

RIGHT OF WAY PROCEDURE GUIDE



CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans
(LSS) – Lincoln Standard Specifications

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Concept

This Right of Way Guidance Manual was developed to provide technical guidance on city wide policies and standards for right-of-way transactions to both internal and external customers. Its purpose is to establish uniformity in the interpretation and administration of laws, regulations, policies, and procedures applicable to the operations and services of the LTU ROW.

The Right of Way Guidance Manual is a living document that will change as controlling laws and regulations change, and more effective management practices develop. It will also be revised to incorporate better practices identified through quality control/quality assurance activities.

The Right of Way Services Division of Lincoln Transportation and Utilities is responsible for continued maintenance and update of the Manual. Users are encouraged to advise the Manager of Right of Way Services of need for corrections or provide suggestions that would improve the content of the Manual. Correspondence should be addressed to:

LTU ROW Services
LTUROW@LINCOLN.NE.GOV
Subject Title: Manual Suggestion

Control of access to an arterial roadway is one of the key elements to provide minimum conflicts with drivers. Restricting access will only be acquired when it is consistent with the intended service to be provided by the roadway. New roadways control will be presented in the conceptual plan or the Long-Range Plan.

Information obtained within this procedure and process manual has been compiled from several city sources. Some of them sources are **Lincoln Municipal Code (LMC)**, **Lincoln Design Standards (DS)**, **Access Management Policy (AMP)**, **Nebraska Administrative Code Title 428 (NAC)**, **Lincoln Standard Plans and Specifications (LSP)**, and **Lincoln Standard Specifications (LSS)**

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All parties requesting to do work within the Right-of-Way must adhere to the following requirements:

- All City of Lincoln, Transportation & Utilities engineering requirements and construction standards imposed;
- All current FOP or ROW construction permits shall be present on each work site.
- All current FOP or ROW construction permits shall be presented upon request to any representative of the Director;

As per Chapters 5.17 and 14.70 of the Lincoln Municipal Code, a construction permit is required prior to any installation, construction or maintenance of private facilities located within the public right-of-way.

TITLE 1: ROADWAY CLASSIFICATIONS

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. It becomes necessary then to determine how this travel can be channelized within the network in a logical and efficient manner.



Arterial Roadway - streets which interconnect major areas of activity, such as shopping centers, business districts, manufacturing centers, and industrial parks.

Collector Roadway - streets which collect traffic from residential streets and move it to smaller commercial centers or to higher arterial systems.

Local Roadway - streets exclusively limited to vehicles desiring to go to or from adjacent property.

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TITLE 2: AUTHORIZATION TO OCCUPY

SECTION 2.1: RIGHT OF ENTRY

An entrance or entrances may be provided to each tract or property in an attempt to avoid landlocking a tract or property or to provide reasonable access to the roadway on controlled access.

EASEMENTS

An easement is the right to use another person's land for a stated purpose. It can involve a broad part of the property or only a certain portion.

A right-of-way easement allows someone to travel through another person's land to get somewhere else. It can be offered to one person, several people, or the public.

The landowner who grants an easement can't build structures within a prescribed area surrounding it, and they also can't use fencing to hinder access. Any activity that blocks the use of the easement is prohibited.

NOTE: Not every easement is included within property deeds. Some easements are recorded as part of public records.

One simple way to identify easements is to get the property records from the county courthouse and review them.

Here is a breakdown of how different easements can be categorized, many of which may overlap:

- **Permanent Easement (outlot)** limits indicated on the plans outline the area required to construct and maintain features such as channel changes, inlet and outlet ditches, flooding or ponding areas, etc. Such easements are acquired with authority to re-enter after construction has been completed.
- **Public Easements** allow the residents of an area to use a limited section of a person's property such as right-of-way access to public roadways that would be otherwise inaccessible. Property or homeowners may not obstruct the public's fair access to non-privately owned areas under the terms of a public easement.
- **Utility Easement** gives utility companies the right to access private property for the good of the community. This allows the construct and maintain overhead electric, telephone and cable television lines and underground electric, water, sewer, telephone, and cable television lines.

NOTE: Decorative landscaping within the utility right-of way maybe acceptable with the understanding that any materials placed within the boundaries of the utility easement are subject to damage and are not the responsibility of the utility owner. Any replacement cost for such damage is clearly at the discretion of the utility owner.

ESTABLISHING AN EASEMENT

Deeds are to contain a full, current legal description of the property, metes and bounds of the easement, name of the party transferring the property (grantor), name of the party receiving the property (grantee) and must be signed by grantor(s) and notarized.

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SECTION 2.2: ACCESS

TOPIC:	ACCESS, VEHICLE OPERATION DIMENSION
Description:	Area of the public right-of-way located between the roadway and property adjacent to the public right-of-way which is intended to provide access for vehicles from the roadway to the adjacent property.
Policy	Roadway shall mean that portion of a surfaced road improved, designed, or ordinarily used for vehicular travel, exclusive of the berm or shoulder. In the event a road includes two or more separate roadways, roadway shall refer to any such roadway separately but not to all such roadways collectively.
Detail	<p><i>Length:</i> No Vehicle to exceed 40 feet; Semi-trailer not to exceed 48 feet on streets not part of the interstate and highways; Semi-trailer not to exceed 65 feet on interstate and highways (all dimensions include the loads)</p> <p><i>Height:</i> No Vehicle to exceed 14 feet 6 inches; Vehicles including loads over 12 feet 6 inches will assume all risks of personal and public loss resulting in overhead obstruction.</p> <p><i>Width:</i> Vehicles not to exceed 102 inches</p> <p><i>Weight:</i> Unlawful for any person to operate a truck or truck/trailer combination which exceeds 26 tons licensed gross vehicle weight upon any portion of a street which is not a part of the state highway system or which has not been designated as a truck route.</p>
Codes	<p><i>Truck Routes</i> LMC Title 10.14.39</p> <p><i>Vehicle Equipment</i> LMC Title 10.22.080</p> <p><i>Stopping, Standing, Parking</i>..... LMC Title 10.32</p>

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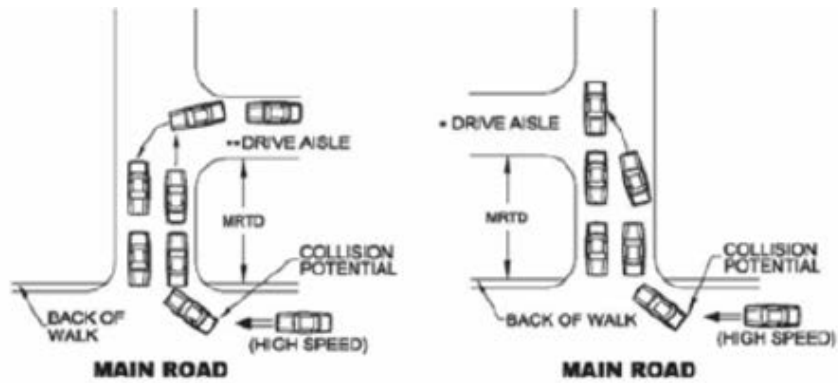
SECTION 2.3: DRIVEWAY APPROACH

TOPIC:	ACCESS, DRIVEWAY APPROACH
Description:	Area of the public right-of-way located between the roadway and property adjacent to the public right-of-way which is intended to provide access for vehicles from the roadway to the adjacent property.
Policy	<p>Driveway Approach permit is required for all driveway approaches on all public rights-of-way, even if the roadway is uncurbed, unpaved, or unimproved. All driveway approaches are temporary in nature, revocable, and modifiable by the city of Lincoln.</p> <p>The owner of a property served by a driveway approach shall pay all costs for constructing the driveway approach; required additional turn lanes; pavement widening; median construction or reconstruction; alteration of manholes; storm sewer inlets, water valves or fire hydrants; relocation of signal poles, power poles or light poles; and alteration of any other public utilities affected by the construction of the driveway approach.</p>
Detail	<p><i>Gates:</i> Any access with a gate shall be designed so that the longest vehicle can completely clear the traveled way when the gate is closed and as it is opened. A gate may not be constructed and/or located within the right-of-way of the street.</p> <p><i>Backing maneuvers:</i> An access for commercial or multi-family residential use shall not be approved for a parking area that requires backing maneuvers within the right-of-way. All off-street parking areas must include on-site maneuvering areas and aisles to permit user vehicles to enter and exit the site in a forward direction without hesitation.</p> <p><i>Dimension of Parking Area</i> Width of such parking area shall not exceed thirty-five percent of the width of the front yard, except in the case of townhouses, where the width shall not exceed fifty percent of the width of the front yard, provided the width of such parking area shall not exceed 16 feet</p> <p><i>Minimum Setback Parking Area</i> Garages facing and taking access from a street must have a minimum setback of 20 feet to 30 feet (based on Zoning) from the lot line.</p> <p><i>Sight Distance</i> When sight distance requirements to a driver’s right cannot be met, the need can be eliminated by prohibiting left turns out of the driveway. When sight distance to the driver’s left cannot be provided, acceleration lanes can be required to allow right turn movements out of the driveway.</p> <p><i>Driveway culverts</i> are permissible along unpaved city streets. The Maintenance Division of the Lincoln Transportation and Utilities Department shall determine culvert size and grade and install the culvert. The owner shall purchase the corrugated metal pipe culvert complete with flared end sections and have it delivered to the site.</p>
Codes	<p><i>Vehicles overhanging city ROW and adj Property</i> LMC Title 10.32</p> <p><i>Driveway Approach</i> LMC Title 14.75</p> <p><i>Minimum Setback Parking Area</i> LMC Title 27.67.030 & Title 27.72.020</p> <p><i>Access & Design</i> AMP Chapter 6</p> <p><i>Gates, Backing Maneuvers</i> AMP Chapter 7</p> <p><i>Neighborhood Standard</i> DS Title 3.75</p> <p><i>Driveway Culverts</i> DS Title 2.05.6.5</p> <p><i>Curb and Driveway Detail</i> LSP 651 thru 653</p>

CODE REFERENCE

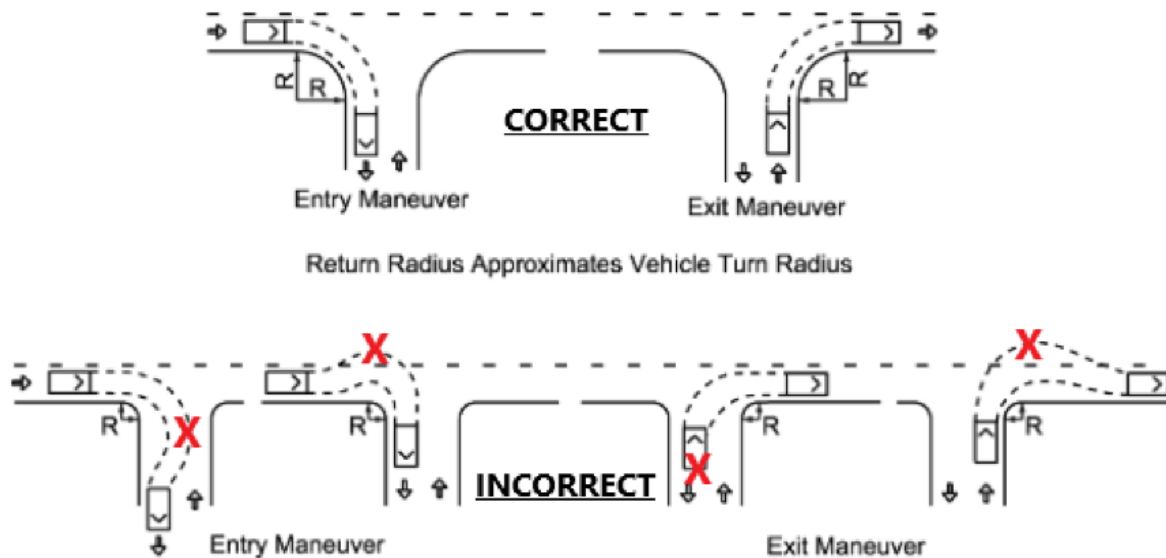
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MINIMUM REQUIRED THROAT DEPTH (MRTD)*



(*) See Access Management Policy Title 7.f for requirements on throat depth.

RETURN RADIUS**



(**) See Access Management Policy Title 7.c for requirements on return radius.

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TITLE 3: PLACEMENT WITHIN CITY RIGHT-OF-WAY

TOPIC:	PLACEMENT IN ROW, OCCUPYING WITHIN PUBLIC SPACE
Description:	Continuous unobstructed sight distance needed for safe traffic operations should be provided for drivers and pedestrians at all intersections and street access drives. Fences, walls, signs or other obstructions shall not be installed on public right-of-way without prior consent from the City. Trees shall not be planted on public right-of-way without prior consent from the City Parks & Recreation Department. Anything placed or planted at or near a street intersection or driveway/alley access must meet the sight distance requirements.
Policy	<p><i>Use of Street for Private Construction Purposes</i> is any person engaged in the erection, construction, reconstruction, wrecking or repairing of any building, or the construction or repair of any sidewalk along any street, may occupy the public space, whether street, sidewalk space, or alley, in the manner hereinafter provided.</p> <p><i>Occupancy Above or Below Public Property</i> consists of use of any space underneath, on, or above the surface of any street, alley, sidewalk, public space, or other public ground within this city, or to construct any structure, whether temporary or permanent, thereunder, thereon, or thereover unless approved by the city by a permit issued as a privilege.</p> <p><i>Vacation of Public Ways</i> is whenever any street, alley, or other public way is vacated, the zoning district adjoining each side of such street, alley, or public way is extended to the center of such vacation; and all area included in the vacation shall then and henceforth be subject to the appropriate regulations of the extended districts. In the event that the vacated street, alley, or public way is conveyed to one owner, the zoning classification of the vacated area shall match the zoning classification of the property of the receiving owner.</p>
Detail	<p>Applications for USE OF STREET are to be to Building and Safety. Such application shall include a drawing showing the dimensions of the proposed walkway locations and street use area to be occupied. The public space must be adjacent to the real estate on which the building is to be erected, constructed, reconstructed, wrecked or repaired, or along which a sidewalk is to be constructed or repaired</p> <p>Applications for OCCUPANCY ABOVE/BELOW PUBLIC PROPERTY shall be made to the Department of Transportation and Utilities ROW Service Dept.</p> <p>Petitioners for VACATION shall file with the city Planning Director.</p>
Codes	<p><i>Use of Street for Private Construction Purposes</i> LMC Title 14.29</p> <p><i>Occupancy Above or Below Public Property</i> LMC Title 14.54</p> <p><i>Vacation of Public Ways</i> LMC Title 14.20 & LMC 27.05.040</p> <p><i>Sight Distance Requirements</i> DS Appendix A</p>

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SECTION 3.1: PERMITS

Currently, there are three (4) forms of "construction permits" issued by the City of Lincoln Building and Safety Department for private construction work to be conducted in the public right-of-way:

- [Excavation Permits](#): Is generally required for single excavations within the public right-of-way for access to existing private facilities for the purpose of maintenance, repair or service hook-up.
- [Right-Of-Way \(ROW\) Permits](#): required for any installation or extensive maintenance of private facilities within the public right-of-way, by a private utility company, as well as all new construction being conducted within the public right-of-way for all City Departments.
- [Fiber \(FOP\) Permits](#): required for any installation or maintenance of private communication facilities within the public right-of-way, by a private utility company and where once the facilities are installed, a portion of the installed facilities, will be transferred to "City" ownership. This permit is also required when the installation of private facilities utilizes existing City owned conduit.
- [Street Use Permit](#): Any person involved in the construction or wrecking of a building, or the construction or repair of any sidewalk may occupy the public space, whether street, sidewalk space, or alley, in the manner hereinafter provided. Such person shall make an application to the building official. Public space must be adjacent to the real estate.

NOTICE

[ROW](#) and [FOP](#) Permits require plans stamped by a registered professional engineer to be submitted and approved.

In addition to the three (4) listed permits, pending the location of the work and the scope, there are other permits that the applicant may have to acquire prior to starting work:

[Flood Plain Permit](#): The permittee may be required to obtain a flood plain permit as part of the plan process. In addition, any excavation taking place within the "**500 foot Critical Area**" of the Salt Creek levee system and the "**500 foot Critical Area**" of the Antelope Creek levee, from 'J' Street north to Salt Creek, shall require review by the Lower Platte South Natural Resources District.

[Storm Water Pollution Prevention Plan](#): The permittee is required to implement erosion and sediment control measures for construction activities in accordance with the City's Regulations for Construction Site Discharges (Chapter 28.01 of the L.M.C. and related "Drainage Criteria Manual" Section 9, as amended and other City ordinances, state laws, and federal regulations).

[State Right-of-Way Permit](#): Any work to be completed within the right-of-way of a State Highway, shall require the acquisition of a State of Nebraska "Right-of-Way Permit". Applicants for City of Lincoln construction permits, shall be required to produce a copy of this State permit prior to commencing work. State Highways within the City Limits of Lincoln include:

- Homestead Expressway from Saltillo Rd to I-80
- Cornhusker Highway from east City Limits to N. 11th St.
- Sun Valley Blvd. from Cornhusker Hwy. to W. 'O' St.
- W. 'O' St. from Sun Valley Blvd. to west City Limits
- 'O' St. from east City Limits to 9th St.
- Hwy. 34 from NW 1st St./W. Fletcher Ave. to west City Limits
- N. 56th St. (L55X) from Cornhusker Hwy. to north City Limits
- NW 48th St. from W. 'O' St. to approximately ¼ mile north of I-80.
- I-180 from downtown to I-80
- I-80 from L-55X to NW 48th St.

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For more information regarding State “Right-of-Way Permits,” check out the Nebraska Department of Transportation website at: <https://dot.nebraska.gov/business-center/permits/>

NOTICE

It is to the applicant to ensure all permits have been applied for and issued for those listed and any other ones that are not listed.

FAILURE TO COMPLY

In the event any Permittee fails to comply with requirements of this section, they may be precluded from obtaining any Right of Way construction permit or performing any further construction within the City's Right of Way for up to twelve (12) months from the date of notification, except for emergency repairs.

Non-emergency situations: Except in the case of an emergency, any person who fails to obtain all permits required under this Article before commencing any opening or excavation of a street or sidewalk is subject to immediate termination of work, and is responsible for the costs of all mitigating and restorative work required by the City.

Emergency situations: Any emergency excavation or repair of private facilities within the public right-of-way required to maintain the safety and well-being of the general public or to restore service to the facility owners’ customers, should be commenced without delay. The facility owner shall apply for a standard Excavation, Right of Way construction or Fiber permit within two (2) business days. If the repair involves simply excavating the damaged facility and making the repairs, plans stamped by an Engineer are not required.

MORATORIUM

Excavation within newly constructed or renovated streets will not be allowed for five (5) years after completion of street construction or renovation. Upon written request, after being reviewed by City of Lincoln, permission to excavate in these moratorium streets may be granted by the Director or representative, when one of the following conditions is met:

- An emergency that endangers life or property
- Interruption of essential utility service
- Service for buildings where no other reasonable means of providing service exists
- Work that is mandated by City, State or Federal legislation

In circumstances where permission to excavate is granted, excavations made in moratorium streets shall be permanently patched according to the current City specifications and may include curb-to-curb restoration. Requests for variances must be submitted in writing to City of Lincoln for review.

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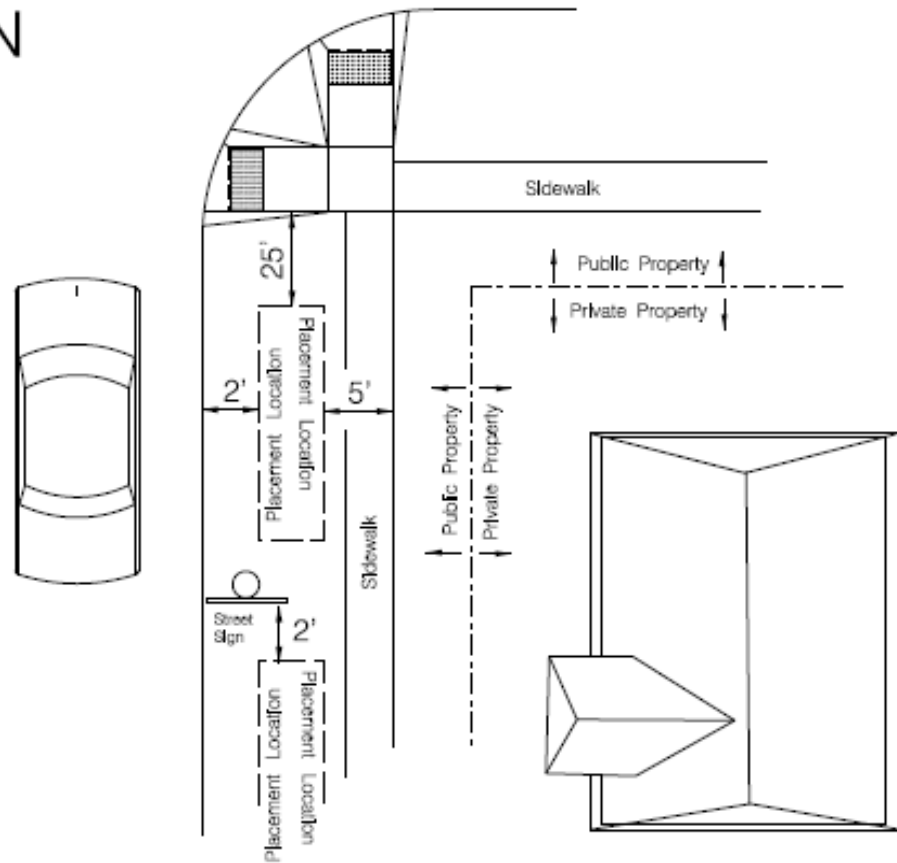
TOPIC:	PERMITS, ROADSIDE MEMORIAL
Description:	Roadside Memorial Policy goals are the following: 1.Remember those who were lost by installing a roadside memorial in the general proximity of the death. 2.Highlight the importance of motor vehicle safety to the community when the death occurred as a result of a vehicle crash. 3.Standardize memorial placement, materials and length of time the memorial can be on the public right-of-way.
Policy	Traffic Engineering Standards 8.0 Roadside Memorial Policy
Detail	Applications request can only be Immediate family members (parents, children, spouse, siblings, grandparents, or grandchildren) may request a permit to place a memorial by completing a permit (at no cost). Non-family members must have approval by a family member in order to place a memorial
Codes	

CODE REFERENCE

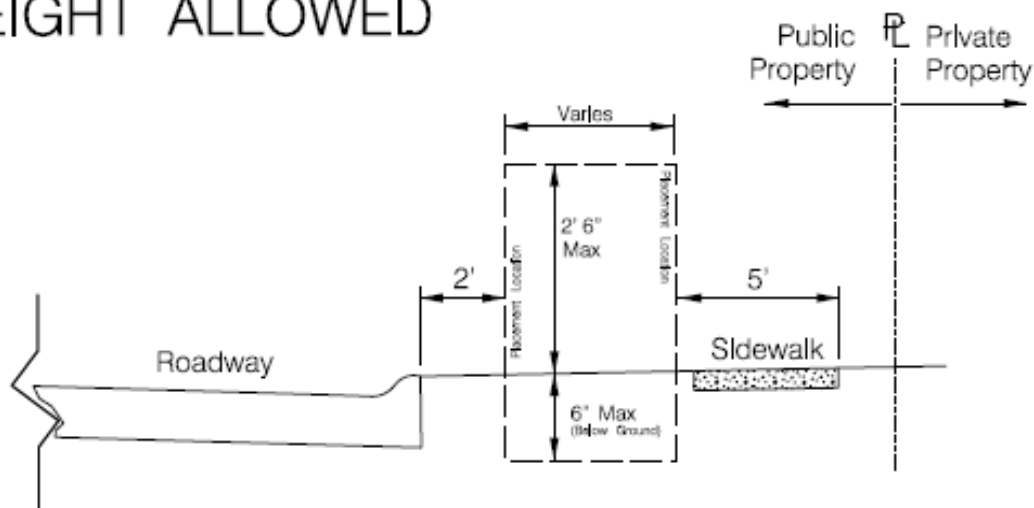
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ROADSIDE MEMORIAL

LOCATION



HEIGHT ALLOWED



TITLE 4: SIDEWALK SPACE

TOPIC:	SIDEWALK SPACE, ALTERATIONS WITHIN
Description:	The space between the lot line and existing or projected curb line on each side of every street in the city (hereafter known as the sidewalk space) shall be used only for the location of sidewalks, street trees and landscape plantings.
Policy	<p><i>Altering a Curb</i> The cutting, breaking, lowering, or removing of any portion of curb in the public right-of-way. Driveway Approach application permit is required for all driveway approaches on all public rights-of-way, even if the roadway is uncurbed, unpaved, or unimproved.</p> <p><i>Sidewalk Construction</i> The construction of all sidewalks shall be under the supervision of the Director of Transportation and Utilities; and no sidewalk shall be constructed, altered, or repaired until an application for a sidewalk construction permit has been filed with the Director of Transportation and Utilities, together with the appropriate permit fee, and a permit therefor has been issued by the Director.</p>
Detail	Single and two family homes, on behalf of Transportation and Utilities, shall review and may be approved or deny by Building Official. Transportation and Utilities Official shall review and may approve or deny all other permit applications.
Codes	<p><i>Altering a Curb</i> LMC Title 14.75</p> <p><i>Sidewalk Construction</i> LMC Title 14.80</p>

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TOPIC	SIDEWALK SPACE, MAILBOXES AND MAILBOX CLUSTERS
Description:	A cluster box unit (CBU) mailbox is a freestanding, pedestal-mounted mailbox that consists of multiple mailbox compartments and parcel lockers that can lock individually.
Policy	Location of mailbox clusters (CBU) are approved through USPS Post Master
Detail	https://www.usps.com/manage/mailboxes.htm
Codes	<p><i>Mailbox LMC Title 14.80</i> <i>Mailbox dimension; Single LSP 60</i></p> <p><i>Mailbox Cluster (include what has been provided by US Postal Service)</i></p>

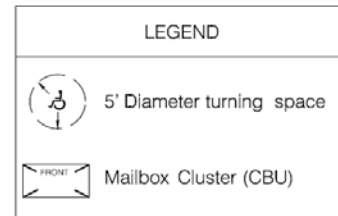
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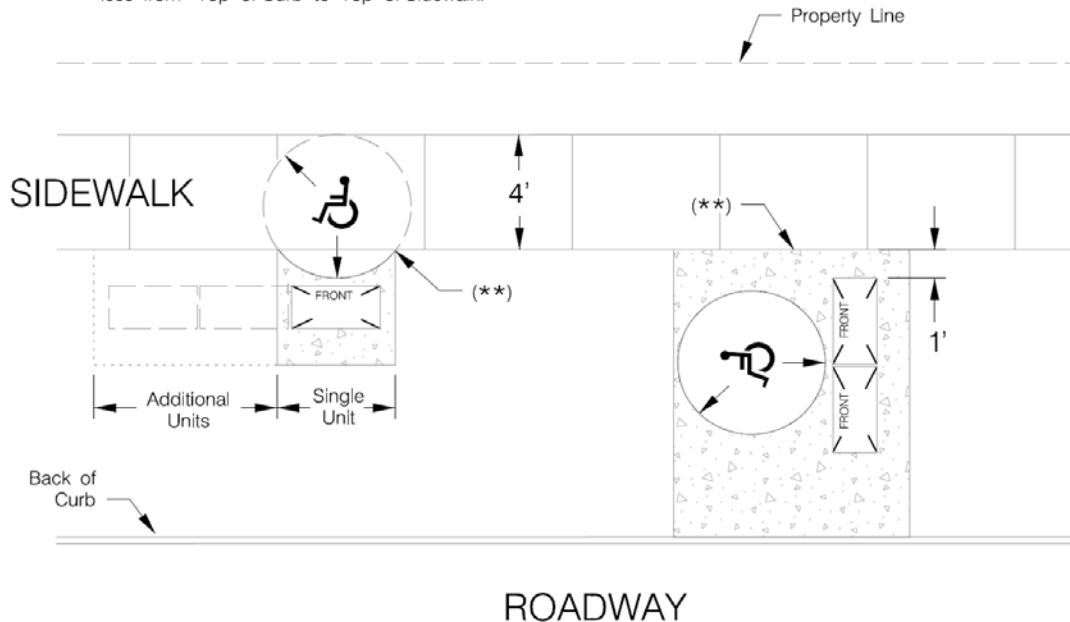
MAILBOX CLUSTER PLACEMENT

General Notes

1. All location requests are subject to review and authorized by Lincoln Transportation and Utilities (LTU)
2. No mailbox cluster (CBU) shall be placed within 5' of a fire hydrant, sign, manholes, and curb inlet; 2' from street lights.
3. All installations shall meet ADA requirements.
4. See manufactures installation requirements for construction of CBU surface pad.
5. At corner lots, the sight triangle shall be protected. Sight triangle consists of the first 25' of the adjacent corner property in both directions in a away direction from the lot corner. (14.44.010 LMC)



(**) ELEVATION OF SIDEWALK:
Sidewalk Elevation shall be 1/4" per Foot or less from Top of Curb to Top of Sidewalk.



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SECTION 4.1: LANDSCAPING WITHIN CITY RIGHT-OF-WAY

TOPIC	LANDSCAPING, FENCES AND RETAINING WALLS
Description:	<p>Fence shall mean a barrier serving as an enclosure or a boundary usually intended to prevent escape or intrusion.</p> <p>Retaining wall shall mean a structure that provides lateral support to higher ground at a change of level, generally intended to retain a slope and prevent erosion.</p>
Policy	<p>Applications for fence and retaining wall within city ROW shall be made to Department of Transportation and Utilities.</p> <p>If it becomes necessary to construct, maintain or repair utilities within the space occupied by the fence or retaining wall, the removal and replacement shall be done at the expense of the owner. In the event emergency maintenance or repairs must be made to utilities, the City may remove the fence or retaining wall with no liability or responsibility for damages thereto.</p>
Detail	<p><i>Retaining walls</i> may be permitted on City property under the following conditions:</p> <ul style="list-style-type: none"> • No higher than six inches above the land that it supports. • Shall comply with all other Lincoln Municipal Code. • Retaining Walls not over 4 feet high • The wall shall be safe and aesthetically compatible with the neighborhood. <p><i>Fences</i> may be permitted on City property under the following conditions:</p> <ul style="list-style-type: none"> • Shall comply with all other Lincoln Municipal Code. • Shall be no closer than two feet to any existing or proposed sidewalk unless installed so as to not interfere with pedestrian and bike traffic. • Shall not be allowed between a sidewalk and the street. If no sidewalk is present, the fence may be no closer than twelve feet from the curb. • Not over 7 feet high • Shall be safe and aesthetically compatible with the neighborhood.
Codes	<p><i>Policies within city right of way</i> LMC Title 14.54.035</p> <p><i>Permitted location and height</i> LMC Title 27.72.140</p> <p><i>Exempt from a building permit</i> LMC Title 20.06.080</p>

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TOPIC	LANDSCAPING, TREES AND SHRUBS
Description:	<p>The selection, planting, maintenance, and removal of trees and ornamental plantings along public ways within the City of Lincoln substantially affect such matters as pedestrian and vehicle safety, the location and maintenance of utility services, tree maintenance costs, the incidence of tree diseases, and the general appearance of the cityscape.</p> <p>Shrubs Include perennial and annual flowering plants, ornamental grasses, and ground covers planted</p>
Policy	<p>The space between the lot line and existing or projected curb line on each side of every street in the city shall be used only for the location of approved street trees, turf grass, shrubs, perennial and annual flowering plants, ornamental grasses, vegetable gardens, and ground covers. Shredded wood mulch may be placed around street trees and landscape plantings within the sidewalk space.</p> <p>The trimming, spraying, removing, and destroying of all trees shall be done by and at the city’s discretion and by no other person unless the Director issues a permit to any applicant therefor, allowing such person to plant, remove, or destroy any such tree.</p> <p>The City may require all trimming to be done under its supervision and direction and at the expense of the franchisee. Nothing in this section shall be construed to give a franchisee the right to trim trees located on private property.</p>
Detail	<p>Listed are some of the general offsets:</p> <ul style="list-style-type: none"> • Twenty-five (25) feet from stop signs. • Fifteen (15) feet from street light poles. • Ten (10) feet from fire hydrants. • Five (5) feet from driveways, storm sewer inlets, manholes, and traffic control signs. • Five (5) feet from underground utility service lines going from utility mains to homes/buildings. • Four (4) feet from water shut-off boxes • Four (4) feet from sidewalks along parking areas • Three (3) feet from gas shut-off valves <p>Listed are some Height restrictions:</p> <ul style="list-style-type: none"> • Shrubs to be a maximum 30 inches • Trees to be 10 feet over sidewalks • Trees to be 14 feet over areas for vehicular traffic <p>When a street tree is being removed or destroyed, the stump shall also be removed. All removed trees, including limbs and debris, shall be removed from the city right-of-way or other public way within forty-eight hours after being cut, and the ground shall be raked clean of all chips, branches, and debris</p>
Codes	<p><i>Tree Trimming</i> LMC Title 5.15.450</p> <p><i>Planting, Maintaining, and Removal</i> LMC Title 12.20</p> <p><i>Location Offset to Avoid Conflicts</i> DS Title 2.35</p> <p><i>Landscaping; Streetscape, Medians, and Arterial Roadway</i> DS Title 4.20</p>

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications

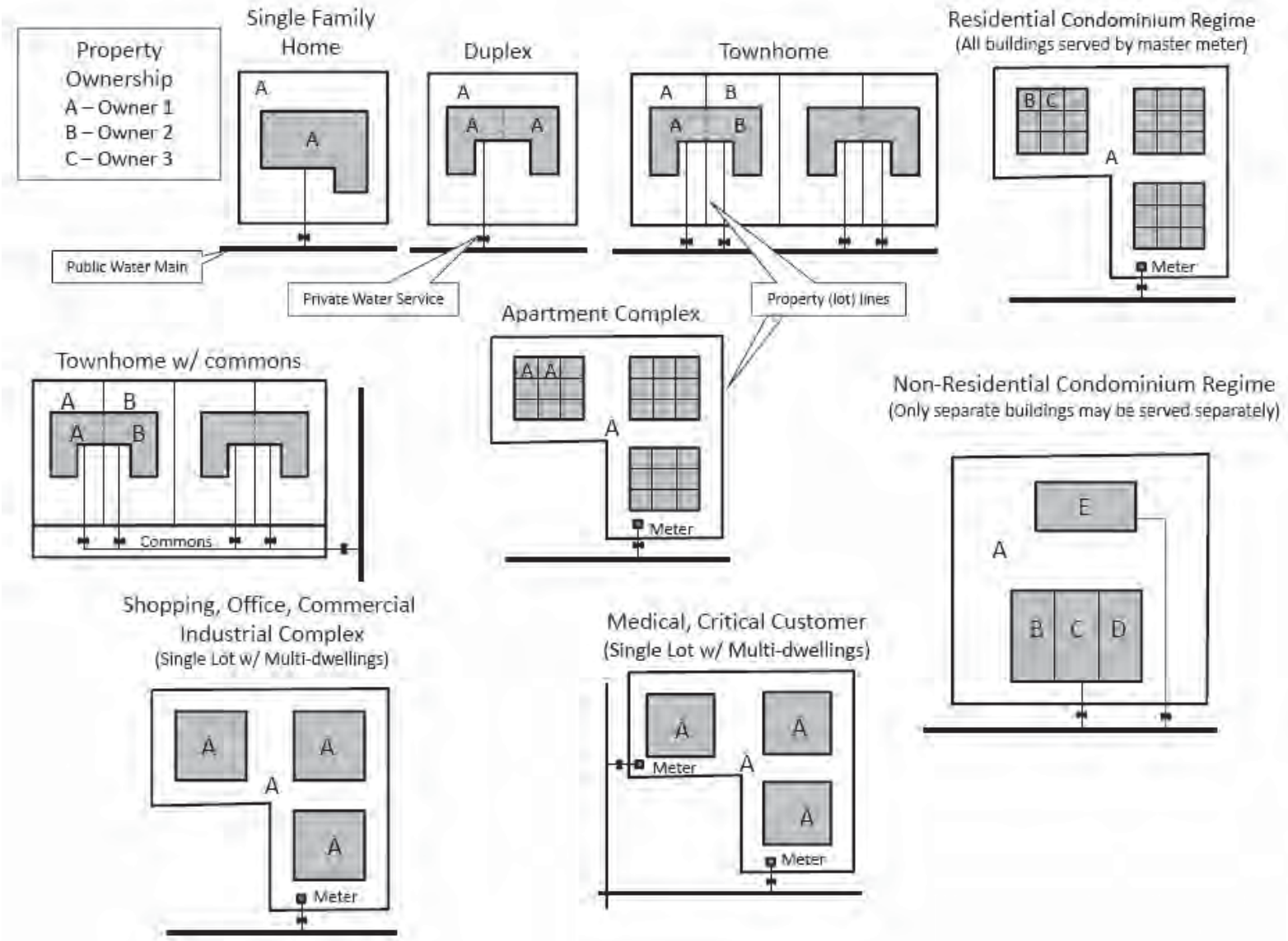
TITLE 5: UTILITIES WITHIN CITY RIGHT-OF-WAY

TOPIC	UTILITIES, WATER SERVICES
Description:	<p>Any person to use or take water from a part of the Lincoln Water System shall do so by permit. No person shall open, use, tamper with, or remove any fire hydrant of the Lincoln Water System; or to connect to, tamper with, or remove any service, or meter apparatus directly or indirectly connected with a main of the Lincoln Water System, without written authorization.</p> <p>Only a City of Lincoln Department of Building and Safety registered master plumber, journeyman plumber, or plumber’s apprentice working under the direct continuous site supervision of a master plumber or a journeyman plumber, may install, alter, or repair any water supply pipe, or water service pipe.</p> <p>Water Service Manual purpose is to describe the methods and requirements for installing, maintaining, and repairing water supply pipes, water service pipes, stop boxes, meters, backflow prevention assemblies and the relocation of fire hydrants.</p>
Policy	<p>Water service to any lot with a single dwelling unit, building, or business shall be provided through a single supply connection, supply pipe, service pipe, and water meter. Water service to any lot with more than one dwelling unit, building, or business shall be provided only through a master metered water service.</p> <p><i>Non-Abutting Agreement</i> When public water main is not along the lot frontage, a non-abutting application form can be requested. Public water shall be deemed available to a premises if such premises are within 300 feet, measured along a street, alley, or public utility easement.</p> <p><i>Outside City Limits Service Connection</i> Premises outside of the corporate limits of the city desire to be connected to the public water system, such connection shall be permitted only by executive order of the Mayor, and the charges for such connection shall be determined by the City Council.</p>
Detail	<p>Water mains up to 16” are generally considered to be tapped for services. Application for new or replacement water service is made through the Development Services Center located within the City County Building.</p>
Codes	<p><i>Maintaining Well water in city Limits</i> LMC Title 8.44</p> <p><i>Permit for Service and Abandonment to lots</i>..... LMC Title 17.10</p> <p><i>Outside City Limits Service Connection</i> LMC Title 17.14 & LMC 24.12</p> <p><i>Separate From Domestic Supply System</i>..... LMC Title 24.01</p> <p><i>Water Service Manual</i></p> <p><i>Water</i>..... DS Title 2.10</p> <p><i>Water Tapping; Exc Pit and cut in</i>..... LSP 340</p>

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans
(LSS) – Lincoln Standard Specifications

Typical Water Service to Properties



CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP) - Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications

TOPIC	UTILITIES, SANITARY SERVICES
Description:	Lincoln Wastewater objective is to prevent the introduction of pollutants or substances into the wastewater system which will interfere with the operation and maintenance of the wastewater system, inadequately treated, and contamination into the receiving waters or the atmosphere or otherwise be incompatible with the system.
Policy	<p><i>Non-Abutting Agreement</i> Public sanitary sewer main is not along the lot frontage, may be permitted to connect to such public systems by request. A public sanitary sewer system shall be deemed available to a premises if such premises are within 300 feet, measured along a street, alley, or public utility easement.</p> <p><i>Outside City Limits Service Connection</i> Premises outside of the corporate limits of the city desire to be connected to the public sanitary system, such connection shall be permitted only by executive order of the Mayor, and the charges for such connection shall be determined by the City Council.</p> <p><i>Private wastewater systems</i>, including all preliminary treatment facilities, flow-equalizing facilities, and private sewers shall be maintained continuously in satisfactory and effective operation by the owner at his sole responsibility and expense. Owner will be responsible to repair all structural deficiencies on private sewers that contribute to the deterioration or settlements of pavement, curb and gutter, sidewalks, adjacent utilities, and appurtenances in the public right-of-way</p>
Detail	Sanitary mains up to 15” are considered to be tappable for services. Application for new or replacement of service is made through the Development Services Center located within the City County Building.
Codes	<p><i>Wastewater</i> LMC Title 17.58</p> <p><i>Sanitary Connection</i> LMC Title 24.12</p> <p><i>Service Connections to City System</i>..... LMC Title 24.38</p> <p><i>Sewer Taps</i>..... LMC Title 24.60</p> <p><i>Sanitary</i> DS Title 2.00</p> <p><i>Sanitary Service Connection</i>..... LSP 210</p>

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications

TOPIC	UTILITIES, PUBLIC MAINS
Description:	Public mains are those basic utilities provided for the most part by Lincoln municipal government, municipal authorities and other semi-public providers to insure the health, safety, and wellbeing of city communities. Such utilities include water, sanitary sewer, and storm sewer. The availability, quality, and adequacy of these utilities are a most important factor in insuring orderly growth and development in each Municipality and in the County as a whole.
Policy	<p><i>Water</i> Lincoln Water System mains are designed to provide adequate flows for domestic and commercial uses and for fire protection, to protect the quality of the public water supply, and to maintain the integrity and reliability of the distribution system. Water mains up to 16” are generally considered to be tapped for services.</p> <p><i>Sanitary</i> All plans for construction of wastewater system improvements shall be reviewed and approved by the Lincoln Transportation and Utilities Department, and the Nebraska Department of Environment and Energy prior to construction.</p> <p><i>Storm Water</i> design standards have been prepared to provide guidance to the engineers and developers interested in stormwater runoff related design and construction and in the management of stormwater runoff.</p>
Detail	“Ten State Standards” separation requirements shall be applied when designing next to water mains. This shall apply to all potable water lines, storm water, and sanitary sewer lines.
Codes	<p><i>Storm Water Regulations for Construction Site</i> LMC Title 28.01 & Title 28.03</p> <p><i>Water</i> DS Title 2.10</p> <p><i>Sanitary</i> DS Title 2.00</p> <p><i>Storm Water</i> DS Title 2.05</p> <p><i>Storm Water; Curb Inlets</i> LSP 101 & 102</p> <p><i>Storm Water; Manholes</i>..... LSP 141 & 142</p> <p><i>Storm Water; R.C. Collars, Elbows and Plugs</i>..... LSP 150</p> <p><i>Pipe Bedding</i> LSP 185</p> <p><i>Encasement</i>..... LSP 190</p> <p><i>Sanitary; Manholes</i> LSP 200, 201, & 205</p> <p><i>Water Main; Reconstruction</i>..... LSP 301</p> <p><i>Water Main; R.C. Collars, Thrust Blocks, Anchorages, Tee Blocks and Plug Blocks</i> LSP 320</p> <p><i>Water Main; Tracer Wire</i>..... LSP 325</p> <p><i>Water Main; Hydrants</i> LSP 330</p>

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications

TOPIC	UTILITIES, STORM SEWER
Description:	<p>Any conveyance or other structure, including but not limited to any roads with drainage systems, public streets, private roadways, sidewalks, catch basins, curbs, gutters, ditches, inlets, piped storm drains, pumping facilities, natural and man-made or altered drainage channels, reservoirs, or other stormwater storage facilities designed or used for collecting or conveying stormwater, and which is not used for collecting or conveying sewage.</p> <p>Requirements and criteria to prevent and control water pollution, and to diminish adverse impacts to health, safety, property, and the general welfare of the citizens of the City of Lincoln through regulating stormwater runoff from areas of construction and reconstruction, to the maximum extent practicable as required by the Federal Clean Water Act</p>
Policy	<p><i>Building Permits</i> Any person who engages in construction activity is responsible for compliance with this chapter and all applicable terms and conditions of the Permit and SWPPP as it relates to any land disturbance less than one acre of total land area that is part of a common plan of development or sale, otherwise known as the building phase of development.</p> <p><i>Storm Water</i> Storm water design standards have been prepared to provide guidance to the engineers and developers interested in stormwater runoff related design and construction and in the management of stormwater runoff.</p> <p><i>Subsoil Drains</i> Subsoil drains shall be piped to a storm drain, to an approved water course, to the front street curb or gutter, to an alley, or the discharge from the subsoil drains shall be conveyed to the alley by a concrete gutter. Where a continuously flowing spring or groundwater is encountered, subsoil drains shall be piped to a storm drain or an approved water course.</p>
Detail	<p>For new parking lots containing 6,000 square feet or more and which are located within 150 feet of, or reasonably accessible to, an existing storm sewer or other drainageway, including open channels and creeks, but excluding roadway gutters, the parking lot must be graded and surfaced such that storm water runoff from the site is not allowed to discharge through the driveway approaches onto the public street or other property, but is collected on the site by an internal drainage system located on the site and carried to that existing storm sewer.</p> <p>To tap existing storm inlets, the homeowner must make a request through Lincoln Transportation and Utilities Right-of -Way Services.</p>
Codes	<p><i>Stormwater Quality and Erosion and Sediment Control</i> LMC Title 28</p> <p><i>Subsoil Drains</i> LMC Title 24.12</p> <p><i>Stormwater Drainage</i> DS Title 2.05</p> <p><i>Parking Lot Drainage</i> DS Title 3.45</p>

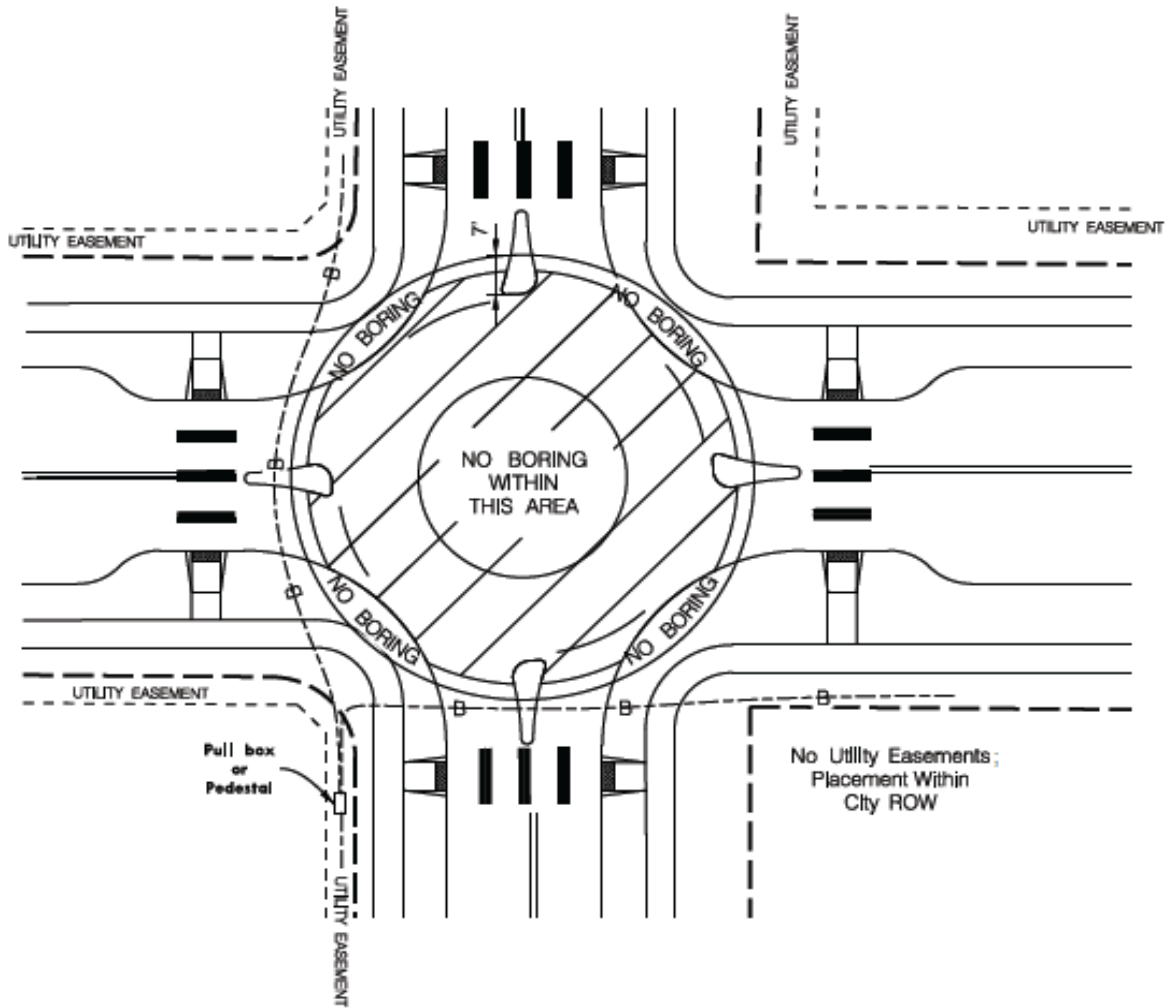
CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications

TOPIC	UTILITIES, COMMUNICATIONS
Description:	It shall be unlawful for any person to use any space above or underneath the surface of any street, alley, sidewalk, or other public ground within the City of Lincoln for the installation, operation, and maintenance of any optic fiber cable, coaxial cable, or other communication cable unless such person has received a permit
Policy	<p><i>Residential Broadband LMC</i> Provide for the franchising and regulation of systems utilizing the City's conduit system and providing broadband service within the City of Lincoln</p> <p><i>Cable Communications</i> Provide a legal framework for the deployment of cable systems and open video systems that meet the current needs of the City and that can be improved and upgraded to meet future needs. A cable system operator must obtain a franchise prior to constructing a cable system or providing cable service within the City.</p> <p><i>Telecommunications</i> providing or offering for rent, sale or lease, or in exchange for other value received, the transmittal of voice, data, image, graphic and video programming information between or among points by wire, cable, fiber optics, laser, microwave, radio, satellite or similar facilities, with or without benefit of any closed transmission medium, but shall not include the provision of cable television service over a franchised cable system or an open video system where an agreement or franchise has been entered into with the City.</p>
Detail	<p>A Professional Engineer registered in the State of Nebraska, is required to stamp and sign all plans associated with any projects where there will be underground boring or multiple excavations within the public right-of-way.</p> <p>Plans associated with pulling fiber through existing conduits or overhead work where new lines are either installed on existing poles or where the new lines are over lashed to existing overhead facilities, need not be stamped and signed by an engineer.</p>
Codes	<p><i>Residential Broadband</i> LMC Title 5.12</p> <p><i>Cable Communications</i> LMC Title 5.15</p> <p><i>Telecommunications</i> LMC Title 5.17</p>

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications



PRIVATE UTILITIES WITHIN ROUNDABOUTS

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications

TOPIC	UTILITIES, POLES
Description:	No street light poles or utility poles shall be placed in or upon the public space in the city without a right-of-way permit.
Policy	Approval by the Director of Transportation and Utilities, an operating agreement between the Department of Transportation and Utilities and utility companies or other city agencies. Such operating agreements shall set forth the rules, regulations, and procedures for authorizing the installation and removal of street light poles or utility poles in the public space by each company or agency. The City Right-of-Way have the authority to approve exceptions to these specific locations.
Detail	All poles installed shall be placed six feet or as far as practical from the street curb. Non curb street locations are to follow the clear zone requirements. Adhere to utility separation requirements with all pole placement
Codes	<i>Underground Relocation..... LMC Title 5.17.190</i> <i>Location of Facilities LMC Title5.17.470</i> <i>Utility Poles and Service Lines LMC Title 14.64 & Title 26.27.070</i> <i>Pull Boxes; Traffic Pull Boxes, Fiber Marker, and Pull Boxes..... LSP 81</i> <i>Power Supply LSP 83</i> <i>Street Lighting; Pole..... LSP 92</i> <i>Street Lighting; Small Cell LSP 93</i>

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications

TOPIC	UTILITIES, LOCATING
Description:	<p>It shall be unlawful for any person to use any space above or underneath the surface of any street, alley, sidewalk, or other public ground within the City of Lincoln for the installation, operation, and maintenance of any optic fiber cable, coaxial cable, or other communication cable unless such person has received a permit</p> <p>When crossing over or under existing public facilities or where the proposed facility will be running in the same direction as the public facilities and is within five (5) feet of the existing facilities, it shall be the responsibility of the contractor to physically locate the existing facilities every 50' by either potholing or by hand digging.</p> <p>Prior to construction, the contractor shall obtain utility locates by contacting Nebraska 811 at 1-800-311-5666 or online at http://www.ne1call.com/</p>
Policy	<p><i>Keyhole, Pothole</i> This specification covers the requirements for keyhole coring, vacuum excavation, backfilling, and reinstatement of the keyhole core in asphalt or concrete pavements to allow for underground utility repairs and underground potholing.</p>

SECTION 5.1: KEYHOLE POTHOLE SPECIFICATIONS AND PROCESS

GENERAL

This specification covers the requirements for keyhole coring, vacuum excavation, backfilling, and reinstatement of the keyhole core in asphalt or concrete pavements to allow for underground utility repairs and underground potholing.

Quality control field inspection and testing requirements including frequency shall be in accordance with Contracting Agency requirements.

The material and placement requirements in the pipe zone and final backfill area shall be in accordance with Chapter 20 – Construction for Utilities & Structures of the Lincoln Standard Specifications.

Pavement keyhole cores removed shall either be removed from the work site or stored in a safe and secure on-site location. The cores shall be made readily available for restoring the pavement after backfilling is complete and approved.

Bonding Agent: The bonding agent shall be a single component cementitious, rapid hardening, high strength waterproof bonding agent conforming to the physical properties listed.

- The bonding material shall be impervious to water penetration at the joint after application.
- The bonding materials shall securely bond the undamaged keyhole core to the pavement and shall completely fill the annular space at the joint.
- The bonding materials shall within 30 minutes at an ambient temperature of 70 degrees Fahrenheit allow the core to support an equivalent traffic load condition of at least three (3) times the AASHTO H-25 standard.
- The bonding material shall be Utilibond, manufactured by Utilicor Technologies Inc., or Engineer approved equal.

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications

POTHOLE EXCAVATION, GENERAL

The vertical alignment of the keyhole coring shall be perpendicular to the horizon, and the cutting shall extend to the full depth of the existing pavement section.

- No keyhole cores shall be drilled within 2-feet of an existing contraction, construction, or control joint. Full depth patches shall be used in these areas.
- No keyhole cores shall be drilled within the approach pavement of a bridge or box culvert structures.
- Steel plates used for covering potholes that have been drilled for the purpose of performing vacuum excavations to locate underground utilities, shall be ½ inch in thickness for potholes 10 inches in diameter or less and ¾ inch for potholes between 10 and 24 inches in diameter.
- All potholes in sidewalk panels will require Full Panel replacement. If colored, textured or patterned concrete is existing, replacement panels will be replaced to match as practicable. Owner may be required to put money into Escrow to cover all repairs prior to starting work.

NOTICE: all potholes shall be covered immediately, either by permanent restoration or by the use of plates. No open potholes are allowed to be left open overnight.

Unless otherwise approved by LTU ROW office, keyhole cores shall not be greater than 24-inches in diameter. Adjacent cores shall not be closer than 3-feet from each other (edge to edge), shall not contain a joint or any pavement cracks greater than 1/8-inch wide, and shall not be performed in pavements where the section is less than 6-inches thick.

In the event of a misaligned keyhole with the underground facility, a second overlapping core may be drilled provided there is at least 1/3 overlap and BOTH cores are drilled consecutively. This method is not applicable to existing restored cores that may be present in the surface. If the second keyhole is also misaligned, then a conventional full depth patch will be required for restoration.

Coring shall be performed with a keyhole coring saw.

- The contractor shall place a temporary mark on the keyhole core prior to cutting to ensure that the removed section is replaced in the same orientation as originally found in the pavement.
- Soils within potholes shall be removed by air/hydro-excavation methods to expose utilities. The zone of soil removal shall remain essentially within a vertical plane extending below the edges of the removed pavement.
- The Contractor shall remove all unsuitable materials from the site.

POTHOLE BACKFILL AND COMPACTION

The backfilling of each zone shall be completed in accordance with Chapter 20 – Construction for Utilities & Structures of the Lincoln Standard Specifications, unless otherwise approved by the LTU ROW office.

In lieu of compacted soil backfill the contractor may elect to use, with LTU ROW approval, Flowable Fill, Coarse Aggregate, Fine Aggregate, or approved equal meeting City of Lincoln Specifications.

Pneumatic compaction equipment (pneumatic rammers or equivalent) shall be used for compaction of the backfill material. The size of the compactor shall not exceed 2/3 of the diameter of the cored keyhole.

NOTICE: Jetting or hydro-flushing of the backfill shall not be permitted.

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications

Care shall be taken to ensure that the utility is properly bedded with material of an approved density or in accordance with these Standard Specifications. The initial 12 inches of backfill above the top of the pipe shall be carefully placed to protect the pipe bedding from further backfilling operations. Backfill shall be mechanically compacted to meet required support.

PAVEMENT RESTORATION

The surface cut by keyhole coring restored to its original condition with the reinstated core flush with and in the original orientation as the existing surface matching existing pavement surface appearance. Excess bonding material shall be removed from the restored surface. A patched appearance shall be avoided in surface restoration wherever possible.

Unless otherwise approved by the LTU ROW, the Contractor shall reinstate the bonded keyhole core within 24 hours of cutting the pavement. Openings within public access or openings allowed to be left open greater than 24 hours shall be covered with a steel road plate capable of supporting traffic loads without movement or racking.

Surface Tolerances: The reinstated core shall be flush and level with the adjacent pavement. Gaps attributable to the positioning of the core shall be less than 1/16-inch between the bottom of a minimum 3-foot long straight edge and the surface of the pavement in any direction of the surface of the keyhole core.

DEFICIENCIES

Where the keyhole core is found to be fractured or defective upon removal, or becomes damaged after removal and prior to reinstatement, the core shall not be used to restore the pavement. A keyhole core shall be considered unacceptable when one of the following conditions exist:

- The keyhole core contains any vertical cracks wider than 1/8-inch extending full depth through the core; or
- Any deteriorated piece of the keyhole core is larger than ten percent of the overall area of the core; or
- Two or more successive layers of pavement in the keyhole core become horizontally delaminated and cannot be re-bonded to each other with the bonding material.

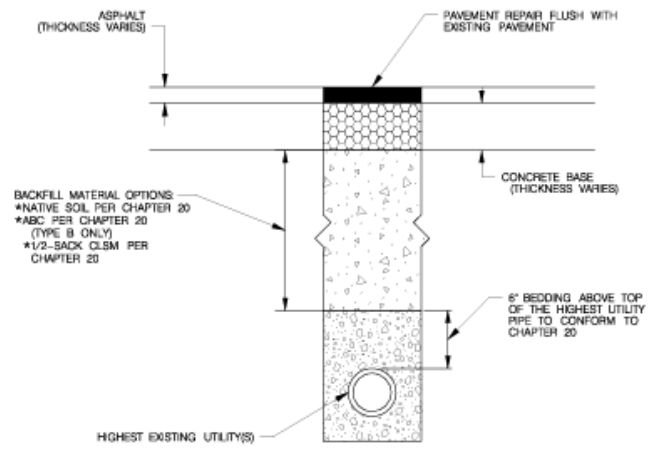
All keyhole cores that are damaged or do not meet the surface tolerances shall be removed and disposed of off-site. The pavement at damaged keyhole core locations shall have a permanent full-depth patch installed by the Contractor in accordance with the City of Lincoln Standard Specifications and Standard Plans including but not limited to: LSP 642 and LSP 670.

CODE REFERENCE

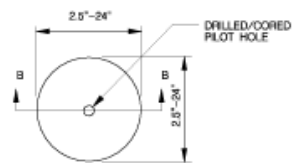
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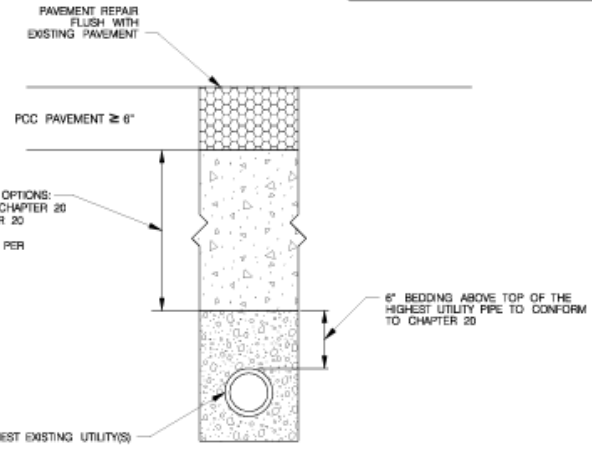
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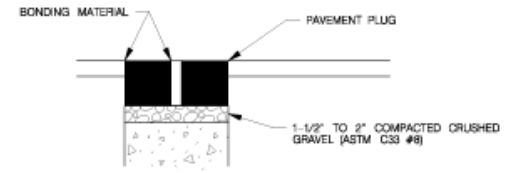
SECTION VIEW



PLAN VIEW



SECTION VIEW



SECTION B-B

- NOTE:
1. CUT, REMOVE AND REPLACE PAVEMENT PLUG IN ACCORDANCE WITH CHAPTER 20
 2. PLACE BACKFILL IN ACCORDANCE WITH CHAPTER 20
 3. BONDING MATERIAL SHALL BE AS SPECIFIED IN CHAPTER 20

- NOTE:
1. MINIMUM CORE SIZE - 2.5"
 2. ALL CORES MUST BE REPLACED WITH ORIGINAL CORE. IF ORIGINAL CORE IS LOST OR BROKEN, A NEW CORE OF THE SAME MATERIAL SIZE AND THICKNESS MUST BE SOURCED FROM PUBLIC WORKS CORE SLAB AND REINSTALLED WITH BONDING AGENT.
 3. CORE REQUIRES UTILBOND OR APPROVED ALTERNATE TO CEMENT CORE BACK IN PLACE.
 4. MINIMUM CORE SAW WALL THICKNESS IS 3/8" KERF CUT.
 5. CORE MUST BE PROTECTED FROM TRAFFIC UNTIL DESIGN STRENGTH IS ACHIEVED.



KEYHOLE POTHOLE EXCAVATION AND BACK FILL

LSP 069

This document was originally issued and sealed by Kristen A. Humphrey, E-10395, on 10-01-22. This media should not be considered a certified document.

TITLE 6: EXCAVATION

TOPIC	EXCAVATIONS, GENERAL
Description:	<p>It shall be unlawful for any person, firm, or corporation, other than duly authorized employees of the City of Lincoln, to make any opening, cut, trench, or excavation in or under the surface of any street, alley, sidewalk, highway, or public property of the City of Lincoln without first obtaining a written permit to do so.</p> <p>Applications to be made through Building and Safety Dept.</p> <p>Street cuts are to be called in to LTU ROW Service Dept 48 hrs prior to work starting.</p> <p>Prior to excavation, investigation shall be made to the extent necessary to determine the location of underground structures and utilities. Care shall be exercised by the Contractor during excavation to avoid damage to existing structures or utilities. Where shown on the plans, "One-Call" field markings, or as requested by the City's Project Manager, the Contractor shall make such excavation as may be necessary to ascertain the vertical and horizontal location of existing utilities.</p>
Policy	<p>Refilling shall not be done with cinders, broken concrete, or other debris, nor with frozen earth, nor when the material already in the excavation is frozen, nor when the walls of the trench or excavation are frozen. All refills shall be firmly compacted by mechanical tampers.</p> <p>The permittee, upon completion of the excavation and refilling, shall remove all material, excess dirt, and debris and the parking area and sidewalk space shall be leveled and raked smooth. All sod which has been removed or damaged by reason of such excavation and refill shall be replaced or resodded with new sod, and any newly seeded areas shall be properly reseeded.</p> <p>In accordance with the City of Lincoln's Standard Specifications, Standard Plans, and Traffic Control Guidelines, permittee shall be responsible for any and all costs associated with defects in workmanship and materials which occur within two years after final inspection and acceptance by the City.</p>
Detail	Jetting or hydro-flushing of the backfill shall not be permitted.
Codes	<p><i>Excavation..... LMC Title 14.70 & LMC 24.12</i></p> <p><i>EarthworkLSS Chapter 20.02</i></p> <p><i>Horizontal Directional DrillingLSS Chapter 20.06</i></p> <p><i>Inlet Protection LSP 178</i></p>

MORATORIUM

Excavation within newly constructed or renovated streets will not be allowed for five (5) years after completion of street construction or renovation. Upon written request, after being reviewed by City of Lincoln, permission to excavate in these moratorium streets may be granted by the Director or representative, when one of the following conditions is met:

- An emergency that endangers life or property
- Interruption of essential utility service
- Service for buildings where no other reasonable means of providing service exists
- Work that is mandated by City, State or Federal legislation

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans
(LSS) – Lincoln Standard Specifications

In circumstances where permission to excavate is granted, excavations made in moratorium streets shall be permanently patched according to the current City specifications and may include curb-to-curb restoration. Requests for variances must be submitted in writing to City of Lincoln for review.

LANDSCAPE PROTECTION

The proposed facility route should be designed to minimize damage to trees and/or landscaping.

- All lines that are bored under trees within street rights-of-way, must be bored a minimum of 48 inches under the surface, to avoid the root system of the trees.
 - Bore pits shall be located a minimum of 24 inches outside of the drip line of the tree. The drip line is an imaginary line that extends from the tree's outer branches and leaves, directly to the ground.
- Manholes shall be placed outside the drip line of the tree, unless approved by the City Parks & Recreation Department.
- Should work need to be performed near a tree, a temporary construction fence shall be erected 12 inches outside the drip line of the tree.
- Permittee shall be responsible for any damage to public or private landscaping and sprinkler systems.

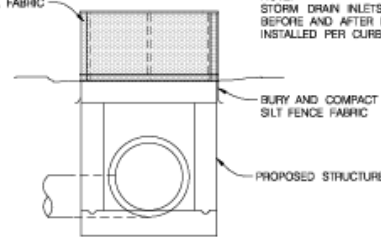
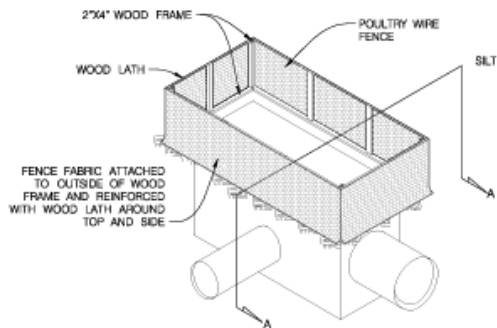
PROCEDURES FOR STEEL PLATE INSTALLATION

Steel plate placement on transverse and longitudinal excavations shall be in accordance with the following:

- For roadways with a posted speed limit of 35 mph or less, a 1 inch minimum steel plate, meeting ASTM A36 steel requirements (is a low carbon steel that exhibits good strength coupled with formability) and the ability to withstand H-20 Traffic Loading (AASHTO Bridge Design Criteria that consists of truck axle loading of 32,000 lbs. or wheel loading of 16,000 lbs.), must be used.
- For roadways with a posted speed limit of greater than 35 mph, a 1 ¼ inch minimum steel plate, meeting ASTM A36 steel requirements and the ability to withstand H-20 Traffic Loading, must be used.
- Steel plates must extend a minimum of 12 inches beyond the edges of the excavation.
- It is recommended that temporary paving with a cold asphalt mix be used to feather the edges of the plate to form a wedged taper to cover the edges of the steel plate, on plates being installed on roadways with a posted speed limit of 35mph or less.
- It is required that temporary paving with a cold asphalt mix be used to feather the edges of the plate to form a wedged taper to cover the edges of the steel plate, on plates being installed on roadways with a posted speed limit of greater than 35 mph.
- In all cases, the steel plate shall be anchored securely, to prevent movement.
- In addition to the required work zone traffic control devices, an additional roadway construction sign (black on orange), meeting MUTCD requirements, shall be installed 100 feet in advance of the steel plate location. The sign shall state "STEEL PLATE AHEAD".
- Steel plates used for covering potholes that have been drilled for the purpose of performing vacuum excavations to locate underground utilities, shall be ½ inch in thickness for potholes 10 inches in diameter or less and ¾ inch for potholes between 10 and 24 inches in diameter.

CODE REFERENCE

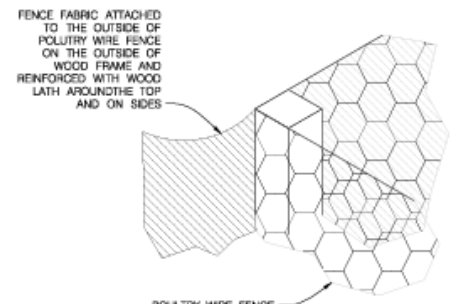
(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications



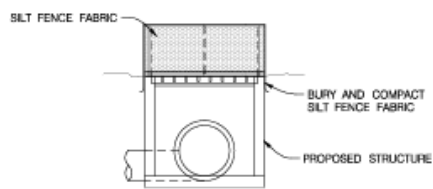
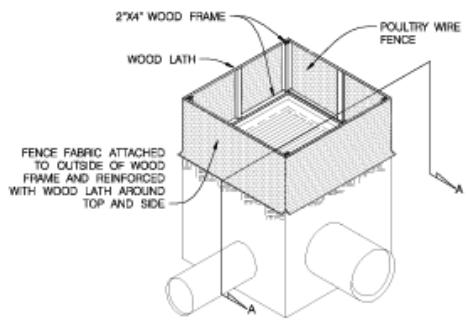
NOTE:
STORM DRAIN INLETS SHALL BE PROTECTED
BEFORE AND AFTER INLET TOP IS
INSTALLED PER CURB INLET PROTECTION

**AREA INLET PROTECTION
CURB INLET VAULT
PRIOR TO INSTALLATION
OF INLET TOP**

SECTION A-A

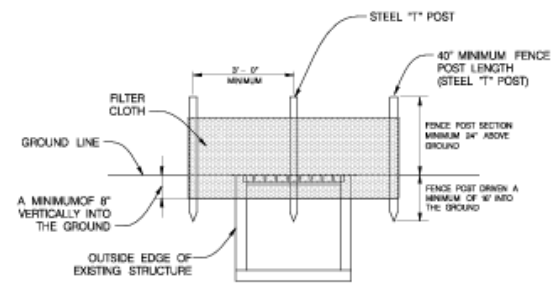
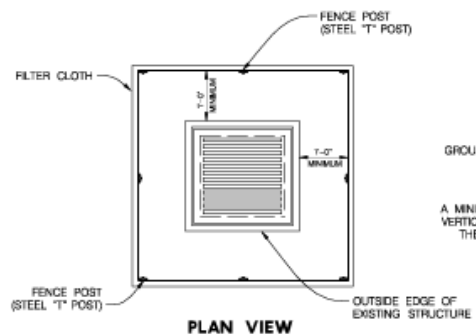


FENCE FABRIC DETAIL



**AREA INLET PROTECTION
TYPE I**

SECTION A-A



**AREA INLET PROTECTION
TYPE II**

SIDE VIEW

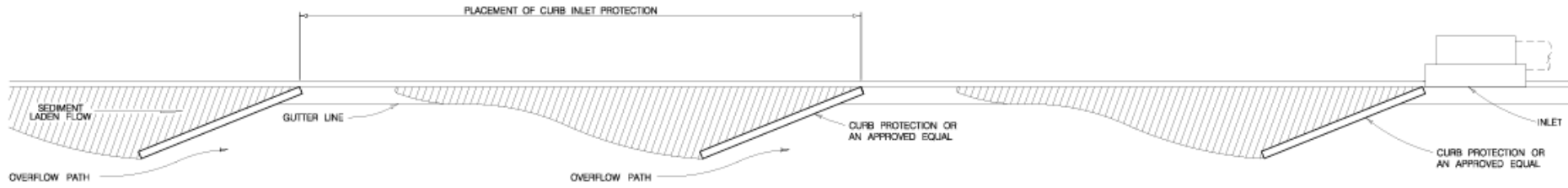
NOTE:
REFER TO CHAPTER 9 OF THE CITY OF LINCOLN
DRAINAGE CRITERIA MANUAL FOR MORE
INFORMATION ON SEDIMENT AND EROSION CONTROL
MEASURES



INLET PROTECTION

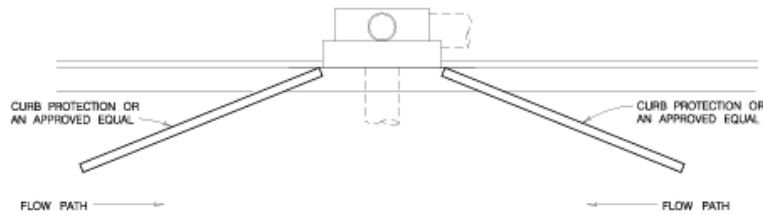
LSP 178

This document was originally issued and sealed by Timothy M. Zach, E-16188, on 10-01-22. This media should not be considered a certified document.



**CURB INLET PROTECTION TYPE I
FOR LINEAR PROJECTS
(TO BE USED ON STREETS
NOT OPEN TO TRAFFIC)**

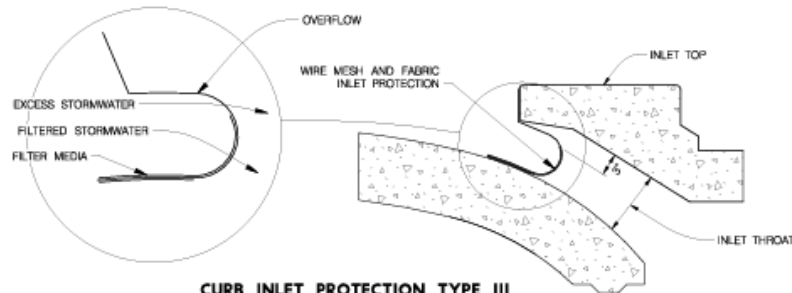
PLACEMENT	
STREET GRADE	PLACING
.5	100'
1.0	50'
2.0	25'
3.0	18'
4.0	13'
5.0	10'



**SUMP CURB INLET PROTECTION
TYPE 2
(TO BE USED ON STREETS
NOT OPEN TO TRAFFIC)**

GENERAL NOTE

- DO NOT BLOCK INLET THROAT.
- DO NOT USE BARRIERS AS THE ONLY SEDIMENT CONTROL MEASURES. INLET PROTECTION IS ONLY EFFECTIVE WHEN USED IN CONJUNCTION WITH OTHER UPSTREAM EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES. INLET BARRIER PROTECTION SHOULD BE A LAST LINE OF DEFENSE FOR SEDIMENT CAPTURE.
- INSPECT WEEKLY AND AFTER EACH RAIN FALL EVENT.
- REMOVE SEDIMENT WHEN HALF FULL (1/2 WAY UP SEDIMENT BARRIER)
- IN SUMP LOCATIONS INLET PROTECTION WILL BE PLACED AS DIRECTED BY THE ENGINEER
- DO NOT USE CURB INLET PROTECTION TYPE I OR SUMP CURB INLET PROTECTION TYPE 2 IF STREET IS OPEN TO TRAFFIC. CURB INLET PROTECTION TYPE II MAY BE USED ON A STREET OPEN TO TRAFFIC AS DIRECTED BY ENGINEER OF PROJECT MANAGER.



**CURB INLET PROTECTION TYPE III
WIRE MESH AND FABRIC INLET
PROTECTION CROSS-SECTION**



INLET PROTECTION

LSP 17B

TOPIC	EXCAVATIONS, TRENCHLESS TECHNOLOGY
Description:	<p>All criteria listed is in addition to what is called out under ‘Excavations, General’ of this manual.</p> <p>It shall be unlawful for any person, firm, or corporation, other than duly authorized employees of the City of Lincoln, to make any opening, cut, trench, or excavation in or under the surface of any street, alley, sidewalk, highway, or public property of the City of Lincoln without first obtaining a written permit to do so.</p>
Policy	<p>When crossing over or under existing public facilities or where the proposed facility will be running in the same direction as the public facilities and is within five (5) feet of the existing facilities, it shall be the responsibility of the contractor to physically locate the existing facilities every 50’ by either potholing or by hand digging.</p> <p>Casing pipe or Conduit shall be placed as indicated on the drawings. Casing pipe or Conduit shall be placed to the minimum depths indicated on the drawings.</p> <p>All bores shall be guided and tracked by equipment that gives continuous, accurate monitoring of the drill bit position. All guidance equipment shall be subject to the acceptance of LTU ROW office. Auger bores are acceptable when required by permit entities.</p> <p>Non-guided boring (such as what has been referred to as “missile” or “thumper”) shall not be permitted at any location within the corporate limits of the City of Lincoln.</p> <p>Drill fluid and the use of drill fluid shall meet the requirements identified in Chapter 20 of the Lincoln Standard Specifications. Used drilling fluid shall be properly, immediately and legally, disposed of.</p> <p>Frac-out or surface uplifting shall be immediately reported to the LTU ROW office, contained, repaired and cleaned up. Any drill fluid released into waterways shall be immediately reported to the Director, contractor and permit agency governing the water. In water, the frac-out shall be contained, in accordance with the permit. Clean up shall be in accordance with the permits. Drill fluid shall not be allowed to remain in the water. The contractor shall be responsible for dewatering, diverting water, and controlling water surface runoff that would affect downstream water turbidity as required for the site conditions</p>
Detail	
Codes	<p><i>Excavation..... LMC Title 14.70 & LMC 24.12</i></p> <p><i>Horizontal Directional DrillingLSS Chapter 20.06</i></p>

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications

TOPIC	EXCAVATIONS, RESTORATION
Description:	<p>A permittee performing construction in the public right-of-way shall restore the public right-of-way to a condition that is equal to or better than the condition prescribed in this manual or other applicable City design and construction standards. Restoration work must be performed to the satisfaction of the LTU ROW office.</p> <p>Restoration must be made in a timely manner. If restoration is unsatisfactory or not performed in a timely manner, then all of the permittee’s work on the project in question will be halted, no projects which have previously issued permits will be allowed to begin or continue is started and no additional permits will be issued until the restoration is completed to the satisfaction of the Director or representative.</p>
Policy	<p>Restoration work to the public right-of-way must include, but is not limited to, the following:</p> <ol style="list-style-type: none"> 1. Any trees or shrubs damaged during construction shall be referred to the City Forestry Department for determination of mitigation requirements, which will be the responsibility of the permittee. 2. Turf replacement shall meet the requirements of Chapter 30 of the Lincoln Standard Specifications. 3. Ruts shall be removed and the topsoil shall be prepared to provide a smooth surface free of rock and gravel. Irrigation systems shall be repaired to preconstruction condition and extent. 4. Installation or reinstallation of all manholes and hand holes, as required by the LTU ROW office. 5. Backfilling and compaction of all completed bore pits, potholes, or other holes must be performed on a daily basis. 6. All sub-grade, streets, sidewalks and alleys shall be restored as provided in the Standard Specifications. 7. Leveling of all trenches and disturbed areas. 8. Restoration of any damaged traffic control devices, including but not limited to, imbedded loop detectors, pavement markings, underground conduits and signs. 9. All locate flags must be removed during the cleanup process at the completion of the work. <p>Restoration of special street, sidewalk, or drive approach surfaces must be done so that the restoration matches the color, texture, and pattern of the surrounding special surfaces.</p>
Detail	<p>Jetting or hydro-flushing of the backfill shall not be permitted.</p> <p>The City may request density tests on compaction.</p> <p>If the tests on the backfill do not meet the Lincoln Standard Specifications, the backfill shall be considered unacceptable and shall be removed and replaced. The permittee shall bear the cost of all corrections and subsequent testing if the backfill is deemed unacceptable.</p>
Codes	<p><i>Excavation..... LMC Title 14.70 & LMC 24.12</i></p> <p><i>Horizontal Directional DrillingLSS Chapter 20.06</i></p> <p><i>Concrete Pavement Repair LSP 642</i></p>

CODE REFERENCE

(LMC) – Lincoln Municipal Code (AMP)- Access Management Policy (DS) – Design Standards (LSP) – Lincoln Standard Plans (LSS) – Lincoln Standard Specifications