

UTILITY ACCOMMODATION POLICY



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PART 1 - GENERAL POLICY

A. Policy Application

1. Purpose

This policy is to prescribe the accommodation, location and method of installation, adjustments, removal, relocation and maintenance of utility facilities within property of an OmniTRAX managed Railroad, referred to hereafter as "Railroad". The policy was developed in the interest of safety, protection, utilization, and future development of OmniTRAX managed Railroads with due consideration given to public and private service afforded by adequate and economical utility installations.

2. Application

The policy concerning utility accommodations shall apply to all:

- a. New utility installations.
- b. Additions to existing utility installations.
- c. Adjustment and relocation of utilities.
- d. Existing or planned utility installations for which agreements with Railroad were entered prior to the date of the adoption of this policy.
- e. Existing utility installations that do not meet the license requirements may remain at the discretion of Railroad.

Various types of utility lines not specifically discussed herein shall be considered within the provisions of this policy. It shall be the general practice to consider all lines carrying caustic, flammable or explosive materials under the provisions for high-pressure gas and liquid fuel lines.

3. Scope

Utilities include lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water and other similar commodities which are privately, publicly or cooperatively owned and which serve directly or indirectly the public or any part thereof.

A Utility Agreement License allowing a Utility Owner the privilege of placing its facilities in or on Railroad property does not constitute permanent right for such usage. Any removal, remodeling, maintenance or relocation of the facilities, whether or not required by Railroad, will be accomplished promptly by the Utility Owner at no cost to Railroad.

4. Exceptions

Exceptions to any design, location or methods of installation provisions contained in this policy must be authorized by Railroad. Requests for exceptions will be considered only where it is shown that extreme hardship and/or unusual conditions provide justification and where alternate measures can be prescribed in keeping with the intent of this policy. All requests for exceptions shall be fully documented including design data, cost comparisons and other pertinent information.

5. Liability

The Utility Owner, its successor, or assigns shall assume all risk and liability for accidents and damages that may occur to persons or property on account of this work, and shall indemnify and hold Railroad harmless from any and all costs, liabilities, expenses, suits, judgments or damages to persons or property or claims of any nature whatsoever arising out of or in connection with the permit, or the operation and performance thereunder by the utility, its agents, employees or subcontractors. In this regard, it is further understood and agreed that the utility be required to obtain insurance coverage as determined by Railroad.

The Utility Owner agrees that if liability insurance is required, it will file with the Railroad, prior to granting of the license, "Certificates of Insurance" or other evidence to show that the appropriate insurance is carried.

Insurance as required shall be maintained in force until the final release of the Utility Owner by Railroad from all obligations under the terms of the license. The insurance contract shall cover claims for such length of time as law permits said claims. The insurance document shall include a clause requiring the insurer to notify Railroad ten (10) days in advance of any cancellation or change in insurance contacts.

The Utility Owner is responsible for any subcontractor to be knowledgeable of the policy and to require all work to be in compliance with this policy. Subcontractors must carry a liability insurance policy unless the subcontractor is covered by the Utility Owner's insurance.

6. Replacement of Facility

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

7. Change in Ownership

It is the Utility Owner's responsibility to inform Railroad, in writing, of any name, ownership or address changes.

8. Noncompliance

Noncompliance with any terms of this Utility Accommodation Policy or Utility License Agreements may be considered as cause for discontinuance of construction or operations until compliance is assured. Continued noncompliance will result in the revocation of the license. The cost of any work required by Railroad in the removal of non-complying construction will be assessed against the Utility Owner.

9. Discharge of Waste Material

Applications for a Utility License Agreement for the installation of utility facilities which will discharge materials into the nation's waters, must comply with all applicable requirements of Corps of Engineers, and other federal, state or local environmental protection agencies. Identification of applicable requirements and administration of compliance procedures are the responsibility of the Utility Owner.

B. Utility License Agreement Requirements

1. General

Utility License Agreements are required when utility facilities are installed, relocated, removed or maintained along or across all Railroad property.

If liability insurance is required, then evidence of adequate liability insurance is to be on file with Railroad for each agreement.

2. Applications

Approved requests to install, maintain, relocate or remove a utility within the property of Railroad shall be authorized by a Utility License Agreement. The applications for utility license agreements along with plans for the proposed installation shall be submitted to Railroad and approved before construction has commenced.

3. Location

a. Utility lines shall be located to avoid or minimize the need for adjustments for future Railroad improvements and to permit access to the utility lines for their maintenance with minimum interference to Railroad traffic.

b. Pipelines shall be installed under tracks by boring, jacking, horizontal drilling or in some cases, open-trenching. WATER JETTING IS NOT PERMITTED.

c. Where practical, pipelines carrying liquefied petroleum gas shall cross the Railroad where the tracks are carried on an embankment (Fill condition).

- d. All high-pressure pipelines (greater than 60-psi internal pressure), except those in public roads, shall be prominently marked at the property line (on both sides of the outside track for under crossings) by signs which state the size of the line and its depth.

Example: CAUTION: 30" diameter high-pressure Gas main 7 feet deep from the base of rail.

4. Design Considerations

- a. The design of any utility installation will be the responsibility of the Utility Owner. An installation within the Railroad property must be reviewed and accepted by the Railroad with regard to location and the manner of adjustment. This includes the measures to be taken to preserve the safety and rail service provided by the Railroad, structural integrity of the roadway or structure, ease of maintenance and the integrity of the utility facility. Utility installations, on, over or under Railroad property shall conform with requirements contained herein and as a minimum, the appropriate requirements outlined in the following:
 - 1) Safety Rules for the Installation and Maintenance of Electric Supply and Communication Lines-National Electric Safety Code.
 - 2) Title 49 C.F.R. Part 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards and Amendments.
 - 3) Title 49 C.F.R. Part 195, Transportation of Liquids by Pipelines and Amendments.
 - 4) American Society for Testing and Materials (ASTM) Specifications - latest edition.
 - 5) Manual on Uniform Traffic Control Devices - latest edition.
 - 6) Rules and Regulations for Public Water Systems - latest edition, published by the appropriate State Health Department.
- b. All utility installations on, over or under Railroad property shall be of durable materials designed for long service life and relatively free from routine servicing and maintenance. Conformance with current applicable material specifications and codes is mandatory.
- c. References given to any manual, publication or specification are intended to be the latest edition. If a conflict occurs between any publication and this manual, the most restrictive specification will be used.
- d. For all boring and jacking installations under mainline and passing tracks, greater than 26 inches in diameter, and at a depth of between 5.5 and 10.0 feet below base of rail, a Geotechnical Study will need to be performed to determine the presence of granular material and/or high water table elevation, at the sole expense of the Permittee. The study will include

recommendations and a plan for a procedure to prevent construction, installation, and/or failure issues. Core samples are to be taken near the ends of tie at the proposed location, at least as deep as the bottom of the proposed horizontal bore depth. Test results must be reviewed and approved by the Railroad, or its consultant, prior to installation activities commencing. The Railroad reserves the rights, based on test results, to require the Permittee to select an alternate location, or to require additional engineering specifications be implemented, at the sole expense of the Permittee, in order to utilize proposed location.

C. Safety

1. Flagging

When work is performed within twenty-five (25) feet of the centerline of the outside track, Railroad flagging will be required.

a. Railroad flagging will be required:

- a. During the period of construction when it is necessary for the Contractor to operate equipment in the vicinity of, or over, Railroad property which may impede Railroad operations.
- b. Two or more Railroad flagmen may be required when deemed necessary by the Railroad Roadmaster and solely at his or her discretion.

b. Flagging services shall be performed by Railroad employees or 3rd Party Sub- Consultant certified to supply flag protection services and the total cost borne by the Utility Owner/Permittee.

c. The Utility Owner will be billed monthly at a rate to be determined by Railroad or hired 3rd Party Sub-Consultant to include labor and payroll associated costs plus any expenses incurred by Railroad or Sub-Consultant for flagging services.

d. A written request for flagging services will be required at least 72 hours prior to the time when such services are needed. This request is made to the Railroad Roadmaster, as noted in the agreement.

2. Material Storage

Storage of materials, parking of equipment and vehicles when not used in actual utility work will not be permitted on Railroad property.

D. Maintenance and Servicing Utilities

1. Utility Owner's Responsibility

- a. All maintenance of the utility is the Responsibility of the Utility Owner.
- b. Maintenance must be performed to keep the facility in an as-constructed condition, and in a good state of repair in accordance with the requirements of the Railroad, Federal, State and Local laws, regulatory standards and utility codes.
- c. It is the Utility Owner's Responsibility to replace and stabilize all earth cover and vegetation when it has eroded over an underground utility facility where such erosion is due to, or caused by, the placement or existence of the underground utility facility.
- d. The Utility Owner shall be Responsible for any settlement of backfill, fills, and embankments that may occur.

2. Emergency Maintenance

- a. Emergency maintenance of utilities located on Railroad property is permissible without obtaining a Utility License Agreement if an emergency exists that is dangerous to the life, safety or welfare of the general public and which requires immediate repair. The Utility Owner shall take all necessary and reasonable safety measures to protect the General Public and the Railroad.
- b. It is the responsibility of the Utility Owner, in such an event, will advise the Railroad Roadmaster as soon as possible. Damage to the Railroad right-of-way and facilities will be restored to its original condition. A Utility License Agreement should be requested by the Utility Owner within two (2) working day provided the work is not covered under any previously granted license. Flagging requirements described earlier apply in all situations.

E. Preservation, Restoration and Cleanup

1. Disturbed Areas

- a. Areas of Railroad property, disturbed by the installation, maintenance, removal and relocation of utilities shall be kept to a minimum.
- b. Disturbed areas shall be returned to normal grade and elevation, with compaction of backfill material, and all excess or undesirable material removed by the Utility Owner. The Utility Owner shall replace destroyed vegetation by sodding, or seeding, fertilizing and mulching, or a combination thereof.

- c. The Utility Owner shall provide protection against erosion in disturbed areas that are subject to erosion. Such protection may be in the form of rock riprap, wash check dam, hay or straw cover, or other material that are acceptable by the Railroad and does not interfere with Railroad activities.

2. Drainage Facilities

Care shall be taken to avoid disturbing existing drainage facilities. Underground utility facilities shall be bedded with pervious material and outlets provided for entrapped water. Underdrains should be provided where necessary.

3. Cleanup

Unused material or debris shall be removed from the work site area. At the end of every construction day, construction equipment and materials shall be removed as far from the operating Railroad tracks as possible (minimum 25 feet from centerline of the outside track).

F. Protection of Vegetation

1. Trimming, Clearing or Removal of Vegetation

- a. Consistent with the preservation of planted vegetation, consideration will be given to Utility Owners for the necessary trimming, clearing or removal of vegetation to provide adequate clearance of overhead utilities, wires, cables, structures, etc. Such work will be done in accordance with established practices and standards; however, approval will not be granted for wasteful or wanton trimming, or removal in order to provide easy solutions.
- b. No trees, shrubs, bushes, vines or ground cover on Railroad property shall be sprayed, trimmed, cut down, rooted up, removed or mutilated in any manner unless a permit is granted by Railroad to do such work.

2. Chemical Brush Control

- a. Spraying brush and seedling tree growth to prevent re-sprouting may be permitted, and when permitted, shall be carried out with extreme caution and careful performance. The Utility Owner shall be responsible for the performance of their employees or contractors in the application of brush control and approved by Railroad.
- b. All spraying shall be done by an authorized applicator that is licensed in the state where the work is to be performed.
- c. Permit applications for spraying shall list the kinds of chemical weed and brush application removal that will be used. When liability insurance is required, it shall be provided by the applicator, or be insured under the liability insurance of the Utility Owner.

- d. Plants over five (5) feet in height should not be sprayed for control. Brush over five (5) feet in height, shall be removed and the stumps treated to prevent future growth. Shrubbery type growth such as dogwood, sumac, redbud, plum, etc., should not be sprayed as a general rule. Steep slopes and/or embankment, where brushy growth is a major factor in preventing erosion, will not be sprayed.

3. Tree Pruning

- a. Tree pruning on Railroad property for utility lines will utilize the best horticultural practices. All cut branches, dead limbs, etc., shall be removed from Railroad property. Such materials shall not be burned or disposed of on Railroad property unless permission is granted by Utility License Agreement.
- b. Should burning be permitted, the Utility Owner is required to follow state or local agency guidelines and permit application process within the work area defined. The Utility Owner will be held liable for any damage to grass, crops, native shrubs and trees arising from careless burning of such brush. The Utility Owner will be responsible for any expense of clean-up and is required to return the impacted area to its original condition prior to the start of the work.
- c. Any and all limbs trimmed shall be removed with a clean cut and all limb scars over one (1) inch in diameter shall be treated with appropriate tree paint and/or controlled future growth material.

PART 2 - UTILITIES PARALLELING RAILROAD PROPERTY

A. General Provisions

This section of the policy applies to all public and private utilities, including electric power, telephone (including fiber optics), telegraph, cable television, water, gas, oil, petroleum products, steam, chemicals, sewage, drainage, irrigation and similar lines that are located, adjusted or relocated within the property under the jurisdiction of the Railroad. Such utilities may involve underground, surface or overhead facilities.

Any utility line greater than five hundred (500) feet in length will be considered a parallel line and is to be located on uniform alignment, within ten (10) feet or less of the Railroad right-of-way or adjacent property line so as to provide a safe environment and to preserve space for future Railroad improvements or other utility installations. Railroad Liaison must approve any installation over one (1) mile.

Utilities will be located so as to provide a safe environment and shall conform to the current "National Electrical Safety Code," "American Waterworks Association Specifications," "Federal Pipeline Safety Regulations," and "The American Railway Engineering and Maintenance Association Specifications." Where laws or orders of public authority prescribe a higher degree of protection, then the higher degree of protection prescribed shall supersede the provisions of this manual. If a conflict occurs between any publication and this manual, the most restrictive specification will be used.

B. Overhead Installations

1. Minimum four (4) feet clearance required above signal and communication lines.
2. Poles must be located 50 feet out from the centerline of Railroad main, branch and running tracks, CTC sidings, and heavy tonnage spurs. Pole location adjacent to industry tracks; must provide at least a 10-foot clearance from the centerline of the outside track, when measured at right angles. If located adjacent to curved track, then said clearance must be increased at a rate of 1-1/2 inches per degree of curved track.
3. Regardless of the voltage, unguyed poles shall be located a minimum distance from the centerline of any track, equal to the height of the pole above the ground-line plus ten (+10) feet. If guying is required, the guys shall be placed in such a manner as to keep the pole from leaning/falling in the direction of the tracks.
4. Poles (including steel poles) must be located a minimum distance from the railroad signal and communication line equal to the height of the pole above the ground-line or else be guyed at right angles to the lines. High voltage towers, poles, support structures (34.5kV and higher) must be located off Railroad right-of-way.

5. For proposed electrical lines paralleling tracks, Railroad may request that an inductive interference study be performed at the expense of the Utility Owner. Inductive interference from certain lines have the potential to disrupt the Railroad signal system in the track causing failures in the track signals and highway at-grade crossing warning devices. The Railroad Signals Liaison will determine the need for a study on a case-by-case basis.

C. Underground Installations

1. Underground utility installations should be located at the high point of the back slope at the outer limits of the Railroad right-of-way.
2. If the pipeline is located forty (40) feet or less from centerline of the outside track, the pipeline shall be encased in a steel pipe subject to approval from Railroad. No pipe may be placed closer than twenty-five (25) feet from centerline of the outside track. Pipe must be buried with a minimum cover of three (3) feet or per the industry regulation requirement.
 - a. If less than minimum depth is necessary because of existing utilities, water table, ordinance or similar reasons, the line shall be rerouted and reviewed by the Railroad for approval.
 - b. Locations where it will be difficult to attain minimum depth due to wet or rocky terrain shall be avoided. Any location change from plan must be approved by the Railroad.
3. The use of plastic carrier pipe for sewer, water, natural gas and other liquids is acceptable under specific circumstances. The use of plastic pipe is satisfactory if the pipe is designed to meet AREMA and all applicable federal and state codes, and if the carrier pipe is properly encased with a steel casing pipe for the entire length on Railroad property.
4. Manholes shall be limited to those necessary for installation and maintenance of underground lines. Manholes vary as to size and shape depending on the type of utility they serve. To conserve space, their dimensions should be minimally acceptable by good engineering and safety standards. In general, the only equipment to be installed in manholes located within Railroad right-of-way is that which is essential to the normal flow of the utility, such as circuit reclosers, cable splices, relays, valves and regulators. Other equipment should be located outside the limits of the Railroad right-of-way. Manholes shall not protrude above the surrounding ground nor be located in the shoulder, shoulder slope, ditch, backslope, or within twenty-five (25) feet of the centerline of the outside track without the approval of the Railroad.
5. Electric Power Lines
 - a. A minimum depth of three (3) feet below natural grade (BNG) will be maintained for 750 volts and less, and four (4) feet BNG for greater than 750 volts.

- b. A six (6) inch wide warning devise will be installed, one (1) foot BNG directly over the underground power line where located on Railroad right-of-way outside the track ballast sections.

6. Fiber Optic Lines

- a. A minimum depth of four (4) feet BNG for fiber optic cable wirelines.
- b. Whenever feasible, all cable should be laid within five (5) feet from the Railroad right-of-way and/or adjacent property lines.
- c. A six (6) inch wide warning devise will be installed, one (1) foot BNG directly over the underground fiber optic line where located on Railroad right-of-way outside the track ballast sections.

D. Attachment to Bridges and Other Structures

The Utility Owner will not be permitted to attach to Railroad bridges or route utility through drainage structures or cattle passes. Utilities are not to be attached to other Railroad structures without the written approval of the Railroad. As a general rule, overhead power, communication and cable television line crossings at bridges must be avoided. Pipelines laid longitudinally on Railroad property shall be located as far as practical from any tracks or other important structures. If located within forty (40) feet of the centerline of any track, the carrier pipe shall be encased or be of special design as approved by the Railroad.

PART 3 - UTILITIES CROSSING RAILROAD PROPERTY

A. General Provisions

This section of the policy applies to all public and private utilities, including electric power, telephone (including fiber optics), telegraph, cable television, water, gas, oil, petroleum products, steam, chemicals, sewage, drainage, irrigation and similar lines that are located, adjusted or relocated within the property under the jurisdiction of the Railroad. Such utilities may involve underground, surface or overhead facilities.

Installations crossing the property of the Railroad, to the extent feasible and practical, are to be perpendicular to the track alignment and preferably at not less than forty-five (45) degrees to the centerline of the track. Utilities shall not be placed within culverts or under Railroad bridges, buildings or other important structures (signal bungalows, etc.) without the approval of the Railroad.

Utilities will be located so as to provide a safe environment and shall conform to the current "National Electrical Safety Code," "American Waterworks Association Specifications," "Federal Pipeline Safety Regulations," and "The American Railway Engineering and Maintenance Association Specifications." Where laws or orders of public authority prescribe a higher degree of protection, then the higher degree of protection prescribed shall supersede the provisions of this manual. If a conflict occurs between any publication and this manual, the most restrictive specification will be used.

B. Overhead Installations

1. Minimum four (4) feet clearance required above signal and communication lines.
2. Poles must be located fifty (50) feet out from the centerline of Railroad main, branch and running tracks, CTC sidings, and heavy tonnage spurs. Pole location adjacent to industry tracks; must provide at least a ten (10) foot clearance from the centerline of the outside track, when measured at right angles. If located adjacent to curved track, then said clearance must be increased at a rate of 1-1/2 inches per degree of curved track.
3. Regardless of the voltage, unguyed poles shall be located a minimum distance from the centerline of any track, equal to the height of the pole above the ground-line plus ten (+10) feet. If guying is required, the guys shall be placed in such a manner as to keep the pole from leaning/falling in the direction of the tracks.
4. Poles (including steel poles) must be located a minimum distance from the Railroad signal and communication line equal to the height of the pole above the ground-line or else be guyed at right angles to the lines. High voltage towers, poles, support structures (34.5kV and higher) must be located off Railroad right-of-way.

5. Overhead crossings will not be installed under or within five hundred (500) feet of the end of any Railroad bridge/structure, or three hundred (300) feet from the centerline of any culvert or Railroad switch area.
6. Complete spanning of the property is encouraged with supportive structures and appurtenances located outside the Railroad property. For electric supply lines, normally the crossing span shall not exceed one hundred fifty (150) feet with adjacent span not exceeding 1-1/2 times the crossing span length. For communication lines, the crossing span shall not exceed one hundred (100) feet in Railroad heavy loading districts, one hundred twenty five (125) feet in Railroad medium loading districts, and one hundred fifty (150) feet in Railroad light loading districts; and the adjacent span shall not exceed 1-1/2 times the crossing span length. The Railroad will review current and future loading districts to determine span requirements. For heavier type construction, longer spans will be considered and need to be reviewed and approved by the Railroad.
7. Joint-use construction is encouraged at locations where more than one (>1) utility or type of facility is involved. However, electricity and petroleum, natural gas or flammable materials shall not be combined. Utility for more than one (>1) utility crossing shall follow the Railroad application process required for an authorized Railroad Utility Agreement. Pipe truss design, overhead structure(s) and proposed layout will need to be reviewed and approved by the Railroad.
8. To ensure that overhead wire crossings are clear from contact with any equipment passing under such wires, communication lines shall be constructed with a minimum clearance above top of rail of twenty-four (24) feet, and electric lines with a minimum clearance of twenty-six and one-half (26 1/2) feet or greater above top of rail when required by the "National Electric Safety Code" or state and local regulations. Electric lines must have a florescent ball marker or warning devise on lowest wire over centerline of track(s).
9. The Utility Owner will label the posts closest to the crossing with the Owner's name and telephone number (contact information) for emergencies.
10. All overhead flammable and hazardous material lines will need the Railroad approval, but should be avoided if possible.
11. For proposed electrical lines crossing track(s), the Railroad may request that an inductive interference study be performed at the expense of the Utility Owner. Inductive interference from certain lines have the potential to disrupt the signal system in the track causing failures in the track signals and highway at-grade crossing warning devices. The Railroad Signals Liaison will determine the need for a study on a case-by-case basis.

C. Underground Installations

1. General

- a. All underground utility crossings of Railroad trackage shall be designed to carry Cooper's E-80 Railroad live loading with diesel impact (AREMA Cooper's loading Requirements). This 80,000-lb. axle load to be distributed laterally a distance of three (3) feet, plus a distance equal to the depth from structure grade line to base of rail, on each side of centerline of single tracks, or centerline of outer track where multiple tracks are to be crossed. In no case shall railroad loading design extend less than ten (10) feet laterally from centerline of track. Longitudinally, the load will be distributed between the five (5) foot axle spacing of the Cooper E-80 configuration.

Railroad loading criteria will also apply where future tracks of the Railroad are contemplated, to the extent this information may be available.

- b. All Utility crossings under ditches should have a minimum depth of cover of three (3) feet below the flow line of the ditch or ground surface and five and one-half (5-1/2) feet from base of rail, or as approved by the Railroad. In fill sections, the natural ground line at the toe of slope will be considered as the ditch grade line. The depth of cover shall not be less than that meeting applicable industry standards.
- c. For all boring and jacking installations under mainline and passing tracks, greater than 26 inches in diameter, and at a depth of between 5.5 and 10.0 feet below base of rail, a Geotechnical Study will need to be performed to determine the presence of granular material and/or high water table elevation, at the sole expense of the Permittee. The study will include recommendations and a plan for a procedure to prevent construction, installation, and/or failure issues. Core samples are to be taken near the ends of tie at the proposed location, at least as deep as the bottom of the proposed horizontal bore depth. Test results must be reviewed and approved by the Railroad, or its consultant, prior to installation activities commencing. The Railroad reserves the rights, based on test results, to require the Permittee to select an alternate location, or to require additional engineering specifications be implemented, at the sole expense of the Permittee, in order to utilize proposed location.
- d. The use of plastic carrier pipe for sewer, water, natural gas and other liquids is acceptable under specific circumstances. The use of plastic pipe is satisfactory if the pipe is designed to meet all applicable federal and state codes, and if the carrier pipe is properly encased within a steel casing pipe per AREMA standards. This casing must extend the full width of the Railroad right-of-way. Casing may be omitted only for gaseous products if the carrier pipe is steel and is placed ten (10) feet minimum below the base of rail per AREMA standards.

2. General Design and Construction Requirements

- a. If less than minimum depth is necessary because of existing utilities, water table, ordinance or similar reasons, the line shall be rerouted and reviewed by the Railroad for approval.
- b. Locations where it will be difficult to attain minimum depth due to wet or rocky terrain shall be avoided. Any location change from plan must be approved by the Railroad.
- c. Underground installations may be made by open-trenching from the property line to the toe of the fill slope in fill sections and to the toe of the shoulder slope in cut sections but no closer than thirty (30) feet of the centerline of the outside track. The remainder will be tunneled, augured, jacked or directional-bored through the roadbed. Refer to the following sections for required encasement of utilities and boring requirements.
- d. Manholes shall be limited to those necessary for installation and maintenance of underground lines. Manholes vary as to size and shape depending on the type of utility they serve. To conserve space, their dimensions should be minimally acceptable by good engineering and safety standards. In general, the only equipment to be installed in manholes located within Railroad right-of-way is that which is essential to the normal flow of the utility, such as circuit reclosers, cable splices, relays, valves and regulators. Other equipment should be located outside the limits of the Railroad right-of-way. Manholes shall not protrude above the surrounding ground nor be located in the shoulder, shoulder slope, ditch, backslope, or within twenty-five (25) feet of the centerline of the outside track without the approval of the Railroad.
- e. The Utility Owner will not be permitted to attach to Railroad bridges or route utility through drainage structures or cattle passes. Utilities are not to be attached to other Railroad structures without the written approval of the Railroad.
- f. Jacking pits shall be located a minimum of thirty (30) feet from the centerline of the outside track.

3. Pipeline Requirements

- a. Pipeline designs are to specify to the type and class of material, maximum working pressures test and the design pressure. Pipelines which are not constructed, operated and maintained under regulations established under US Department of Transportation Hazardous Materials Regulations Board, shall upon revisions in the class of material or an increase in the maximum operating pressure, must be approved by the Railroad.
- b. Pipelines carrying oil, liquefied petroleum gas, natural or manufactured gas and other flammable products shall conform to the requirements of the current AREMA, ANSI/ASME B 31.4 Code for pressure piping - Liquid Petroleum Transportation Piping Systems; ANSI B 31.8 Code for pressure piping - Gas Transmission and Distribution Piping Systems; other applicable

ANSI codes and 49 C.F.R. Part 192 or Part 195 - Transportation of Hazardous Liquids by Pipeline, except that the maximum allowable stress of design of steel pipe shall not exceed the following percentages of the specified minimum yield strength (multiplied by longitudinal joint factor) of the pipe as defined in the ANSI codes.

- c. Pipelines under Railroad track(s) and across Railroad property shall be encased in a larger pipe or conduit called "Casings." Generally, casings shall extend from the Railroad right-of-way line to right-of-way line, unless otherwise approved by the Railroad.
- d. Pipelines and casing pipes shall be suitably insulated from underground conduits carrying electric wires on Railroad property.
- e. Reinforced concrete pipe will need to be encased for a distance as wide as the embankment at the utility crossing. This is to protect against track failure due to joint separation.

4. Encasement of Utilities

- a. Casings are oversized load-bearing conduits or ducts through which a Utility is inserted:
 - 1) To protect the Railroad from damages and to provide for repair, removal and replacement of the Utility without interference to the Railroad service.
 - 2) To protect the carrier pipe from external loads or shock, either during or after construction.
 - 3) To convey leaking fluids or gases away from the area directly beneath the Railroad trackage to a point of venting at the Railroad right-of-way.
 - 4) Carrier pipe must be steel and the wall thickness must conform to E-80 loading for casing pipe shown in the tables as included and defined in the AREMA manual for Pipeline Crossings. The length of thicker-walled pipe shall extend from Railroad right-of-way line to right-of-way line. This will generally result in thicker-walled pipe on Railroad right-of-way.
 - 5) All steel pipe shall be coated and cathodically protected.
 - 6) The depth from base of rail to top of pipe shall not be less than ten (10) feet below base of rail. The depth from ditches or other low points on Railroad right-of-way shall not be less than six (6) feet from ground line to top of pipe.
- b. In circumstances where it is not feasible to install encasement from right-of-way line to right-of-way line, casing pipe under Railroad track(s) and across the Railroad property shall extend to the greater of the following distances, measured at right angles to the centerline of track:

- 1) Two (2) feet beyond toe of slope.
 - 2) Three (3) feet beyond ditch line.
 - 3) Twenty-five (25) feet from centerline of the outside track when casing is sealed at both ends.
 - 4) Forty-five (45) feet from centerline of the outside track when casing is open at both ends.
 - 5) If additional track is planned for future construction, casing must extend far enough to meet above distances given the additional future track requirement.
- c. Pipelines and casing pipe shall be suitably insulated from underground conduits carrying electric wires on Railroad property.
- d. Casing pipe and joints shall be made of metal, and of leakproof construction. Casings shall be capable of withstanding the Railroad loadings and other loads superimposed upon them.
- e. Wall thickness designations for steel casing pipe for E-80 loading (including impact) are:

Nominal Diameter (inches)	Min. Thickness for Coated (inches)	Non-Coated (inches)
14 and Under	0.188	0.188
16	0.219	0.281
18	0.250	0.312
20 and 22	0.281	0.344
24	0.312	0.375
26	0.344	0.406
28	0.375	0.438
30	0.406	0.469
32	0.438	0.500
34 and 36	0.469	0.531
38,40 and 42	0.500	0.563
44 and 46	0.531	0.594
48	0.563	0.625
50	0.594	0.656
52	0.625	0.688
54	0.656	0.719
56 and 58	0.688	0.750
60	0.719	0.781
62	0.750	0.813
64	0.718	0.844
66 and 68	0.813	0.875
70	0.844	0.906
72	0.875	0.938

- 1) Steel pipe shall have minimum yield strength of 35,000 pounds per square inch.
 - 2) All metallic casing pipes are to be designed for effective corrosion control, long service life and relatively free from routine servicing and maintenance. Corrosion control measures must include cathodic protection.
 - 3) Cast iron may be used for casing. It shall conform to ANSI A21. The pipe shall be connected with mechanical-type joints. Plain-end pipe shall be connected with compression-type couplings. The strength of the cast iron pipe to sustain external loads shall be computed in accordance with the most current ANSI A21 .1 "Manual for the Computation of Strength and Thickness of Cast Iron Pipe."
- f. The inside diameter of the casing pipe shall be such that the carrier pipe can be removed without disturbing the casing. All joints or couplings, supports, insulators or centering devices for the carrier pipe shall be considered in the selection of the casing diameter.
- g. For flexible casing pipe, a minimum vertical deflection clearance of the casing pipe shall be three percent (3%) of its diameter plus one-half (1/2) inch so that no loads from the roadbed, track, railroad traffic or casing pipe are transmitted to the carrier pipe. When insulators are used on the carrier pipe, the relationship of the casing size to the size of the carrier pipe is:

Diameter of Carrier Pipe	Inside Dia. of Casing Pipe Equals Outside Dia. of Carrier Pipe Plus:
0" - 8"	2"
10" - 16"	3 1/4"
Over 16"	4 1/2"

5. Casing and Pipeline Installation

- a. Casing and pipeline installations should be accomplished by directional boring, jack-and-bore, tunneling or other Railroad approved methods. Tunneling construction under track(s) will be permitted only under direct supervision of a Railroad Representative. Tunneling procedures and equipment, as well as structural design, must have Railroad approval prior to starting any work on Railroad property. Generally, tunneling shall not be considered where less than six (6) feet of cover exists, or where excessively sandy, loose or rocky soils are anticipated.
- b. Rail elevations over the work must be monitored at intervals prescribed by the Railroad to detect any track movement. Movements of over one-quarter (1/4) inch vertically shall be immediately reported to the Railroad Roadmaster. Due to the danger to rail service that is caused by only small amounts of track movement, Railroad forces may have to be called to surface the track several times at the expense of the Utility Owner.

The following requirements shall apply to these construction methods:

- 1) The use of water under pressure jetting or puddling will NOT be permitted to facilitate boring, pushing or jacking operations. Some boring may require water to lubricate cutter and pipe, and under such conditions, is considered dry boring.
- 2) Where unstable soil conditions exist, boring or tunneling operations shall be conducted in such a manner as not to be detrimental to the track(s) being crossed.
- 3) If excessive voids or too large a bored hole is produced during casing or pipeline installations, or if it is necessary to abandon a bored or tunneled hole, prompt remedial action should be taken by the Utility Owner and immediate notification to the Railroad.
- 4) All voids or abandoned holes caused by boring or jacking are to be filled by pressure grouting. The grout material should be sand cement slurry with a minimum of two (2) sacks of cement per cubic yard and a minimum of water to assure satisfactory placement and complete fulfilling of the voided area.
- 5) The hole diameter resulting from bored or tunneled installations shall not exceed the outside diameter of the utility pipe, cable or casing (including coating) by more than one and one-half (1-1/2) inches for pipes with an inside diameter of twelve (12) inches or less, or two (2) inches on pipes with an inside diameter greater than twelve (12) inches.
- 6) Pits for boring, tunneling or jacking will not be permitted within thirty (30) feet of the centerline of the outside track; or closer to the track than the toe of fill slopes in fill sections, or toe of shoulder slopes in ditch sections when pipes are allowed on the Railroad property.

c. Vents.

In casing pipe installations, vents are appurtenances by which fluids or gases between carrier and casing may be inspected, sampled, exhausted or evacuated.

- 1) Vents shall be located at the high end of short casings and at both ends of casing longer than one hundred fifty (150) feet.
- 2) Vent standpipes shall be located and constructed so as not to interfere with maintenance of the Railroad or to be concealed by vegetation. Where possible, they shall be marked and located at the Railroad property line. The markers shall give the name and address of the Owner, and a phone number and contact information case of emergencies.
- 3) Casing pipe, when sealed, shall be properly vented. The vent pipe(s) shall be of sufficient diameter, but in no case less than two (2) inches in diameter and shall be attached near each end of casing, projecting through ground surface at the Railroad property lines.

- 4) Vent pipes shall extend not less than four (4) feet above ground surface. Top of vent pipes shall be fitted with a down-turned elbow, properly screened; or a relief valve.
 - 5) For pipelines carrying flammable materials, the vent pipes on casings shall be at least sixteen (16) feet (vertically) from aerial electric wires. Casings shall be suitably insulated from adjacent underground conduits carrying electric wires on Railroad right-of-way.
- d. Shut-Off Valves
- 1) The Utility Owner shall install accessible emergency shut-off valves within effective distances on each side of the Railroad property. Where pipelines are provided with automatic control stations, no additional valves will be required.
 - 2) Locating a shut-off valve on Railroad property should be avoided. If approval is acquired by the Railroad, a guardrail must protect the shut-off valve.
 - 3) When a guardrail is required, its height shall be four (4) feet above the ground line. There shall be a minimum clearance of two (2) feet from the valve to the guardrail. Ballard/Bumping Post installed at all four (4) corner posts shall be driven to a minimum depth of four (4) feet below ground line. The steel pipes for the four corner posts and guardrail shall have a minimum diameter of four (4) inches. All joints will be welded with a one-quarter (1/4) inch fillet weld all around.

6. Water Lines

- a. Where casing pipe is used, venting is not required; however, sealing will be required if the ends of the casing are not above high water.
- b. Where non-metallic pipe is permitted and installed, steel casings are required from Railroad right of way line to right of way line.
- c. Manholes should be located outside the Railroad property. Manholes shall not be located within twenty-five (25) feet of railroad trackage, in the shoulder, shoulder slope, ditch or backslope; and shall not protrude above the surrounding ground without the approval of the Railroad.
- d. The Utility Owner shall place a readily identifiable and suitable marker at each Railroad right-of-way line where it is crossed by a water line.

7. Sewer Lines

- a. New and relocated sewer lines shall be constructed with satisfactory joints, materials and designs which will provide protection and resistance to damage from sulfide gases and other corrosive elements to which they may be exposed.

- b. Where casing pipe is used, venting and sealing of casing will be required.
- c. Where non-metallic pipe is permitted and installed, a durable metal wire shall be concurrently installed; or other means shall be provided for detection purposes.
- d. Manholes should be located outside the Railroad property. Manholes shall not be located within twenty-five (25) feet of railroad trackage, in the shoulder, shoulder slope, ditch or backslope; and shall not protrude above the surrounding ground without the approval of Railroad Liaison.

8. Electric Power Lines

- a. A minimum depth of five and one-half (5.5) feet below the base of rail will be maintained for standard underground electrical utility lines.
- b. A minimum depth of three (3) feet below natural grade (BNG) will be maintained for 750 volts and less, and four (4) feet BNG for greater than 750 volts.
- c. The wireline must be encased completely across the Railroad right-of-way with a rigid metallic conduit.
- d. Crossings will not be installed under or within fifty (50) feet of the end of any Railroad bridge, centerline of any culvert or Railroad switch area.
- e. A Railroad Signal Liaison must be present during installation if railroad signals are in the vicinity of the underground wireline crossings, unless the Railroad Signal Liaison authorizes otherwise.
- f. Markers that identify the Utility Owner shall be placed at both Railroad right-of-way lines for utilities crossing Railroad property. The markers should identify the Owner, type of cable and emergency telephone number. A six (6) inch wide warning device will be installed, one (1) foot BNG directly over the underground power line where located on Railroad right-of-way outside the track ballast sections. For parallel lines markers shall be placed above the cable at intervals no less than three hundred (300) feet spacing.
- g. Above-ground utility appurtenances installed as a part of an underground installation shall be located at or near the Railroad right-of-way line and shall not be any closer than twenty-five (25) feet to the centerline of the outside track.

9. Fiber Optic Lines.

- a. The same requirements for Electric Power Line crossings will apply for fiber optic line crossings except for the following:

- b. A minimum depth of four (4) feet BNG for fiber optic cable wirelines.
- c. The Railroad must approve any specialized equipment used to install cable. No “rail plow” will be allowed for installation purposes.

PART 4 – SUBMITTAL - PLANS, APPROVALS AND PROCEDURES

A. License Procedure

1. All Utility Crossings must submit an application for a Preliminary Engineering Review with the Railroad prior to any plan reviews by the Railroad. Application is located in the Appendix or on the OmniTRAX website at <http://omnitrax.com/services/track-access/>.
2. Utility Crossing Agreements will be required for all encroachments on Railroad property.
3. Utility Crossing Applications are available on the OmniTRAX website at <http://omnitrax.com/services/track-access/> or from the Railroad Real Estate Department.
4. Generally, agreement-processing time will be thirty (30) to sixty (60) days. Please allow sufficient lead-time for document handling prior to desired construction date. Before construction begins, agreements must be executed by Utility Owner and returned. Verbal authorizations will not be granted or permitted. A minimum of seventy-two (72) hours advance notice to the Railroad Roadmaster after execution of an agreement will be required prior to initiation of construction.
5. License fees must be submitted at the time agreements are executed and returned.

B. Plans and Approvals

1. The design of all utility installations will be the responsibility of the Utility Owner.
2. The plans for the proposed installation shall be submitted to and meet the approval of the Railroad before construction is initiated.
3. Plans shall be drawn to scale showing the relationship of the proposed utility line to the railroad track(s), the proposed angle of crossing in relationship to the track, location of valves and vents (offsets distances from the centerline of track), the Railroad mile post and engineering station, Railroad right-of-way lines and general layout of track(s) and other Railroad facilities. A plan and profile sheet is required from the field survey that will show utility placement, depth of utility line and casing in relation to actual profile of existing ground and track(s). If tunneling is proposed, installation and construction method of supporting the existing track(s) or driving of tunnel shall be included. The geotechnical study, when required, should be included and submitted with the Plans.
4. The Plans should contain the following but not limited to the data for carrier pipe and casing pipe:
 - a. Contents to be carried
 - b. Inside diameter
 - c. Pipe material
 - d. Specifications and grade of material

- e. Wall thickness
 - f. Actual working pressure
 - g. Type of joints
 - h. Longitudinal joint factor
 - i. Coating
 - j. Method of installation
 - k. Vents-Number, Size, Height above existing ground and base of rail
 - l. Seals-Both ends, One end
 - m. Cover (base of rail to top of pipe or casing)
 - n. Cover (other than under track)
 - o. Cover (at ditch line)
 - p. Cathodic protection
 - q. Type, Size and Spacing of insulators or supports
5. When a geotechnical study is required, the findings and protection plan shall be prepared by a licensed civil engineer in the state where the work is located and included with the plans.
 6. The geotechnical crew will need to submit an application for the "Right of Entry" to the Railroad prior to entering Railroad property. The application must be executed and referenced.
 7. A Railroad flagman will be required when working within twenty-five (25) feet of the track.
 8. Approvals
 - a. Approval of plans and application forms is required for all installations of utilities prior to initiation of work on Railroad property.
 - b. If surveying is necessary for the completion of an application for the "Right of Entry" to the Railroad prior to entering Railroad property. The application must be executed and referenced.

C. Construction

1. Contractor is required to submit application for the "Right of Entry" to the Railroad prior to entering Railroad property. The application must be executed and referenced. Application is located in the Appendix or on the OmniTRAX website at <http://omnitrax.com/services/track-access/>.
2. The execution of the work on Railroad property shall be subject to the observation of the Railroad Roadmaster or Railroad Representative.
3. A representative of Railroads Signal Department must be present during installation if railroad signals are in the vicinity of the construction, unless approval of plans or authorization has been granted.

UTILITY ACCOMMODATION
POLICY - APPENDIX



REFERENCES

American National Standards Institute (ANSI) Codes, 1430 Broadway, NY, NY 10018.

American Railway Engineering and Maintenance of Way Association (AREMA) Specifications.

American Society for Testing and Materials (ASTM) Specifications.

American Water Works Association Standards and Specifications, AWWA, 2 Park Avenue, NY, NY 10016.

Manual on Uniform Traffic Control Devices - with revisions, US Department of Transportation, Federal Highway Administration.

National Electrical Safety Code, US Department of Commerce, National Bureau of Standards.

Pipeline Safety Regulations - Code of Federal Regulations, Title 49 - Transportation, Parts 191-192-Natural Gas; Part 195-Liquid Petroleum Gas.

Rules and Regulations for Public Water Systems - latest edition, State Health Departments.

Rules and Regulations promulgated by the Hazardous Materials Regulation Board of the US Department of Transportation. Statutory Provisions, 23 U.S.C. 109 and 111. April 16, 2004

OmniTRAX managed Railroad properties application form and other information is available on the OmniTRAX Services Website. Right of Entry and Accessing Property, Utility Crossings (Pipeline, Wireline), Grade Crossings Application, Track Lease Application, Assignment of Documents are available or contacting the Railroad Real Estate Department.

DEFINITION OF TERMS

The terminology used in this Policy strives for conventional meaning and to insure uniform interpretation. To this end, the following definitions apply:

ACCESS CONTROL: Restriction of access to and from abutting lands to railroad property.

AREMA: American Railroad Engineering and Maintenance of Way Association. **ANSI:** American National Standard Institute.

ASTM: American Society for Testing and Materials.

BACKFILL: Replacement of soil around and over an underground utility facility. **BASE OF RAIL:** Bottom flange of the steel rail of the track.

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

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

CARRIER: Pipe directly enclosing a transmitted fluid (liquid or gas). **CASING:** A larger pipe enclosing a carrier.

CFR: Code of Federal Regulations.

COATING: Material applied to or wrapped around a pipe.

COMMUNICATION LINE: Fiber optic, telephone cable and similar lines, not exceeding four hundred (400) volts to ground or seven hundred fifty (750) volts between any two (2) points of the circuit, the transmittal power of which does not exceed one hundred fifty (150) watts.

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

COVER: The depth of material placed over a utility. Depth of cover is measured from top of utility casing or carrier pipe (if no casing is required) to the natural ground line or proposed construction line above the utility.

DIRECT BURIAL: Installing a utility underground without encasement, by plowing or trenching. No "rail plows" will be permitted.

ELECTRIC SUPPLY: Electric light, power supply, and trolley lines, irrespective of voltage used for transmitting a supply of electrical energy.

ENCASEMENT: Structural element surrounding a pipe or cable.

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

GROUNDING: Connected to the earth or to some extended conducting bodies which intentionally or accidentally is connected with the earth.

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

JACK-AND-BORE: The installation method whereby the leading edge of the jacked pipe is well ahead of the cutting face of the auger bit. The auger is removing waste from inside the pipe as it is being jacked. This method greatly reduces the likelihood of subsidence of granular material during installation.

JACKING: The installation of small pipes by the use of hydraulic jacks or rams to push the pipe under the traveled surface of a road, railroad roadbed, or other facility.

LICENSE: UTILITY LICENSE AGREEMENTS are executed for all utility facilities located on Railroad property.

MANHOLE: An opening to an underground utility system which workmen or other may enter for the purpose of maintaining, inspecting, or making installations.

DISTRIBUTION SYSTEM: A pipeline other than a gathering or transmission line.

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

TRANSMISSION SYSTEM: A pipeline other than a gathering line that transports gas from a gathering line or storage facility to a distribution center or storage facility. It operates at a hoop stress of twenty percent (20%) or more of the Specified Minimum Yield Strength.

NORMAL: Crossing at a right angle (90° Angle).

PERMIT TO BE ON RAILROAD PROPERTY is to be executed prior to any general access and all survey, geotechnical, and Contract Work on Railroad property (Right of Entry (ROE) Applications, etc.)

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

PRESSURE: Relative internal pressure in PSI (pounds per square inch) gauge.

PRIVATE LINES: Any privately owned facilities which convey or transmit the commodities outlined under the definition for Utilities but are devoted exclusively to private use.

PUBLIC LINES: Those facilities which convey or transmit the commodities outlined under the definition for Utilities and directly or indirectly serve the public or any part thereof.

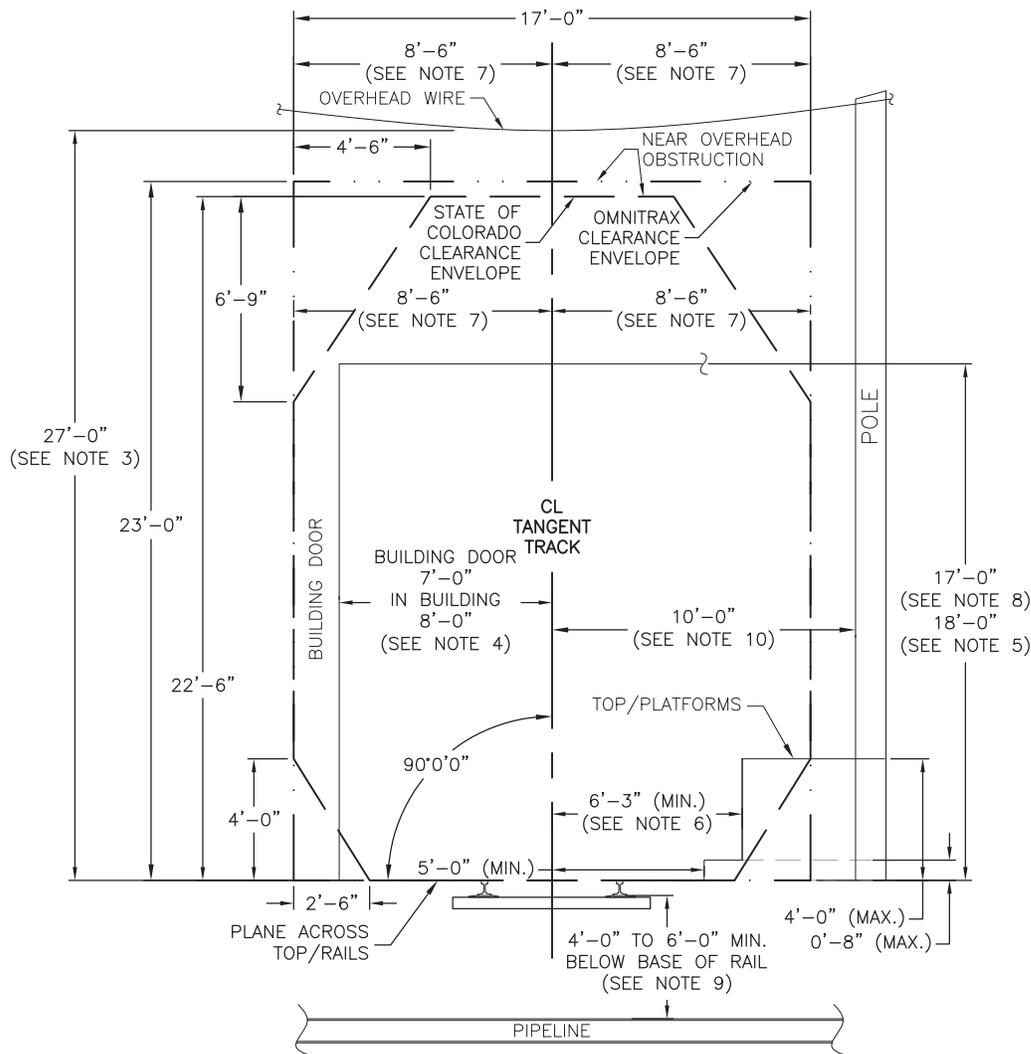
RAILROAD: An OmniTRAX managed property

RIGHT OF WAY: A general term denoting land, property of interest therein, usually in a strip, acquired for or devoted to Railroad transportation purposes.

SEAL: A material placed between the carrier pipe and casing to prevent the intrusion of water, where ends of casing are below the ground surface.

SHOULDER: That portion of the roadbed outside the ballast. **TRENCHED:** Installed in a narrow excavation. **TUNNELING:** Excavating the earth ahead of a large diameter pipe by one or more of the following processes: 1) The earth ahead of the pipe will be excavated by crew using hand tools while the pipe is pushed through the holes by means of jacks, rams or other mechanical devices, 2) The excavation is carried on simultaneously with the installation of tunnel liner plates, and/or 3) The tunnel liner plates are installed immediately behind the excavation as it progresses and are assembled completely away from the inside.

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



NOTE:

1. REGULATION REFERENCE BASED ON COLORADO DEC. 55621 AND 4 CODE OF COLORADO REGULATIONS (CCR) 723-7.
2. SEE AREMA MANUAL FOR RAILWAY ENGINEERING CHAPTER 28 (LATEST EDITION) FOR COMPLETE CLEARANCE REQUIREMENTS BY STATE AND RECOMMENDED AREMA CLEARANCE.
3. ALL WIRES IN GENERAL SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF NOT LESS THAN THAT SPECIFIED BY THE NATIONAL ELECTRIC SAFETY CODE, AS INCORPORATED BY REFERENCE IN RULE 7008, AND OVERHEAD WIRE VERTICAL CLEARANCE INCREASED AS REQUIRED.
4. AT ELEVATIONS OF 4'-0" OR LESS ABOVE TOP OF RAIL INSIDE OF BUILDINGS, THE MINIMUM SIDE CLEARANCE MAY BE REDUCED ON ONE SIDE OF THE TRACK TO 6'-3", PROVIDED THAT 8'-0" IS MAINTAINED ON THE OPPOSITE SIDE.
5. OVERHEAD CLEARANCE INSIDE OF ENCLOSED BUILDINGS MAY BE REDUCED TO 18'-0", PROVIDED THAT THIS CLEARANCE SHALL APPLY ONLY TO TRACKS TERMINATING WITHIN THE BUILDING OR IN THE IMMEDIATE PLANT AREA IF SAID TRACKS SHOULD EXTEND THROUGH THE BUILDING.
6. IF SIDE CLEARANCE IS REDUCED TO 6'-3" ON ONE SIDE, A FULL CLEARANCE OF 8'-0" SHALL BE MAINTAINED ON THE OPPOSITE SIDE.
7. HORIZONTAL CLEARANCES ARE TO BE INCREASED 1-1/2" PER DEGREE OF CURVE WHERE THE OBSTRUCTION IS LOCATED ADJACENT TO OR WITHIN 80 FEET OF A TURNOUT OR CURVE LIMITS.
8. ENGINE HOUSES, SHOP BUILDINGS, TIPPLES, AND LOADING FACILITIES PERMITTED LESSER DIMENSIONS WITH APPROVAL OF THE VP ENGINEERING.
9. UNDERGROUND PIPELINE CROSSINGS TO MEET AREMA PART 5 RECOMMENDATIONS (LATEST EDITION).
10. NO PART OF ANY SIGN OR APPURTENANCE ATTACHED TO SUCH POLES OR POSTS SHALL BE LESS THAN 8'-6" FROM THE CENTERLINE OF AN ADJACENT TRACK, BETWEEN THE TOP OF RAIL AND A POINT 15 FEET ABOVE.
11. IN SOME INSTANCES, CERTAIN STATES MAY ACCEPT VERTICAL OR HORIZONTAL CLEARANCES SLIGHTLY LESS THAN OMNITRAX STANDARDS. IN THESE INSTANCES, OMNITRAX NORMALLY WILL ACCEPT THE STATE'S LESSER CLEARANCE REQUIREMENTS, ALTHOUGH THE INDUSTRY WILL BE REQUIRED TO SIGN AN IMPAIRED CLEARANCE AGREEMENT WITH THE RAILROAD. IN ANY INSTANCE, WHEN EITHER HORIZONTAL OR VERTICAL CLEARANCE IS LESS THAN THOSE OF THE STATE RAILWAY OR PUBLIC SERVICE COMMISSION, AS THE CASE MAY BE, THE INDUSTRY SHALL SECURE NECESSARY APPROVAL FROM THE APPROPRIATE STATE AUTHORITY FOR EACH IMPAIRED CLEARANCE. THE AGREEMENT COVERING SERVICE TO THE INDUSTRY'S TRACK WILL INCLUDE SPECIFIC REFERENCE TO THE SUBSTANDARD CLEARANCE INVOLVED. WHEN STATE LAW REQUIRES CLEARANCES THAT ARE MORE RESTRICTIVE, SUCH LAWS WILL GOVERN.
12. REQUIRED WARNING SIGNS SHALL BE PLACED IN ADVANCE OF THE IMPAIRED CLEARANCE TO ADVISE RAILROAD OPERATING PERSONNEL OF THE IMPAIRMENT.

TYPICAL MINIMUM CLEARANCE SECTION (COLORADO)

OMNITRAX TECHNICAL SPECIFICATIONS FOR INDUSTRIAL TRACK – SECTION 7
(NOT TO SCALE)



APPLICATION PROCESS & INSTRUCTIONS

Telephone (303) 398-0400, Fax (866) 351-9503

PRELIMINARY ENGINEERING APPLICATION FORM

Return the completed application along with a non-refundable deposit of **\$1,500 USD (\$1,987 CAD)** for the application fee. Also, provide details of the proposed public project in the form of a survey or engineering stamped plans with dimensions, coordinates and railroad property boundaries. Also depict any planned or proposed improvements on the railroad’s premises with dimensions from nearest track. Note that there is one application accepted per location; if the requested project involves multiple locations, you will need to submit an application for each location. Additional fees will be assessed pursuant to a separate written Preliminary Engineering Agreement. Checks can be made payable to OmniTRAX. Be sure to list the check number(s) at the bottom of the cover sheet and application.

Send this application, deposit and any additional paperwork along with a map indicating the location of the project to:

**OmniTRAX Inc.
C/O AR Real Estate Department
252 Clayton Street
4th Floor
Denver, CO 80206**

Incomplete applications will result in processing delays and applications submitted without the required deposit will not be processed. If the submitted application and prints require review by any independent environmental (HAZMAT) or other outside consultants, this review will be at applicant’s sole cost and in addition to the aforementioned fees. Once an executable Preliminary Engineering Agreement is submitted to you, the agreement must be fully negotiated and executed within ninety (90) days. Thereafter, the application and materials will be archived and resubmission (including deposit) will be required. If you are a Canadian business or resident, this fee is a taxable supply. Include the applicable GST. REQUESTS FOR RUSHED SERVICES WILL BE DENIED.

PLEASE INITIAL HERE INDICATING YOUR UNDERSTANDING OF THIS POLICY: _____

LIST CHECK NUMBER(S): _____

RAIL MADE

EASY



PRELIMINARY ENGINEERING APPLICATION FORM

Telephone (303) 398-0400, Fax (866) 351-9503

IDENTIFY WHAT TYPE OF PROJECT APPLICANT IS REQUESTING:

- Grade Xing Surface Maintenance/Replacement () Grade Xing Installation/Removal () Engineering Review Only ()
- Overhead/Undergrade Bridge Project () Warning Device Alterations () Parallel Road Construction ()
- Painting/Cleaning Bridges () Flagging Only () Bike/Pedestrian/Trail () Quiet Zone Proposal ()
- Other Request () _____

1. Complete Legal Name of Applicant: _____
2. Agreement to be in the name of (if different from above): _____
3. Type of Entity (please mark one): Government Agency ___ LLC ___ DOT ___ Municipality ___ Corporation ___ SHA ___ FHA ___
Other _____
4. If applicable, state/province of incorporation or organization: _____
5. Federal Tax Identification number (U.S. Leases): _____
6. Mailing Address: _____
7. Overnight Delivery Service Address (if different): _____
8. Contact Person: _____ Title: _____
9. Phone No.: () _____ Fax No.: () _____
10. Email: _____
11. Email Address Where Notices Can be Sent: _____
12. **Billing Contact Name, Phone Number, and Address Required:**

13. Will track operations be impacted by the applicant's project? Yes ___ No ___

14. Railroad Name: _____

15. Location Information

Nearest Milepost: _____ Nearest DOT Crossing No.: _____

Track Station (from): _____ Track Station (to): _____

NOTE: If Milepost or Track Stations are not known, please indicate the nearest road intersection here:

City: _____ County: _____ State: ___ Section: ___ Township: ___ Range: ___

Geographical coordinates required in decimal degrees – can be found online using Google Maps

(Example - Latitude: 39.720312 Longitude: -104.955415) Latitude: _____ Longitude: _____

Located on the (N/S/E/W) ___ side of (landmark, intersection) _____

16. Will another party be performing the work? Yes ___ No ___ (NOTE: If yes, additional information will be required.)

17. Estimated area of railroad's land to be impacted, if applicable: _____ (in square feet or acres)

18. Detailed description of intended use of railroad's premises: _____

_____ (Use a separate sheet of paper if needed)

19. How will applicant access railroad's property? _____



PRELIMINARY ENGINEERING APPLICATION FORM

Telephone (303) 398-0400, Fax (866) 351-9503

20. Will hazardous materials be involved? Yes ___ No ___

If Yes, describe: _____

21. Will improvements be constructed on the railroad's premises? Yes ___ No ___

If Yes, describe: _____

_____ (Ensure the improvements are depicted on Engineering Plans)

22. Will applicant be storing materials or equipment during the project? Yes ___ No ___

If Yes, describe what will be stored: _____

Date: _____

LIST CHECK NUMBER(S): _____

Signature: _____

Name Printed: _____

Title: _____

Phone No.: _____

Email: _____

Fax No: _____

BE SURE TO RETURN THE COVER SHEET WITH YOUR APPLICATION

Check the box if this is a RUSH? If so include a \$1,500.00 check in addition to the application fee.

RIGHT OF ENTRY LICENSE APPLICATION Non-Environmental

Return the completed application along with a non-refundable fee in the amount of **\$3,500 USD (\$4,375 CAD)** and a print or sketch of the proposed licensed premises with dimensions, coordinates and directions. Also, depict any planned or existing improvements on the licensed premises and include the distance from the nearest track.
(Be sure to list the check number(s) at the bottom of the cover sheet AND application).

Make check(s) payable to:

**Omnitrax Inc.
C/O AR Real Estate Department
252 Clayton Street
Denver, CO 80206**

(As information, future payments will also be sent to the address listed above.)

If the submitted application and/or plans require review by an environmental (HAZMAT) or other outside consultant, it will solely be at the applicant's expense and in addition to the aforementioned fees. INCOMPLETE applications will result in processing delays and applications without the required fees will not be processed. If you are a Canadian business or resident, this fee is a taxable supply. Include the applicable GST.

REQUESTS FOR RUSH SERVICE: Once a COMPLETE application and required fees are received, including the rush fee of \$1,500 USD (\$1,875 CAD), a draft Right of Entry Agreement will be made available for review within fourteen (14) business days. Please be sure to mark the box above.

Once an executable Right of Entry Agreement is presented to you, the agreement must be fully negotiated and executed within thirty (30) days. Thereafter, the application and materials will be archived and resubmission (including fees) will be required.

A Right of Entry is to access property for up to thirty (30) days. Beyond thirty (30) days, you will be responsible for an additional fee of \$3,500 (\$4,375 CAD). You also have the option to purchase a six (6) month Right of Entry for \$20,000 (\$25,000 CAD).

PLEASE INITIAL HERE INDICATING YOUR UNDERSTANDING OF THIS POLICY: _____

RAIL MADE

EASY



RIGHT OF ENTRY APPLICATION – NON-ENVIRONMENTAL

1) Complete Legal Name of Applicant:
Agreement to be in the name of (if different from above):
Type of Applicant (please mark one): Corporation ___ LLC ___ Individual ___ Municipality ___
Partnership ___ (General ___ Limited ___) Other
If applicable, state/province of incorporation or organization:
Federal Tax Identification number (U.S. Leases):
Mailing Address:

Billing Name, Address (No PO Box), Email, and Phone Number (REQUIRED):

Three horizontal lines for billing information.

Overnight Delivery Service Address:
Contact Person: Title:
Phone No.: () Fax No.: ()
Email:

Time period of your project and use of the Railroad’s property?
REQUIRED INDICATE DATE RANGE (30 DAY MAX): from to

2) When do you need to receive this agreement from the Railroad?
(Please allow 30-45 days for processing of this request)

3) Will there be any activity, material, vehicles or equipment within 50 feet of a railroad track in connection with your project? YES/ NO (If ‘YES’, Railroad protective liability insurance will be required)
Within 25 feet? YES/ NO (If ‘YES’, a Railroad Flagman will be required at your sole cost.)

4) Will there be any excavation involved? YES/ NO (If ‘YES’, include shoring plans)

5) Site Location (City, County & State):

Latitude: Longitude:

6) Railroad: ; Railroad Site Location Information: (Railroad Mile Post, Subdivision, or any other pertinent location information)



RIGHT OF ENTRY APPLICATION – NON-ENVIRONMENTAL

7) Purpose of your request: (This must be detailed and complete; attach engineering plans, shoring plans, if applicable, and details to support) If you need additional room, please attach paper to this form. _____

Date: _____

Check #'s sent: _____

Signature: _____

Name Printed: _____

Title: _____

Phone No.: _____

BE SURE TO RETURN THE COVER SHEET WITH YOUR APPLICATION