also include authorization for the District Construction Engineer to assign an inspector to ensure compatibility of highway features and utility locations. The Department's Railroad and Utility Section Agent shall send a copy of the notice to the District Construction Engineer. (See Paragraph 24.2 [now Subsection B of 17.4.2.24 NMAC]on Inspection.)

A. Verbal authorizations: In urgent or emergency situations, verbal authorizations for the utility construction to commence may be made by the Department. On federal aid projects, concurrence from the FHWA shall be secured and documented by a memo to file prior to authorization. The utility should notify the Railroads and Utilities Section Manager by phone or in writing if the confirmation is not received within ten (10) working days, as undocumented authorizations may preclude reimbursement.

B. Inspection of utility relocations: Utility relocation inspection by the Department and/or the FHWA and the utility owner shall be performed during construction as necessary.

(1) A trained technician from the appropriate District shall be assigned to inspect and verify the labor, materials and equipment used by the utility owner or utility contractor performing the utility relocation construction. The Department's assigned inspector shall assist the utility owner or its contractor in determining the planned location of the utility facilities, as taken from the utility relocation plans. However, it is the sole responsibility of the utility owners for the accuracy of utility relocation work, including, but not limited to, surveying and staking performed by its employees or the utility contractor's employees. It is also the sole responsibility of the utility owner to do all necessary inspections to insure the integrity of utility construction, quality of materials being installed, construction methods, testing, and insure that the work is performed in a good and workmanlike manner.

(2) Periodic inspection of utility relocation work shall be made, as necessary, by the Department's assigned Railroads and Utilities Relocation Agent. The Agent shall also assist the utility owner, as necessary, in defining the highway features shown on highway construction and/or right-of-way plans and in resolving problems the utility may encounter during construction. The Agent shall also assist highway project personnel, as necessary, to interpret utility relocation plans, estimates, agreements and any other utility relocation contract documents.

C. Notification of beginning and completed utility relocation construction: Once the utility has received authorization from the Department to construct, it shall notify the Department, a minimum of three (3) weeks in advance, of the date it will commence utility relocation construction. Such notification by the utility shall be provided on the Department's Form No. A-369, "Acknowledgment of Authority for Utility Construction." Upon completion of the relocation work, the utility owner shall so notify the Department in writing, of the completion.

D. Highway-utility preconstruction conferences: When utility relocation is to be performed concurrent with highway construction, or if the relocation is not completed when the Department's contractor is scheduled to begin highway construction operations, a Utility Preconstruction Conference, either concurrent with the Department's or immediately following, should be held. The conference shall be called by the Department's Highway Project Manager and all affected utilities shall be invited to attend. The scheduling of the utility's relocation work shall be discussed and a sequence of construction developed to assure completion of utility relocation work as expeditiously as possible, without delay or conflict to the Department's Contractor. Any highway contractor delay claims paid by the Department due to unreasonable utility owner or utility contractor actions or inactions shall be reimbursed to the Department by the utility owner. Any such actions or inactions shall be fully documented by Department personnel so as to substantiate reimbursement claims.

[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.25 BILLING AND AUDIT REQUIREMENTS: Payment to utilities shall be made only when the billings conform to State and Federal requirements, and are in sufficient detail so that each element is clear and its cast understood. Billings received prior to the appropriate authorization letter or that are inadequate or inaccurate shall be returned with appropriate correspondence to the utility.

A. Billings may be submitted on a progressive basis, but shall only include actual costs incurred; billings shall be identified as "first partial," "second partial," "final," etc. In all cases, billings shall be certified by the utility's auditor or person directly responsible for its accuracy.

B. It shall be the responsibility of the utility to ensure that final billings are submitted for payment within ninety (90) days of completion of the utility relocation work. Failure to submit billings within the ninety (90) day period may result in a penalty being assessed against the utility for five hundred dollars ($500.00) for amounts due the utility of twenty-five thousand dollars ($25,000.00) or less, and two and one-half percent (2.5%) for amounts due the utility that exceed twenty-five thousand ($25,000.00).

C. Any reimbursable amounts for utility work that remains outstanding (unpaid) for a period of one year from the date of completion of utility relocation work shall be forfeited by the utility. In such a situation, the Department will disencumber the funds previously authorized for reimbursement and such funds may revert to the state road fund.

D. When the utility performs reimbursable utility work, all utility records and accounts relating to the specific highway project are subject to audit by representatives of the State of New Mexico and the Federal Government for a period of three (3) years from the date of final payment. It shall also be the Department's prerogative to audit billings prior to reimbursement.
[3/10/71, 11/15/96; Recompiled 12/31/01]

17.4.2.26 RESOLUTION OF DISPUTES: Disputes between the Department and utility owners regarding reimbursement eligibility, replacement right-of-way, utility/highway construction operations and other issues may develop. Most disputes are generally resolved at administrative levels, by staff more directly involved in the day to day operations of highway/railroads/utilities functions. Therefore, dispute resolutions shall begin with official notification to the Railroads and Utilities Section Manager. If a dispute is not resolved at the Railroad and Utility Section Manager level, the utility shall submit a request for hearing within thirty (30) days of the Manager's decision. Within a reasonable time, taking into consideration the nature of the dispute, a hearing shall be scheduled by the Department and a hearing officer appointed to conduct the hearing. The hearing officer's decision shall be final and the findings and orders shall be documented and made available to the appropriate parties. Any party aggrieved by any order may appeal to the District Court of Santa Fe County for a review pursuant to NMSA 1978, Section 67-8-19, as amended. A dispute involving eligibility for reimbursement or the amount of such reimbursement shall not be grounds for a delay in making an ordered relocation. The utility must suffer the relocation as ordered, pending the resolution of the dispute.
[11/15/96; Recompiled 12/31/01]

17.4.2.27 WAIVERS FOR THE PUBLIC GOOD: The Secretary of the Department, at his/her discretion, may waive any regulation herein, if such waiver will not violate any State Statute or Federal Regulation, and it has been determined to be for the public good. The Secretary shall appoint a three member committee, one member which must be from the Department's Office of General Counsel, to consider the waiver and prepare an appropriate justification.
[11/15/96; Recompiled 12/31/01]

17.4.2.28 RAILROAD COST AND MAINTENANCE RESPONSIBILITY ON HIGHWAY/RAILWAY PROJECTS: During the development or maintenance of some highway projects, it shall be necessary to coordinate with and secure approval from railroad companies to resolve conflicts between highway construction features or maintenance activities and railroad property and/or facilities. This Section sets forth railroad eligibility for reimbursement by the Department for costs incurred in resolving such conflicts where construction of a highway project necessitates the use of railroad property or affects railroad facilities. There shall be a written agreement between the State and the railroad company, and such agreements shall meet the requirements of the Federal Aid Policy Guide, Part 646.

A. Preliminary negotiation: Preliminary negotiation should be initiated by the Department with the railroad at the location stage, if possible. Upon approval of the location, the railroad shall be provided with information showing a tie to the railroad center line, railroad mile post or bridge. A proposed highway typical Section shall be supplied, along with a request that the railroad's horizontal and vertical clearances, maintenance road, drainage and other requirements be forwarded to the Department as soon as possible. This information shall then be forwarded to the appropriate Engineering/Design Division Unit, preferably before design of the highway project begins. As soon as preliminary plans showing the railroad requirements are available, they shall be sent to the railroad, along with a letter requesting a field meeting with railroad officials. The negotiations and understandings reached at such meeting shall be documented and reviewed prior to beginning negotiations for a State/Railroad Agreement.

B. Right-of-way: Acquisition of right-of-way, other than railroad operating right-of-way, required for highway construction shall be handled as any other acquisition by the Department's Right-of-Way Bureau. When railroad operating right-of-way is required for highway construction purposes, including, but not limited to soil exploration, a right of entry shall be secured by the Department prior to entering railroad property. Such right of entry may be in letter or agreement form and shall be fully executed by the State and railroad. Where soil exploration within railroad property is necessary, it is preferable that Department crews perform such exploration, because of strict insurance and agreement provisions. Because the State is self-insured, it is less cumbersome and time consuming to have State forces perform exploration activities within railroad property.

C. Negotiations for agreements/authorizations: Negotiations for a final agreement can be started after the following plans are available for review by the railroad company: (1) the layout structure over or under the tracks if a grade separation is involved, showing a tie to the railroad centerline, minimum clearances, both horizontal and vertical, and provisions for extra tracks, and off track maintenance equipment, if such provisions are required; (2) right-of-way plans showing the crossing area or easements required from the railroad company, together with a description thereof; and (3) highway plans showing grade, drainage and other features that may affect the railroad. The plans shall be developed to a stage where changes by the Department will not require re-engineering by the railroad. If authorization has been received from the FHWA for preliminary engineering, the plans that are applicable shall be sent to the railroad company in quadruplicate, with an explanation of any items that may be obscure to the railroad company. The transmittal letter to the railroad shall include information regarding the letting date for the project, a request for review of the plans transmitted, and comments or approval, and a request for the railroad to prepare their force account estimate. This submittal is the authorization from the Department to the railroad to proceed with their engineering and design.

D. Processing agreements: Four (4) copies of the Agreement (two original signatures and 2 stamped originals) shall be submitted for processing, accompanied by a letter to the FHWA requesting an authorization to proceed with construction (include method of construction, i.e., force account, contract, etc.) if provisions for railroad work are part of the Agreement. When the authorization from FHWA is received, the Department shall authorize the railroad to proceed with the railroad work required, in accordance with the approved agreement, plans, and estimate.

E. Railroad liability for cost of project:

(1) federal aid projects: The classification of projects and the requisite railroad share the cost on federal aid projects shall conform to the Federal Aid Policy Guide, Part 646.

(2) state funded projects: The NMSHTD has determined that railway liability with respect to specific project types shall be as follows:

(a) grade crossing elimination: When a project eliminates an existing rail/highway at-grade-crossing, either by grade separation or relocation of the highway or the railway, whether or not railway active warning devices are in place, the project shall be deemed a benefit to the railroad. The assigned railroad liability shall be five percent (5%) of the cost of the project, which costs shall be based on the cost for preliminary engineering, right-of-way and construction costs, including utilities and railroad force account. Where the project does not result in closing an existing at-grade-crossing, railroad participation shall not be required. Railroad participation is limited to the grade separation structure and approaches required to transition to a theoretical highway profile, which would have been constructed if there were no railroad present, for the number of lanes on the existing highway and in accordance with the current design standards of the Department. Responsibility for maintenance of a newly constructed grade separation shall be as follows:

(i) Where a separation facility overpasses a railroad, maintenance responsibility for the entire structure and approaches shall be assumed by the Department.

(ii) Where a grade separation structure underpasses a railroad, maintenance of the approaches and of the entire structure below, including the deck plate, hand rails and parapets, shall be the responsibility of the Department. Maintenance of the water proofing, ballast, ties, rails and any portion of the supporting structure above the top of the ballast deck plate between parapets shall be the responsibility of the railroad company owning the tracks.

(iii) The cost of repairing damage to a structure, occasioned by collision, equipment failure or derailment of railroad equipment shall be borne by the railroad.

(b) grade crossing protection: This type includes all projects for protection of highways and railways by automatic signal devices. Authorizations for installation of automatic signal devices are described in the Federal Aid Highway Policy Guide, Part 646; the U.S. Department of Transportation on Railroad-Highway Grade Crossing Handbook, or as otherwise determined by the Department. Flashing light signals shall be installed at all highway projects crossing a railroad, when the highway traffic count exceeds 100 A.D.T. and there are more than two (2) trains per day at the crossing. When the highway facility consists of more than two (2) lanes, cantilever type signals shall be installed. Automatic flashing light signals with short-arm gates shall be installed if one or more of the following conditions prevail:

(i) Multiple mainline railroad tracks.

(ii) Multiple tracks at or in the vicinity of the crossing which may be occupied by a train or locomotive so as to obscure the movement of another train approaching the crossing.

(iii) High speed train operation combined with limited sight distance at either single or multiple track crossing.

(iv) A combination of high speeds and moderately high volumes of highway and railroad traffic.

(v) A high volume of vehicular traffic crossing the tracks; a high number of train movements; a substantial numbers of school buses or trucks carrying hazardous materials; unusually restricted sight distance; continuing accident occurrences; or any combination of these conditions.

(iv) A diagnostic team recommends them. Motion sensors and predictors shall be installed at locations where they may expedite highway traffic.

(c) The New Mexico State Highway Department has determined that at-grade crossing protection falls into four (4) general classifications and conditions, as follows:

(i) Where a highway or railway project requires installation of automatic signal devices at a location which is presently only protected by advance warning signs and standard cross-bucks, the project is deemed to be of no benefit to the railroad company involved. The railroad rehabilitation work which will be required at such crossings, consisting of raising or lowering of track, pavement materials between tracks, including any widened roadway Section, shall be deemed to be of no benefit to the railroad and railroad participation in that portion of the project shall not be required.

(ii) Where an existing highway crosses a railroad at-grade and there are presently automatic signal devices in place, and if on account of highway widening, the signals must be relocated and the crossing improved but no new signals required, the project shall be considered to be of no benefit to the railroad and railroad participation shall not be required.

(iii) Where an existing highway crosses a railroad at-grade and there are presently automatic signal devices in place, and due to highway widening the signals must be replaced with cantilever type signals or signals with gates, the project shall be considered to be of no benefit to the railroad; the railroad rehabilitation work required at such crossings; consisting of raising or lowering of track, pavement materials between tracks, including any widened roadway Section, shall be considered of no benefit to the railroad and railroad participation in that part of the project shall not be required.

(iv) Where an existing highway crosses a railroad at-grade and there are presently automatic signal devices in place, and if on account of highway widening and improvement of the crossing the signal system must be modernized to include cantilever type or signals with gates, and the existing signals are to be relocated to the roadway median, the project shall be considered to be of no benefit to the railroad and railroad participation shall not be required. The railroad rehabilitation work which will be required at such crossing, consisting of raising or lowering of track pavement materials between tracks, including any widened roadway Section, shall be considered to be of no benefit to the railroad, and railroad participation in that part of the project shall not be required. Maintenance of automatic signal devices at the crossing surface and two (2) feet beyond each outside rail including space between multiple tracks under any of the above described conditions, shall become the responsibility of the railroad company involved.

(d) reconstruction of existing railroad/highway grade separation: A project to reconstruct an existing overpass or underpass shall include the entire structure and railroad and the highway approaches thereto. Since there is no railway liability for such projects, there shall be no benefit to the railroad and railroad participation shall not be required. Responsibility for maintenance shall be the same as described under I.A. [Subparagraph 3 of Paragraph 3 of Subsection E of 17.4.2.28 NMAC] and I.B. [Subparagraph (b) of Paragraph (3) of Subsection E of 17.4.2.28 NMAC]**,** above.

(e) existing railroad crossed by new highway: Where a new highway is constructed which is not a relocation of an existing highway and it intersects an existing railroad, the construction of a separation structure or the installation of a signal device at such crossing will not be considered a benefit to the railroad and railroad participation shall not be required. Responsibility for maintenance shall be the same as described under I.A. [Subparagraph (a) of Paragraph (3) of Subsection E of 17.4.2.28 NMAC], I.B. [Subparagraph (b) of Paragraph (3) of Subsection E of 17.4.2.28 NMAC], and II.D (fourth classification) **[**Subparagraph (b) of Paragraph (2) of Subsection E of 17.4.2.28 NMAC], aforementioned.

(f) Existing highway crossed by a new railroad: Where a new railroad crosses an existing highway, the required separation or signal devices and any pavement work at the crossing shall not be considered to be of benefit to the road user and 100% railroad participation shall be required. The determination as to separation or type of protection shall be according to the policy existing on the classification and traffic volume of the highway

crossed and the relative traffic hazard. In the event exceptional situations arise and expansion of these regulations are necessary to cover the situation, the provisions of Federal Aid Policy Guide, Part 646, the U.S. Department of Transportation Grade Crossing Handbook, and other relevant data and/or conditions shall be considered; however, the decision of the Department shall be final.

F. Railroad Section 130 safety funds: On highway projects where railroad facilities are being impacted by highway construction, Section 130 funds shall not be used as a funding source unless the specific location of the rail/high facilities has been identified and included in an approved safety program by the State and FHWA. Exceptions may be projects where federal regulations that allow transfer of such funds have been considered and appropriate steps taken by the State and FHWA to allow their use. In all cases where railroad facilities are involved, early coordination between the Preliminary Engineering Bureau and the Railroads & Utilities Section shall be pursued so as to identify potential options for addressing conflicts and circumventing project delays.

[3/10/71, 11/15/96; Recompiled 12/31/01]

History of 17.4.2 NMAC: [RESERVED]