



Office of Community of Development
**NOTICE OF A MEETING FOR
CITY OF CHICKASHA
PLANNING COMMISSION**

In compliance with Title 25, Oklahoma Statutes, Section 301-314, the Oklahoma Open Meeting Act, including the posting of notices and agenda, be advised that the **City of Chickasha Planning Commission** of the City of Chickasha, Oklahoma, meeting on **Tuesday, October 11, 2022, at 4:00 PM.**

Said meeting will be held at City Hall, 2nd Floor City Council Chambers, 117 N. 4th Street, Chickasha, Oklahoma.

The City of Chickasha encourages participation from all its citizens. If special accommodations are needed, please notify the City Clerk at least 48 hours prior to the scheduled meeting. The City may waive the 48-hour rule if the necessary accommodations can be easily made.

AGENDA

- 1 Call to Order/Roll Call**
- 2 Meeting Items**
 - a. Discussion, Consideration and Possible action to approve the minutes from September 13, 2022 meeting.
 - b. Public Hearing to Discuss and Consider the Land Development Code.
- 3 Motion to Adjourn.**

Rachel Bernish, Community Development Director



City of
CHICKASHA

Meeting Type: Planning Commission 10/11/22

Meeting Date: 10/11/2022

Department: Community Development

Agenda Item No. 2.a.

AGENDA ITEM: Discussion, Consideration and Possible action to approve the minutes from September 13, 2022 meeting.

I. BACKGROUND/DESCRIPTION:

II. RECOMMENDED ACTION:

III. FISCAL INFORMATION -

IV. FUND INFORMATION:

Dept. Director:
NAME, TITLE

Fund	Account	Amount
(To)		
FUND	ACCOUNT	AMOUNT
(From)		

Meeting Date:
October 11, 2022

V. ATTACHMENTS:

1. PLANNING COMMISSION 9-13-22

PLANNING COMMISSION MEETING

9-13-2022 4:01 pm

1. Call meeting to order: 4:01 pm

Roll Call: Mike Mosley, Tim Smith, John Grote, Glenn Snedeker, James Schoppa, Jeff McClure (alternate), Joe Hutmacher (alternate)

Present: Mike Mosley, James Schoppa, John Grote

Absent: Tim Smith, Glenn Snedeker, Jeff McClure, Joe Hutmacher

Staff Present: Rachel Bernish Community Development Director, Cristina Fierro Permit Technician, Darren Martin Chief Building Official

Citizens Present: Joshua Woods, Mark Tibbetts, Ed Stanton, Suehzen Mosley, Misty Croskey, Steve Hopking, Mike Lawson, Charlie Lawson, Charlie Eckhoff, Pam McCarty, Deserea Manning, Garrett Hall, Greg Martinez, Him Cowan

2. Meeting Items

- a. **Discussion, Consideration and Possible action to approve the minutes of the July 12, 2022 meeting.**

*Motion by James Schoppa and second by Mike Mosley to approve minutes of July 12, 2022 Planning Commission meeting.

Roll Call: Mike Mosley, John Grote, James Schoppa,

Ayes: Mike Mosley, James Schoppa, John Grote

Nays:

Abstain:

Motion Carries

- b. **Public hearing** to discuss and consider the request to Vacate Real Property owned by the City of Chickasha between 510 W Grand and 515 W Utah for applicant Lawson Retail Properties.

Hearing opened: 4:04 pm

Hearing closed: 4:06 pm

- c. **Discussion consideration and Possible action** to approve to Vacate Real Property owned by the City of Chickasha between 510 W Grand and 515 W Utah for applicant Lawson Retail Properties.

*Motion by **Mike Mosley** and second by **James Schoppa** to approve

Roll Call: Mike Mosley, John Grote, James Schoppa,

Ayes: Mike Mosley, John Grote, James Schoppa

Nays:

Abstain:

- d. **Public hearing to discuss and consider the request for the Use on Review Applicant for 1809 W Grand Ave. 6 rooms for applicant Josh Woods.**

Hearing 4:09

Hearing closed 4:13

- e. **Discussion consideration and Possible action** to approve the Use on Review Applicant for 1809 W Grand Ave 6 rooms for applicant Josh Woods.

- **Motion** by James Schoppa and second by Mike Mosley to approve

Roll Call: Mike Mosley, John Grote, James Schoppa,

Ayes: Mike Mosley, John Grote, James Schoppa

Nays:

Abstain:

- f. **Publish hearing** to discuss and consider the request for changes to the Tattoo Parlor ordinance for the Historic Downtown Urban Center Ordinance.

Hearing opened: 4:16pm

Hearing closed: 4:18pm

- g. **Discussion consideration and Possible action** to approve the changes to the Tattoo Parlor ordinance for the Historic Downtown Urban Center Ordinance.

- **Motion by James Mosley and second by James Schoppa to approve**

Roll Call: Mike Mosley, John Grote, James Schoppa,

Ayes: Mike Mosley, John Grote, James Schoppa

Nays:

Abstain:

3. Motion to adjourn meeting 4:22 pm

*Motion **Mike Mosley** and a second by James Schoppa

Roll Call: Mike Mosley, John Grote, James Schoppa,

Ayes: Mike Mosley, John Grote, James Schoppa

Nays:

Abstain:



City of
CHICKASHA

Meeting Type: Planning Commission 10/11/22

Meeting Date: 10/11/2022

Department: Community Development

Agenda Item No. 2.b.

AGENDA ITEM: Public Hearing to Discuss and Consider the Land Development Code.

I. BACKGROUND/DESCRIPTION:

This is a Planning commission work session to discuss the land development code draft.

II. RECOMMENDED ACTION:

III. FISCAL INFORMATION -

IV. FUND INFORMATION:

Dept. Director:
NAME, TITLE

Fund	Account	Amount
(To)		
FUND	ACCOUNT	AMOUNT
(From)		

Meeting Date:
October 11, 2022

V. ATTACHMENTS:

1. Chickasha Chapter 46 LDC DRAFT 22.08.31 W ATTACHMENTS
2. CHICKASHA STANDARD DRAWINGS 22.09.28

City of Chickasha
Code of Ordinances

PROPOSED CHAPTER 46 - LAND DEVELOPMENT CODE

ARTICLE I. - IN GENERAL

Sec. 46-1 Title

This Ordinance shall be known as the "Land Development Code" or "LDC" of the City of Chickasha, Grady County, Oklahoma.

Sec. 46-2 Authority

In order to promote the health, safety, and general welfare of present and future residents, and to bring about the coordinated, efficient, and economic development of the City of Chickasha, Oklahoma, this LDC is adopted in accordance with the authority granted the City under Oklahoma Statutes Title 11, relating generally to Building and Zoning, and including, without limitation, provisions for platting, the regulation of subdivisions, planning, zoning, variances and appeals, regulation of planned unit developments, site plan review, historic preservation, and the creation of planning commissions and boards of adjustment. It is the intent of the City Council in adopting this Code to exercise as fully as possible the authority granted by Oklahoma Statutes Title 11 and to do so in a comprehensive, integrated and cohesive code.

Sec. 46-3 Purpose and Intent

Land development typically starts with subdivision of land but may also include development or improvement of undivided tracts of land. The regulation of land development within a formalized procedure provides for the establishment of a contract between the land owner (developer) and a governmental entity acting on behalf of the public and for the benefit of subsequent individual owners and/or tenants. Precise commitments concerning a described geographic area of proposed development are specifically set forth in relation to and in accord with graphic and written documentation as filed of record.

The arrangement of land parcels in the community for residential, commercial, and industrial uses and for streets, alleys, schools, parks and other public purposes, will determine to a large degree the conditions of health, safety, economy and amenity that prevail in the area. The quality of these conditions is of public interest. These regulations and standards for the development of land are designed to make provisions for adequate light, air, open spaces, drainage, transportation, public utilities, and other needs, to ensure the development and maintenance of a healthy, attractive and efficient community that provides for the conservation and protection of its human and natural resources.

This LDC regulates the use of land, buildings and structures within the city limits of the City of Chickasha. The regulations contained herein are necessary to promote the health, safety,

convenience and welfare of the City's inhabitants by regulating the use of the land and the use and size of buildings as to height and number of stories, the coverage of land by buildings, the size of yards and open space, density of population and location of buildings.

This Chapter intends to require that all land located in the City of Chickasha be developed in conformance with these provisions. Further, this Chapter intends to require that all land located in the City of Chickasha intended to be subdivided shall be platted in conformance with these provisions prior to the actual accomplishment of development and that an approved Final Plat shall be filed of record prior to the issuance of a required building permit for the development of any and all institutional, industrial, commercial, and residential uses.

This LDC as adopted shall serve the following purposes:

- A. Ensure sound community growth and the safeguarding of the interests of the homeowner, the developer and the local government.
- B. Safeguard these interests and the assurances that land subdivision will provide permanent assets to the community.
- C. Prevent excessive governmental operating costs, while seeking to ensure to the maximum degree possible the means whereby land can be developed for the highest possible use as determined by consideration of social, economic and environmental factors with all of the necessary protections for the prevention of deterioration, obsolescence, slums, and blight.
- D. Make provisions for adequate light, air, open spaces, drainage, transportation, public utilities and other needs, to ensure the development and maintenance of a healthy attractive and efficient community that provides for the conservation and protection of its human and natural resources. They are designed, intended and should be administered in a manner to:
 1. Implement the City's Comprehensive Plan in relation to:
 - a. The use of land and land use relationships;
 - b. The transportation system, including, but not limited to, highways, streets, alleys, and sidewalks;
 - c. Community facilities, including recreational and educational facilities, fire stations, etc.;
 - d. The extension or expansion of the sanitary sewer system, including adequate easements to accommodate lines and facilities;
 - e. The appropriate disposition of surface runoff water; and
 - f. The accommodation of all other utilities within adequate easements;
 2. Protect and provide for the public health, safety and general welfare of the City;
 3. Provide for adequate light, air and privacy to secure safety from fire, flood and other physical dangers and to prevent overcrowding of the land;
 4. Provide neighborhood conservation and prevent the development of slums and blight;
 5. Harmoniously relate the development of the various tracts of land to the existing community and facilitate the future development of adjoining tracts;

6. Provide that the cost of improvements which primarily benefit the tract of land being developed be borne by the developers of the tract, and that the cost of improvements which primarily benefit the whole community be borne by the whole community;
7. Provide the best possible design for the tract;
8. Reconcile any differences of interests; and
9. Establish adequate and accurate records of land development.

Sec. 46-4 Jurisdiction

The regulations of this LDC shall apply to all land within the corporate limits of the City of Chickasha. Except as provided elsewhere in this LDC, no land shall be used and no building, structure or improvement shall be made, erected, constructed, moved, altered, enlarged or rebuilt which is designed, arranged or intended to be used or maintained for any purpose or in any manner except in accordance with the requirements established in the district in which such land, building, structure or improvement is located, and in accordance with the provisions of this LDC relating to any or all districts.

Sec. 46-5 Minimum Requirements

interpretation and *application* of this UDC, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

Sec. 46-6 Effective Date

The effective date of this LDC shall be _____.

Sec. 46-7 Conflicting Provisions

- A. Conflict with State or Federal Regulations. If the provisions of this LDC are inconsistent with those of the state or federal government, the more restrictive provision shall control, to the extent permitted by law;
- B. Conflict with Other City Regulations. If the provisions of this LDC are inconsistent with one another, or if they conflict with provisions found in other adopted ordinances or regulations of the City, the more restrictive provision shall control. Interpretation, determination and administration of such conflicts shall be the sole authority of the City.

- C. **Conflict with Private Restrictions.** It is not the intent of this LDC to interfere with, abrogate or annul any easement, covenant, deed restriction or other agreement between private parties. If the provisions of this LDC impose a greater restriction than imposed by a private agreement, the provisions of this LDC shall control. Where the provisions of a private agreement impose a greater restriction than this LDC, the provisions of the private agreement shall control.

Sec. 46-8 Transitional Provisions

- A. **Violations Continue.** Any violation of the previous zoning or subdivision regulations of the City shall continue to be a violation under this LDC and be subject to penalties and enforcement under Chapter 1 of this Code, unless the use, construction or activity complies with the provisions of this LDC.
- B. **Nonconformities Under Previous Code.** Any nonconformity determined to be legal under the previous zoning regulations of the City will also be a legal nonconformity under this LDC, as long as the situation that resulted in the nonconforming status under the previous regulations continues to exist. If, however, a nonconforming situation under the previous regulations becomes conforming because of the adoption of this LDC, or any subsequent amendment to it, then the situation will no longer be a nonconformity
- C. **Permit Issued Before Effective Date.**
1. Any building or development for which a permit was issued before the effective date of this LDC may be completed in conformance with the issued permit and other applicable permits and conditions, even if such building or development does not fully comply with provisions of this LDC.
 2. If construction is not commenced or completed according to the applicable permit terms, the City Council may, for good cause shown, grant an extension of up to six (6) months for such construction. If the building is not completed within the time allowed under the original permit or any extension granted, then the building *may* be constructed, completed or occupied only in compliance with this LDC.
- D. **Plat Approved Before Effective Date.**
1. Any lot shown on a subdivision plat approved by the City of Chickasha under any prior subdivision ordinance shall be deemed to be fully conforming with this LDC as to lot area and access.
 2. Any site other than a lot described under paragraph 1 above that meets both of the following criteria shall be deemed fully conforming with this LDC as to lot area and access:
 - a. The site consists of all or part of one or more lots shown on a subdivision plat approved by the City of Chickasha under any prior subdivision ordinance; and
 - b. The site conformed with the zoning ordinance at the time that it was created, or it conforms with the requirements of this LDC
 3. Any subdivision for which a Final Plat was approved before the effective date of this LDC may be completed according to the approved plat and other applicable permits and conditions, even if the subdivision does not fully comply with the provisions of this land development Code.

4. If the subdivision is not completed within the time requirements established by prior code or within any schedule included in the approval of the plat, the City Council may grant one extension of time for the completion of the subdivision. If the subdivision is not completed within the time required under the original approval or any extension granted, then the subdivision may be completed only in compliance with this LDC
- E. *PUD Approved Before Effective Date.* Any PUD for which a Final Plat has been approved by the City Council is considered legal and shall continue to be governed by the specific ordinance and site plan previously adopted by the Planning Commission and City Council. Any amendments, revisions or changes to previously adopted PUD's shall comply with provisions of this LDC.

Sec. 46-9 Relation to Zoning

In order to provide adequate information for evaluation and decision by the Planning Commission and the City Council, and to provide documentation of intent for public record, the following requirements are mandatory:

- A. Zoning of land is governed by Chapter 54 of this Code and the official Zoning Map and Ordinances of the City of Chickasha.
- B. A rezoning request which includes any amount of unplatted land shall be accompanied by a Preliminary Plat and/or Development Plan, as deemed appropriate by the Community Development Director, of the land in question, and any adjacent land which is fifty (50) percent or more owned or under option to buy by the applicant; provided, The Preliminary Plat and Development Plan shall be submitted for consideration as an agenda item before the Planning Commission simultaneously with the rezoning request.
- C. In the instance of proposed planned unit development(s), as provided in Chapter 54 of this Code, three (3) paper copies and one portable document format (pdf) copy of the PUD master plan shall be submitted with the application for rezoning and consisting of a design statement and a master development plan map shall be included with the submission of the Preliminary Plat when application is made for Planning Commission approval.
- D. No Final Plat may be considered for approval by the City Council until the Preliminary Plat and proper zoning in terms of density, lot size, and land use has been approved by the City Council regarding the subject property.

Sec. 46-10 Severability

In case any portion of this LDC shall be held to be invalid or unconstitutional, the remainder of the LDC shall not thereby be invalid but shall remain in full force and effect.

Sec. 46-11 Enforcement, Violation and penalty.

- A. It is the duty of the Administrative Officer of the Planning Commission to enforce the provisions of these regulations.
- B. No building permit shall be issued for any new structure or change, improvement or alteration of any existing structure on any tract of land subdivided subsequent to the

adoption of these regulations which does not comply with all of the provisions of these regulations.

- C. A violation of this Chapter shall be deemed an offense and punishable by fine. Any person, firm or corporation who violates or refuses to comply with any of the provisions of these regulations shall be fined as provided in Sections 1-14 and 1-15 for each offense. Each day a violation is permitted to exist shall constitute a separate offense.

Sec. 46-12 Definitions

The following words, terms and phrases, when used in this Chapter, shall have the meanings ascribed to them in this Section, except where the context clearly indicates a different meaning. Words not herein defined but defined in any other chapter of the Municipal Code shall conform to the definitions in said Code.

- A. *Alley* means a minor right-of-way dedicated to public use, which gives a secondary means of vehicular access to the back or side of properties otherwise abutting a street, and which may be used for public utility purposes.
- B. *Applicant* - The owner of land proposed to be subdivided, or on which a building is proposed to be altered, erected or constructed, or his or her legal authorized representative.
- C. *As-built drawings* means a set of detailed drawings and documents reflecting all changes made in the specifications and construction drawings during the construction process. The drawing shows the exact dimension, geometry and location of all elements of the improvements completed.
- D. *Base Flood* - means the flood having a one (1) percent chance of being equaled or exceeded in any given year.
- E. *Bicycle Lane* - means that portion of a roadway set aside and appropriately designated for the use of bicycles.
- F. *Bicycle Path* - means a paved facility physically separating the bicycle from motor vehicle traffic.
- G. *Block* means a parcel of land, intended to be used for urban purposes, which is entirely surrounded by public streets, highways, railroad rights-of-way, public walks, parks or green strips, rural land or drainage channels or a combination thereof.
- H. *Building line or setback line* means a line designating the area outside of which buildings may not be erected.
- I. *Certificate of Survey* - An instrument prepared by a registered surveyor licensed to practice in the State of Oklahoma describing the location and boundaries of a tract or parcel of land.
- J. *City* means the City of Chickasha, Oklahoma.
- K. *City Council* means the governing or legislative authority of the City of Chickasha, Oklahoma.
- L. *City Engineer* - means the licensed engineer designated by the City Manager to furnish engineering assistance for the administration of these regulations.
- M. *Community Development/Director* - The Community Development Director of the City of Chickasha, Oklahoma, or his/her designated representative, who is the administrative official designated by the City Manager to administer the provisions of these regulations.

- N. *Comprehensive Plan* means the comprehensive physical development plan for the City which has been officially adopted to provide long range development policies for the area subject to urbanization in the foreseeable future and which includes, among other things, the plan for land use, land subdivision, circulation and community facilities.
- O. *Construction plan or drawing* means the maps or drawings showing the specific location and design of improvements to be installed in the development in accordance with the requirements of these regulations and the municipal code.
- P. *Covenant* - means a private legal restriction on the use of land, contained in the deed to the property or otherwise formally recorded. The City of Chickasha shall not be responsible for enforcing covenants.
- Q. *Dedication* - means the grant of an interest in property to the public for public use and benefit.
- R. *Deed* - means a document under seal that states a conveyance of title to real property
- S. *Deed Approval* - means a process used by City staff following an administrative review procedure authorized by these regulations for approval of deeds.
- T. *Deep Absorption Sanitary System* - means a soil absorption sewer system for disposal of effluent through the bottom and side of a hole or trench at a depth of more than three (3) feet below the natural undisturbed surface. See Individual Sewage Disposal System.
- U. *Development* means the change of use of land, the erection, construction, or change of use of buildings; or the erection or construction of any additions to existing buildings where outer walls are added or altered as to location, but not including alterations or remodeling of buildings where said outer walls are not added or altered as to location.
- V. *Developer* means any person, firm, partnership, corporation or other entity, acting as a unit to change the use of land, to subdivide land, or to erect, construct, or change use of buildings; or to erect or construct any additions to existing buildings where outer walls are added or altered as to location, but not including alterations or remodeling of buildings where said outer walls are not added or altered as to location.
- W. *Duplex* - means a multi-family residential structure contains two units in the same building, sharing a common wall, or stacked on top of one another, each occupying an entire floor or two floors of the building.
- X. *Easement* means a grant by the property owner to the public, a corporation, or persons, of the use of a strip of land for specific purposes.
- Y. *Individual Sewage Disposal System* - means a septic tank, seepage tile sewage disposal system, or any other approved on-lot sewage treatment device. See Deep Absorption Sanitary System.
- Z. *Land Surveyor, Registered* - means a land surveyor licensed and registered in the State of Oklahoma.
- AA. *Lot* means a subdivision of a block or other parcel intended as a unit for the transfer of ownership or for development.
- BB. *Lot, corner*, means a lot located at the intersection of and abutting on two or more streets.
- CC. *Lot, double frontage*, means a lot which runs through a block from street to street and which has two nonintersecting sides abutting on two or more streets.

- DD. *Lot line adjustment* means a relocation of the lot lines of two or more lots included in a plat which is filed of record, for the purpose of making necessary adjustments to building sites.
- EE. *Lot, reverse frontage*, means a double frontage lot which is to be developed with the rear yard abutting a major street and with the primary means of ingress and egress provided on a minor street.
- FF. *Lot of Record* - means a lot which is a part of an approved plat or metes and bounds subdivision, the map of which has been recorded in the office of the County Registrar of Deeds.
- GG. *Lot Width* - means the mean horizontal distance between the side lot lines of a lot measured at right angles to the depth typically measured at the frontage line or front property line.
- HH. *Nonconformity* - means a lot, the area, dimensions, or location of which was in existence prior to the adoption, revision, or amendment of these regulations, but which fails by reason of such adoption, revision, or amendment to conform to the present requirements of the LDC.
- II. *ODEQ* - means the Oklahoma Department of Environmental Quality.
- JJ. *ODOT* - means the Oklahoma Department of Transportation.
- KK. *Off-Site* - means any real property not located within the area of the property to be subdivided, whether or not in the same ownership of the applicant for subdivision approval.
- LL. *Off-Site Improvements* - means any utility, paving, grading, drainage, structure, or modification of topography which is, or will be located on property not within the boundary of the property to be developed.
- MM. *Off-Street Parking* - means a type of parking wherein the maneuvering of the vehicle while parking and unparking, as well as parking itself, is done entirely off of the street right-of-way, and where access to the area is by means of drive-way approach built to the standards of the City of Chickasha.
- NN. *On-Site* - means any real property located within the area of the property to be subdivided, whether or not in the same ownership of the applicant for subdivision approval.
- OO. *Ordinance* - means enactments of the legislative body of the municipal corporation which has the force of law, including any amendment or repeal of any ordinance.
- PP. *OWRB* - means the Oklahoma Water Resources Board.
- QQ. *Parcel* - means a contiguous area of land described in a single description in a deed or as one of a number of lots on a plat; separately owned, either publicly or privately; and capable of being separately conveyed. For ease of indexing data, a segment of a street, highway, railroad, right-of-way, pipeline or other utility easement may be treated as a parcel.
- RR. *Percolation Test* - means a field-test conducted and used in judging the suitability of soil for on-site, sub-surface sewage disposal and seepage system.
- SS. *Planned Unit Development* - means a form of development characterized by a unified site design which may include providing common open space, density averaging and mix of building types and land uses.
- TT. *Planning Commission / Commission* - means the Planning Commission of the City of Chickasha, as created by the City Council.

- UU. *Plat, final*, means a map of land subdivision prepared in a form suitable for filing of record with necessary affidavits, dedications and acceptances, and with complete bearings and dimensions and curve data of all lines defining lots and blocks, streets and alleys, public areas and other dimensions of land.
- VV. *Plat, preliminary*, means a map of a proposed land subdivision showing the character and proposed layout of the tract in sufficient detail to indicate the suitability of the proposed subdivision of land.
- WW. *Plot Plan* - means a drawing of the LOT that shows the dimensions, location and size of all proposed and existing features and structures, including driveways.
- XX. *Professional Engineer* - means an engineer licensed and registered in the State of Oklahoma.
- YY. *Public Improvement / Improvement* - means any improvements consisting of drainage, water, sanitary, sewer, paving, parkway, sidewalks, pedestrian way, tree, lawn, off-street parking area, lot improvement, or other facility for which the local government may ultimately assume the responsibility for maintenance and operation, or which may affect an improvement for which local government responsibility is established.
- ZZ. *Public Use* - means any area, building or structure held, used, or controlled exclusively for public purposes by any department or government unit, without reference to the ownership of the building or structure.
- AAA. *Public Utility* - means a business or service which is engaged in regularly supplying the public with some commodity or service which is of public consequence and need, such electricity, gas, water, sewage disposal, transportation or communications.
- BBB. *Rear Lot Line* - means ordinarily that line of a lot which is opposite and farthest from the front lot line or as designated on the plat for corner lots.
- CCC. *Reserve Strip* - means a narrow, linear strip of property, usually separating a parcel of land and a roadway or easement, that is characterized by limited depth which will not support development, and which will prevent access to the roadway or easement from the land adjacent to the reserve strip.
- DDD. *Re-subdivision, Replat, Amended Plat or Amended Subdivision* - means a change in a map of an approved or recorded subdivision plat, if such change affects any street, layout on such map or area reserved thereon for public use, or any lot line, or if it affects any map or plan legally recorded prior to the adoption of any regulations controlling subdivision of land.
- EEE. *Short - Form Subdivision* - means a subdivision process by the Planning Commission or in Planned Unit Developments, by the Director, for subdivision of lots, tracts or parcels into three (3) or fewer lots, tracts or parcels usually by metes and bounds description.
- FFF. *Sidewalk* - means a paved surface area usually paralleling and separated from the roadway, used as a pedestrian way.
- GGG. *Sight Triangle* - means the sight distance area at intersections of two (2) public streets. On any corner lot, a triangle formed by measuring from the point of intersection of the front and side lot lines a distance of 25 feet along said front and side lot lines and extending the hypotenuse (when at a right angle) to the curb and connecting the points so

established to form a sight triangle on the area adjacent to the street intersection. Said triangle is included in the street right-of-way.

- HHH. *Site Plan* - means a plan showing location and size of water and sewer lines and storm sewers, paving, contours at two (2) foot intervals, building pad elevations, spot elevations at each lot corner for all lots in the development, lot and street drainage arrows, street light locations, water and sewer service connections, top of curb elevations, lot dimensions, fire hydrants, man-hole locations, right-of-way widths and utility easements.
- III. *Street* means a public or private right-of-way which affords the primary means of access to abutting property.
- JJJ. *Street, collector*, means a street which collects traffic from minor streets and serves as the most direct route to a major street or a community facility.
- KKK. *Street, cul-de-sac*, means a minor street having one end open to vehicular traffic and having one closed end.
- LLL. *Street, frontage or service*, means a street auxiliary to and located on the side of a major street for service to abutting properties and adjacent areas and for control of access.
- MMM. *Street, major*, means a freeway, principal arterial, or minor arterial designated on the Comprehensive Plan.
- NNN. *Street, minor, or local*, means a street whose primary purpose is to provide access to adjacent properties, and which is designed so that its use by arterial traffic will be discouraged.
- OOO. *Street, public*, means any preexisting county road heretofore annexed by the City and which forms a part of said City by reason of such annexation, or any street or road granted or dedicated to and accepted by the City.
- PPP. *Subdivider* means any person, firm, partnership, corporation or other entity, acting as a unit subdividing or proposing to subdivide land as herein defined; also known as the Developer.
- QQQ. *Subdivision* means the division or redivision of land into two or more lots, tracts, sites or parcels for the purpose of transfer of ownership or for development, or the dedication or vacation of a public or private right-of-way or easement.
- RRR. *Substantial Improvement* - means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before start of construction of the improvement
- SSS. *Townhouse* - One of a series of three (3) or more attached dwelling units, separated from one another by continuous, vertical common walls without openings from basement floor to the roof deck and which are intended to have ownership transferred in conjunction with a platted lot.

ARTICLE II. - GENERAL PROCEDURES

Sec. 46-13 Land Development and Building Permits

- A. All development of land within the City Limits of Chickasha or development on land owned by the City of Chickasha or on land otherwise under the legal jurisdiction of the City of

Chickasha shall be subject to the provisions of this LDC. All persons who intend development of any land within the City Limits of Chickasha or on land owned by the City of Chickasha or on land otherwise under the legal jurisdiction of the City of Chickasha shall submit all documentation required by this Chapter, unless granted a waiver thereof from the Community Development Director.

- B. Building Permit Application and Permit Issuance regulations and procedures shall be as prescribed in Chapter 10 of City Code. No building permit shall be issued for the construction or erection of any building or structure on any tract of land which does not comply with this LDC.

Sec. 46-14 Land Subdivision General Procedure

A. *General*

Whenever any subdivision of land is proposed, before any contract is made for the sale of any part of the land and/or before any permit for the erection of a structure in such proposed subdivision shall be granted, the owner of the land or his agent shall apply for and secure the approval of the Final Plat by the Planning Commission and City Council. The proposed subdivision shall conform to the general procedure described as follows:

1. Planning Commission and City Council approval of Preliminary Plat.
2. Planning Commission approval of Final Plat.
3. Planning Commission and City Council approval of Construction drawings.
4. Posting of Maintenance Bonds, inspection fees and construction of improvements.
5. City Council acceptance of improvements and approval of Final Plat.
6. Filing of the Final Plat.

- B. *Plat approval.* For all cases of subdividing within the scope of these regulations, a plat of the land in question, or an easement with a description in writing where appropriate, shall be drawn and submitted to the Planning commission and City Council for their approval or rejection, as provided hereafter in these regulations. The subdividing process shall consist of the following procedures:

1. Preliminary and subsequent final platting is required for the following types of land subdivision:
 - a. The division of unplatted land within any residential, commercial, or industrial zoning district resulting in two or more tracts, lots or parcels.
 - b. The subdivision of unplatted land within the A-1 or A-2 zoning district resulting in five or more tracts, lot or parcels, any part of which, when subdivided contains less than ten acres in area.
2. A Short Form Plat is required for the division of unplatted land for the conveyance of a single tract, lot or parcel. The simplified plat requirements are the same as described in Section 46-19.
3. A Short Form Plat is required for the division of unplatted land in the A-1 zoning district into three or fewer parcels, as described in Section 46-19.

4. *Filing fee.* To defray partially the costs of notification and administration procedures there shall be paid to the Clerk at the time of submission of the Preliminary and Final Plats a fee in the amount as set by the City Council by motion or resolution.
5. *Agenda.* Each plat submitted for preliminary or final approval shall be placed on the agenda of the Planning commission only after fulfilling the appropriate requirements of these regulations.
6. *Official recording.* No plat or other land subdivision instrument shall be filed in the office of the County Clerk until it shall have been approved by the Planning commission and by the City Council as hereinafter set forth. Before recording the Final Plat, digital as-built drawings shall be submitted to the Community development department in GIS shapefile format. All Final Plats shall be filed within two years of date of approval by the Planning commission and City Council, and no lots shall be sold from any plat until recorded. Failure to record the plat within two years of the date of the City Council action shall void all approvals thereto.
7. *Exemption.* Plats containing three lots or fewer may be exempted from the provisions of all or part of procedural provisions of this Chapter upon written approval of the Community Development Director; provided, however, that all other provisions of these regulations, including those relating to design and improvements, shall be complied with, as set forth in Section 46-19.
8. *Data required.* To assist in incorporating plats into the City's GIS mapping system plats must be provided in GIS shapefile format.
- C. *Compliance to this Code.* No Subdivider shall subdivide any tract of land that is located within the city or within its exclusive extraterritorial jurisdiction, except in conformity with the provisions of this Chapter.
- D. *Compliance to other codes.* All subdivisions and development shall comply with other adopted codes whether specified herein or not, including, but not limited to, the City zoning ordinances.
- E. *Penalty for violation.* Any person, firm or corporation who shall violate any of the provisions of this Chapter or who shall fail to comply with any provision hereof shall be guilty of a misdemeanor and, upon conviction, shall be subject to a fine as allowable by state law, and each day that such violation continues shall constitute a separate offense and shall be punishable accordingly. Prosecution or conviction under this provision shall never be a bar to any other remedy or relief for violations of this Chapter.
- F. *Improvements required.*
 1. The Subdivider shall furnish, extend, install and/or construct all infrastructure, including, but not limited to, the water and sanitary sewer systems and the street and drainage facilities necessary for the proper development of the subdivision. All such facilities shall be designed and constructed in accordance with the design standards referenced as part of this Chapter, and other standards, specifications and drawings as may be hereafter adopted, approved by the City Council and placed on file in the office of the City Clerk.
 2. Where considered necessary by the City Engineer and/or Community Development Director the facilities shall be sized in excess of that dictated by the design standards

to provide for future growth and expansion and will conform to the water and sewer extension policy.

G. Variances and exceptions

Whenever the tract to be subdivided is of such unusual size or shape or is surrounded by such development or unusual conditions that the strict application of the design requirements contained in these regulations would result in real difficulties and substantial hardships or injustices, the Developer shall submit written justification and proof of such condition. The Board of Adjustment may vary or modify such design standards so that the Developer is allowed to develop his property in a reasonable manner but so, at the same time, the public welfare and interests of the City are protected, and the general intent of these regulations are preserved. Such variances may be granted only by the affirmative vote of a majority of the members of the Board of Adjustment.

Sec. 46-15 Preliminary Plat

A. General Requirements

1. *Purpose.* The purpose of the Preliminary Plat is to provide early illustration of the nature of a proposed subdivision. This step in the process occurs prior to the preparation of detailed drawings of construction details in order that conflicts with surrounding lands, community plans or other factors might be avoided at an early time. Discussion of intentions or anticipated development approaches with the staff is welcomed and encouraged at any time, including prior to the actual preparation of a Preliminary Plat.
2. *Submittal.* The Subdivider shall prepare a Preliminary Plat for submission to the Planning commission. Three (3) paper copies of the Preliminary Plat shall be submitted to the office of the secretary of the Community Development Director not less than 28 days prior to the meeting at which it is to be considered. Additionally, one copy shall be provided in portable document format (pdf) via e-mail or shared link to the Community Development Director not less than 28 days prior to the meeting at which it is to be considered.
3. *Code compliance.* The Preliminary Plat must comply with all City Codes and ordinances.

B. Application Conference

1. *Purpose.* A Preliminary Plat application conference may be requested by the Developer or the Community Development Director. The purpose of the application conference is to give the Developer an opportunity to:
 - a. Discuss the proposed development with the Public Works Director, the Community Development Director and the City Engineer;
 - b. Obtain copies of all forms, publications, design criteria, and standards available from the city; and
 - c. Determine whether the current zoning is appropriate for the proposed development or if rezoning may be required.
2. *Conference to streamline process.* The plan submittal and the conference provide an opportunity for the Developer and the City to communicate and streamline the platting process.

3. *Submittal.* The submittal for the application conference shall be the same as the Preliminary Plat application.

C. Application

The Subdivider shall submit with the Preliminary Plat an executed copy of the application on the form provided by the Community Development Department, along with all required fees.

D. Contents Of Preliminary Plat

1. Completed application and checklist on the appropriate form furnished by the Community Development Department;
2. A nonrefundable application fee;
3. *General.* The Preliminary Plat shall be drawn at a scale of not less than 100 feet to one inch and shall contain or be accompanied by the following information:
 - a. The scale, north point, and date;
 - b. The proposed name of the subdivision;
 - c. The name and address of owner of record, the Subdivider and of the registered engineer and registered land surveyor;
 - d. A key map showing the location of the proposed subdivision referenced to existing or proposed major streets and to government section lines, and including the direction and number of acres of the drainage area of which the proposed subdivision is a part;
 - e. The names, with location of intersecting boundary lines, of adjoining subdivisions and the location of city limits, if falling within or immediately adjoining the tract;
 - f. Proposed street names.
 - g. Proposed addresses.
 - h. The total area of each lot, listed in square feet.
 - i. The land contours with vertical intervals not greater than two feet referenced to NAVD88;
 - j. The location of existing buildings, water, watercourses, and the location of dedicated streets at the point where they adjoin or are immediately adjacent to the subdivision; provided, however, that actual measured distances shall not be required;
 - k. The length of the boundaries of the tract, measured to the nearest one-hundredth of one foot, and the proposed location and width of streets, alleys, easements and setback lines and the approximate lot dimensions. All surveys and survey data shall comply with the requirements of the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.
 - l. The location, approximate size and type of sanitary and storm sewers, water mains, culverts, power and natural gas lines and other surface and subsurface structures and pipelines existing within or immediately adjacent to the proposed subdivision; and the location, layout, type and proposed size of the following structures and utilities:
 - i. Water mains;
 - ii. Sanitary sewer mains, submains and laterals;
 - iii. Storm sewers, culverts and drainage structures; and

- iv. Street improvements
 - m. The location of all drainage channels and subsurface drainage structures, and the proposed method of disposing of all runoff from the proposed subdivision, and the location and size of all drainage easements relating thereto, whether they are located within or outside of the proposed plat;
 - n. The following items associated with oil or gas drilling or producing operations and existing within 200 feet of the subdivision boundaries:
 - i. Location and dimensions of the drilling and/or production site including walls, structures, tank batteries, and oil, gas or water lines.
 - ii. Location and dimension of all existing vehicular entrances, exits and drives.
 - iii. Location and size of all existing mud pits
 - o. The classification of every street easement or right-of-way within or adjacent to the subdivision in accordance with the intended use of the street based on the proposed design. This shall be done by placing the appropriate term:
 - i. Arterial;
 - ii. Collector;
 - iii. Residential collector;
 - iv. Residential local; and
 - p. A title block which shall include:
 - i. Name of the subdivision.
 - ii. Name and seal of the engineer of record or registered surveyor.
 - iii. Scale.
 - iv. Date of the drawing.
- E. *Planning Commission Action, Preliminary Plat Method of Approval*
1. *Planning commission.* The Planning Commission shall approve, reject, or table the Preliminary Plat within 45 days of the date of its submission by the applicant. Approval is subject to action of the City Council. If the Preliminary Plat is rejected, the reason for such action shall be recorded in the minutes of the commission meeting. (A copy of the minutes of the meeting shall be transmitted to the Subdivider.) The reasons for rejection shall refer specifically to those parts of the Comprehensive Plan, general plan, land use plan, or specific regulations with which the Preliminary Plat does not conform. The Subdivider may submit a revised Preliminary Plat addressing the reasons for rejection by the Planning Commission. An action to table the Preliminary Plat may be taken to permit revisions to the plat by the Subdivider. Unless stipulation for additional time is agreed to by the Subdivider, if no action is taken by the Planning commission at the end of 45 days after submission, the plat shall be deemed to have been approved subject to action by the City Council.
 2. *City Council.* The City Council shall approve, reject, or table the Preliminary Plat as it may elect. If the Preliminary Plat is approved by the Planning Commission and the City Council, the Subdivider may proceed with the preparation of Construction Drawings and with the preparation of a Final Plat. In all other cases the development of the subdivision may not proceed unless and until a Preliminary Plat is submitted and receives approval from the Planning Commission and the City Council.

Sec. 46-16 Construction Documents

A. *General.* Construction Documents shall include the following:

1. All improvements shall be designed in accordance with the design standards referenced as part of this Chapter.
2. Three (3) paper copies of complete construction drawings, specifications, engineering calculations and detailed cost projections for streets, drainage, sanitary sewers, water distribution, and any other improvements to be constructed shall be submitted to the Community Development Director. In addition, one portable document format (pdf) copy via e-mail or shared link to the Community Development Director. Construction drawings must be 100 percent complete at the time of submittal. Any incomplete sets of construction drawings shall be returned and unreviewed.
3. The construction drawing paper copies shall be submitted on standard 24-inch by 36-inch sheets.
4. Each sheet of the construction drawings shall contain a title block, including space for the notation of revisions. This space is to be completed with each revision to the plan sheet and shall clearly note the nature of the revision and the date that the revision was made. This title block shall be located at the lower left hand corner of each sheet submitted.
5. Each sheet of the construction drawings shall include north arrow, scale, date, and benchmark description to sea level datum.
6. The specifications and each construction drawing sheet shall bear the seal and signature of the licensed professional engineer who prepared the drawings.
7. Drainage studies and drainage plans are required to demonstrate compliance with this Code and the city drainage standards and shall be submitted as part of the Construction Documents.
8. A separate document or report entitled "Engineering Design Summary" may be required as directed by the City Engineer and/or Community Development Director and included with the submittal of the construction drawings and specifications. It shall summarize calculations and other such engineering information pertaining to the major items of design. It shall be used during the review to determine whether the facilities proposed for construction have been designed in accordance with the intent of the design standards.

B. *Paving plans.* The construction drawings, at a minimum, shall include a plan and profile of each street with stationing, top of curb grades, if applicable, or street centerline, drainage ditch flowline and existing and proposed ground lines. The typical cross section of proposed streets shall show the width of roadway, pavement type and location and width of sidewalk.

C. *Sanitary sewer and water plans.* The construction drawings, at a minimum, shall include a plan and profile of proposed sanitary sewers with stationing, grades, pipe sizes, and materials indicated and showing locations of manholes, cleanouts, etc., and a plan of the proposed water distribution system showing pipe sizes and location of valves, fire hydrants and fittings, etc. Construction details shall be included with the construction drawings, if the Developer proposes details not complying with City Standards, along with a letter listing the proposed details and the reason(s) for such details.

- D. *Storm drainage plan.* The construction drawings shall include stormwater detention plans and erosion control plans, and shall include the following:
1. The construction drawings shall include a general location map of the subdivision showing the entire watershed (a U.S.G.S. quadrangle is satisfactory) and the limits of all on-site and off-site stormwater draining to the project.
 2. The construction drawings shall include calculations showing the anticipated stormwater flow, including watershed area, percent runoff, runoff factors, storm intensity and time of concentrations showing basis for design.
 3. The construction drawings shall include a plan and profile of proposed storm sewers or channels, showing stationing, hydraulic data, pipe grades, sizes and materials, manholes, inlets, pipe connections, outlet structures, etc.
 4. The construction drawings shall include a detailed plan for any bridges, culverts, catchbasins, any other drainage structures or any other improvements to be made and shall include all of the following:
 - a. The open channel or storm drain grades, design flow, design velocity, capacity and hydraulic grade line;
 - b. A plan and profile of all culverts under any street with the design flow of water, headwater, and tailwater depth and tail water capacity;
 - c. The size of all driveway culverts to carry the design flow of water at each point of installation;
 - d. Typical ditch sections and the width of any right-of-way or easement needed;
 - e. A summary sheet of all drainage facilities;
 - f. The seal and signature, prominently displayed on each sheet, of the licensed professional engineer responsible for the design.
- E. After approval of the Construction drawings by the Planning Commission,

Sec. 46-17 Final Plat

A. General Requirements

1. *Purpose.* The purpose of the Final Plat is to create a recorded document which accurately describes the subdivision of land, both as to accurate dimensions, and as to legal provisions which are pertinent to the subdivision. Much of the reason for this step is to make the transfer of the land simpler and more certain. Land sales by reference to a legally filed plat are generally less complicated and more likely to provide the precise legal situation sought. The certainty of such sales derives from the assurance of an accurate survey and processes designed to ensure the provision of facilities necessary to service the land.
2. *Submittal.* Two (2) mylar copies and one (1) paper copy, 24-inch by 36-inch in size and one portable document format (pdf) of the Final Plat shall be submitted to the office of the Community Development Director not less than 28 days before the Planning commission meeting at which it is to be considered for final approval. At the same time, there shall be submitted three sets of the proposed drawings and specifications for all improvements and the proposed restrictions in final form; provided, however, that the Final Plat may be approved subject to later submission of final improvement drawings and specifications.

3. *Impact fees.* All required impact fees shall be collected as set forth in the City Codes and ordinances.
 4. *Code compliance.* The Final Plat shall comply with all City Codes and ordinances.
 5. *Control network.* All drawings shall be submitted in NAD 1983 Oklahoma State Plane South, US feet coordinates.
 6. The plat shall contain a clearly visible statement that the filling or obstruction of drainage channels and other conveyances within the floodplain and drainage easements shall be prohibited.
 7. Submittal of all fees required by the latest approved City of Chickasha Fee Schedule shall accompany the Final Plat.
- B. Contents of the Final Plat
1. Completed application and checklist on the appropriate form furnished by development services department;
 2. A nonrefundable application fee;
 3. Complete GIS shapefiles for inclusion in GIS system;
 4. Three (3) paper copies of the plat map, 24-inch by 36-inch in size, drawn at a scale of 50 or 100 feet to one inch;
 5. The area of each lot, outlot, and public ground in square feet rounded to the nearest square foot and in table format on the map, or in a separate document if necessitated by space limitations on the map.
- C. The Final Plat shall show the following:
1. The scale, north point and date.
 2. Title, including:
 3. The name of subdivision with phase and section number. Amended Final Plats that have been previously approved shall have the phrase "replat of" before the subdivision name along with a description of the portion of the original plat being re-platted.
 4. The name of city, county, and state.
 5. The location of the subdivision referenced to section, range, and township.
 6. The location and description of all section corners and permanent survey monuments in or near the tract to at least two of which the subdivision shall be referenced. Reference, based upon State Plane Oklahoma North with NAD83 datum, may be by separate digital submission once Final Plat is ready for recording.
 7. The length of all required lines dimensioned in feet and decimals thereof, and the value of all required true bearings dimensioned in degrees, minutes and seconds as hereafter specified.
 8. The boundary lines of the land being subdivided and the location of all subdivisions, and rights-of-way, immediately adjacent to the perimeter of the subdivision.
 9. The lines of all proposed rights-of-way and easements fully dimensioned by lengths and bearings.

10. All curves including rights-of-way and property lines shall be labeled with a number or alphabetical letter. The curve data labeled with matching numbers or alphabetical letters shall be shown on the plat in tabular form.
11. The full name of all proposed streets as defined in Section 46-24.
12. The centerline and width of all rights-of-way.
13. The lines of all proposed lots fully dimensioned by lengths and bearings, except where a lot line is parallel with a block line, the bearing may be omitted.
14. The lines of all proposed outlots or public grounds fully dimensioned by lengths and bearings. Public grounds shall be labeled as such. Outlots shall be labeled with the word "Outlot" followed by a consecutive lettering system starting with the letter A.
15. The blocks numbered consecutively throughout the entire subdivision and the lots numbered consecutively throughout each block.
16. The location, width, and purpose (i.e., drainage, utility, pedestrian, etc.) of all proposed easements with dimensions to be dedicated with the plat.
17. Statement dedicating any right-of-way, easements, or land to be used for streets, alleys, ways, commons or other public areas to the "City of Chickasha, Oklahoma, a municipal corporation," in accordance with 11 O.S. § 41-109.
18. Signature blocks containing the following shall be included on the approved Final Plat prior to filing with the County Clerk:
 - i. Signed owner's certificate and dedication.
 - ii. Licensed professional engineer or registered land surveyor's certificate signed and sealed.
 - iii. Certificate for release of mortgage for any portion dedicated to the public.
 - iv. Certification of Planning commission approval.
 - v. Certification of City Council approval.
 - vi. County treasurer certificate

D. Action by Planning commission

1. It shall be the duty of the Planning commission to act upon the Final Plat within 45 days after the Final Plat application has been made and submitted for final approval. This approval and the date thereof shall be shown on the plat over the signature of the Planning commission chairperson or secretary-member. Unless stipulation for additional time is agreed to by the Subdivider, and if no action is taken by the Planning commission at the end of 45 days after submission, the plat shall be deemed to have been approved. If the Final Plat is rejected, grounds for this rejection shall be stated in writing, a copy of which shall be transmitted to the applicant. The reasons for rejection shall refer specifically to those parts of the Comprehensive Plan or ordinance or regulation with which the plat does not comply.
2. A Final Plat approved by the Planning Commission shall be transmitted to the City Council with the report and recommendations of the Planning commission within 30 days of the Planning commission action for hearing before and City Council action thereon.
3. A Final Plat rejected by the Planning commission shall not be considered further unless the applicant, within 15 days of the action by the Planning commission, shall

file an appeal in writing with the City Clerk and the Community Development Director for a public hearing before the City Council.

E. Approval and Acceptance by City Council

Before recording the Final Plat, it shall be submitted to the City Council for and approval of the Final Plat and acceptance of public ways and service and utility easements and land dedicated to the public use. This approval of the Final Plat shall be shown over the signature of the Mayor and attested by the City Clerk. The rejection of any plat or plan by the City Council shall be deemed a refusal of the proposed dedication shown thereon.

Sec. 46-18 Replats, Amending Plats, Correcting Plats and Plat Vacation

A. General

1. *Replats required.* A replat is required for property in which there has been a change in lot allocation, dedicated infrastructure or easements.
2. *Requirement waived.* The Community Development Director may waive this requirement if the replat involves minor changes.
3. *Certified copies required.* Certified copies of the entire subdivision and deed restrictions shall accompany replats.
4. *Subject to Final Plat requirements.* Replats are subject to the same requirements as Final Plats and shall contain the information required by this Article.

B. Application

Application procedure shall be that of the Final Plat and shall contain information required by this Article.

C. Correction of errors in plats

All plat vacation requests shall comply with the provisions of 11 O.S. § 42-101 et seq.

D. *Plat vacation.*

All plat vacation requests shall comply with the provisions of 11 O.S. § 42-101 et seq.

Sec. 46-19 Exceptions to platting procedures

A. These regulations shall not apply to the sale of land by metes and bounds in tracts of more than five (5) acres.

B. Short Form Subdivision

Whenever a tract or previously subdivided parcel under single ownership is to be re-subdivided into three (3) or fewer lots, the proposed subdivision may be exempt from the procedural provisions of these regulations, and the requirement for a Preliminary and a Final Plat may be waived. Such a subdivision of tract, parcel or lot shall be defined as a Short Form Subdivision under the following conditions.

1. Purpose and Intent

- a. The purpose of the Short Form Subdivision process is not to allow extensive subdividing and/or re-subdividing of large tracts, parcels or lots. When a Short Form Subdivision shows one or more tracts, lots or parcels containing more than one acre of land and there are indications that such tracts, lots or parcels will eventually be re-subdivided or extensive improvements are required, the Director and/or Planning Commission may require the applicant to submit a Preliminary and

Final Plat. In such a case, platting procedures and requirements shall be followed as specified by these regulations.

- b. The classification of a subdivision as Short Form Subdivision shall not be construed as a waiver of any requirement of these regulations nor the provisions of any other ordinance or statute pertaining to the property.

2. Short Form Subdivision Application Procedures

Application for Short Form Subdivision approval shall be filed with the Director. The application shall consist of:

- a. A deed(s) on each tract with legal description to be approved.
- b. A certified survey, prepared by a land surveyor registered in the State of Oklahoma, shall be submitted on the proposed tract and the re-subdivision thereof. The survey shall show the following:
 - i. Each new tract being formed shall be labeled "Tract A, Tract B, and/or Tract C";
 - ii. The legal description of the original tract of land and each new tract being created by the subdivision;
 - iii. Scale, north point, and date;
 - iv. Name and address of the owner of record;
 - v. Key map showing the location of the reference to existing and proposed major streets and governmental section lines;
 - vi. Location of existing buildings and dedicated streets at the point where they adjoin and/or are immediately adjacent to the subdivision;
 - vii. Length of boundaries of the tracts created measured to the nearest hundredth foot and proposed location and width of streets, alleys, and easements and building setback lines where applicable;
 - viii. Original signature and seal of the registered land surveyor preparing the plat of survey properly notarized.
- c. Copy of the original deed showing the legal description of the tract, site or parcel as a short form subdivision;
- d. Deeds of tracts, parcels or lots bordering the proposed Short Form Subdivision if deemed necessary by the Director;
- e. All instruments for the dedication of required public easements and rights-of-way shall be submitted. This shall mean, in cases where private easements are required, that the applicant must submit certified copies of the instrument(s) filed of record with the appropriate County Clerk;
- f. Percolation test results approved by the Health Department and/or the Department of Environmental Quality, if applicable;
- g. A filing fee in the amount of seventy-five dollars (\$75.00) shall accompany the Short Form Subdivision application. The filing fee is not refundable.

3. Short Form Subdivision Review Procedure

The Director and City staff shall review the proposed Short Form Subdivision to ensure compliance with all design and improvement requirements of these regulations. The Director may submit the application for review and comment to other agencies and/or City Departments, as he/she deems necessary.

4. Short Form Subdivision Approval Procedure

a. Staff level approval

- i. For Short Form Subdivisions of lots, blocks or parcels approved for Commercial, Industrial, or high density Multiple Family Residential land uses in an approved Planned Unit Development, approval may be granted at staff level under the following conditions:
 1. All other requirements of this Section are met.
 2. The proposed Short Form Subdivision is in substantial conformance with the approved PUD Master Development Plan Map. Substantial conformance shall be determined by the Director and based on the provisions set forth in these regulations
- ii. If items "1" and "2" of the above paragraph are not met, the Director may require the applicant to submit a Preliminary and Final Plat and/or a revised Planned Unit Development application to be reviewed and approved by the Planning Commission and City Council.
- iii. After review of the application and within ten (10) working days of the official date of application, the Director shall approve or not approve the application for Short Form Subdivision and shall notify the applicant of the decision. The applicant may waive this requirement and consent to an extension of said period. If the application is approved, each deed shall be certified by the Director as the designated representative of the Planning Commission. If the application is denied, the Director shall inform the applicant of reasons for denial and shall advise him/her on appropriate alternate procedures.

b. Planning Commission Approval

- i. In all cases where staff level approval is not allowed, the Director or his/her designee shall prepare a written report thereon which shall be forwarded to the Planning Commission not more than twenty-one (21) days after receipt of the Short Form Subdivision application for consideration at the next regular meeting of the Planning Commission.
- ii. Upon approval by the Planning Commission, each deed shall be certified by the signature of the Chairman or his/her designee. If the application was denied, the reasons for denial shall be stated in writing with references made to the express provision of the regulations to which the proposed Short Form Subdivision does not conform and shall be transmitted to the applicant.
- iii. Whenever a deviation is required from the improvement requirements contained herein or an easement or other element is dedicated, the action of the Planning Commission shall be forwarded to the City Council for its approval and acceptance of dedications. For all the other types of Short Form Subdivision applications the action of the Planning Commission is final.

5. Improvements Required

- a. All current subdivision regulations shall be complied with including all ordinances and regulations relating to the improvement of street, the installation of water, sewer and drainage facilities and the dedication of required easements.

- i. The extension and/or installation of sanitary sewer facilities shall be required as prescribed by these regulations. If a subdivided tract, parcel or lot is proposed to utilize an individual sewage disposal system, the following conditions shall apply:
 1. Percolation test results for each tract affected approved by ODEQ shall be submitted with the Short Form Subdivision application.
 2. The individual sewage disposal system shall be installed and inspected in accordance with ODEQ and the City of Chickasha requirements.
 3. Minimum lot size shall be:
 4. Lots with water wells and septic tanks - two- (2) acres.
 5. Lots with septic tanks only - one (1) acre.
 6. All requirements of "Septic Tank and Subsurface Tile Systems", Bulletin No.600, Oklahoma State Department of Health, as currently adopted or subsequently amended shall be met.
 7. The width of the lot at the front building line shall not be less than one hundred (100) feet.
 8. The location of any tract can be no closer than 330' from the closest sanitary sewer line.
 - ii. The extension of and/or installation of water facilities shall be required to serve this tract, parcel or lot as specified by the regulations. If a private water well is utilized, the following conditions shall apply:
 1. Approval of water well drilling by OWRB and/or ODEQ must be secured.
 2. The tract, parcel or lot must meet the location criteria and OWRB and/or ODEQ requirements if water well and septic tank are both used.
 - b. In all cases where sanitary sewer and/or public water facilities are not available and the extension of such facilities is not required, the deed(s) submitted for approval shall have affixed to its face: "Not served by public sewer and/or water".
 - c. If approval of the Short Form Subdivision is conditional upon the extension and/or installation of any public improvements, upon Short Form Subdivision approval by the Planning Commission and acceptance by the City Council, if appropriate, the applicant shall prepare and submit to the appropriate department improvement plans. All improvement plans shall be prepared in accordance with these regulations and any other applicable laws of the United States, State of Oklahoma and ordinances of the City of Chickasha. Assurance of completion of said improvements shall be made in accordance with the assurances for completion of improvements section of these regulations. Construction drawings and the assurance of completion shall be submitted prior to any building permit being issued for any lot created using the Short Form Subdivision procedure.
- C. Deed Approval at Staff Level
- Subdivision of land shall be classified as a deed approval under the following conditions:
1. No additional tract, parcel or lot shall be created by any deed approval. Deed approval shall include:
 - a. Deed(s) resulting from the adjustment of lot lines in an approved plat.
 - b. Pre-existing or otherwise exempt deed(s) as defined.

2. No dedication or abandonment of public rights-of-way and/or easements is involved, included in, or required by, the deed approval.
3. These regulations and all other applicable ordinances and statutes are satisfied without the construction of streets, water facilities, storm drainage facilities or other improvements except as necessary to directly serve the created lots and to provide a direct connection to an existing and approved system.
4. Purpose and Intent

It is the intent of this provision to limit this classification and procedure to those cases where the improvements required by these regulations have been provided and all such improvement requirements, except for the extension of service to individual lots, have been satisfied under applicable sections of these regulations.

 - a. The classification of a subdivision as a deed approval procedure shall not be construed as a waiver of any requirements of these regulations nor the provisions of any other ordinance or other statute pertaining to the property.
 - b. Staff Level Deed Approval Procedure

Application for deed approval review shall be filed with the Director. The application shall consist of the following:

 - i. The deed with legal description to be approved. In the case of a lot line adjustment, all deeds affected shall be submitted for approval concurrently.
 - ii. Copy of original deed(s).
 - iii. A certified survey, prepared by a land surveyor, registered in the State of Oklahoma showing the following:
 1. The legal description of the subject tract;
 2. Scale, north arrow and date;
 3. Name and address of owner of record;
 4. Key map showing the location of the subject tract, parcel or lot referenced to existing and proposed major streets and government section lines;
 5. Location of existing structures, dedicated and/or private streets where they adjoin and/or are immediately adjacent to the lot adjustment, showing widths where applicable;
 6. Easements and location of public utilities to serve the tract, parcel or lot showing widths where applicable;
 7. Original signature and seal of the registered land surveyor preparing the plat of survey properly notarized.
 8. Certification of Flood Plain compliance by a registered land surveyor, if applicable;
 - iv. Deed of tracts or lots bordering the proposed deed approval if deemed necessary by the Director.
 - v. A filing fee in the amount listed in the latest approved City of Chickasha Fee Schedule shall accompany each deed submitted for deed approval application. The filing fee is not refundable.
 - c. The Director shall review the application and may submit it for review and comment to other agencies and/or departments as he/she deems necessary. Within ten (10) working days of the official date of application, the Director shall approve or not

approve the application for deed approval and shall notify the applicant of the decision. The applicant may waive this requirement and consent to an extension of said period. If the application is not approved by the Director, the applicant may apply to the Planning Commission for a public hearing following the same procedures as a Short Form Subdivision.

5. Deed Approval for Lot Line Adjustment

The purpose of this form of deed approval is to allow adjustments to be made to lot lines of platted lots for the purpose of adjusting the size of a building site(s); however extensive re-platting shall not be accomplished by use of this Section.

- a. Exceptions to these regulations designated as deed approval lot line adjustment shall not violate any of the provisions of these regulations as to requirements for design improvements and shall constitute only procedural exceptions as herein stated.
- b. In addition to the criteria found in Section 30.2 of these regulations, the approval of any lot line adjustment shall not result in the creation of any lot which is unusable or does not meet the requirements of these regulations or any ordinance of the Chickasha Municipal Code.
- c. All lots affected shall be submitted for approval concurrently.
- d. An application and filing fee shall accompany each deed submitted for approval.

6. Other-Deeds Eligible for Staff Level Approval

The Director has the authority to approve deeds under the following conditions:

- a. Pre-existing deeds: The property conveyed by the deed submitted for review existed in its present configuration prior to its annexation to the City or prior to the adoption of the Subdivision Regulations.
- b. Exempted Deeds
 - i. The configuration of the property to be conveyed was created by court decree or by an action of other governmental authority. Documentation of such court decree or governmental action shall be required.
 - ii. The property to be conveyed is bounded on all sides by properties which have previously received deed approval by the Planning Commission or by the Director. Documentation of such shall be required.
 - iii. The deed submitted is exempted from the requirements of Planning Commission approval by a provision of State Law. Documentation of such shall be required.
- c. Other Deeds: The property to be conveyed is located within a non-complying subdivision or other area of the City for which specific guidelines, governing development and/or redevelopment have been adopted by the Planning Commission. Said property shall be in full compliance with the same. A deed conveying property in a subdivision which is found to be nonconforming because of ordinance or regulation changes will be considered to be a preexisting deed and may be approved administratively so long as the subdivision was in conformance with the ordinances and regulations in force at the time of its creation.

7. Force of Approval

Once the initial deed or any subsequent deed has been approved through the deed approval process either by Short Form Subdivision, lot line adjustment or exemption by the Planning Commission or Director, such approval relates back to the original approved legal description and covers all future conveyances using the same legal description.

8. Limits of Authority

No further delegations of the Planning Commission's authority for the approval of deeds are hereby granted or implied. The Director is hereby authorized by the Planning Commission to sign or stamp approval on the race or those deeds receiving approval by any manner of the deed approval process. Nothing in this Chapter shall prevent the applicant from requesting a public hearing before the Planning Commission.

ARTICLE III. – DESIGN

Sec. 46-20 COMMUNITY DESIGN PRINCIPLES

A. Design purpose.

1. The quality of design of the urban area is dependent on the quality of design of the individual subdivisions that compose it. Good community design requires the coordination of the efforts of each Subdivider and Developer of land within the urban area. Therefore, the design of each subdivision shall be prepared in accordance with the principles established by the Comprehensive Plan for land use, circulations, community facilities and public utility services, and in accordance with the principles set down in this Article.
2. Minimum standards for development are contained in the zoning ordinance, the Building Code and in these regulations. However, the Comprehensive Plan expresses policies designed to achieve an optimum quality of development in the urban area. If only the minimum standards are followed, as expressed by the various ordinances regulating land development, a standardization of development will occur. This will produce a monotonous urban setting. Subdivision design should be a quality to carry out the purpose and spirit of the policies expressed in the Comprehensive Plan and in these regulations and to permit the maximum exercises of initiative by the Developer rather than be limited to the minimum standards required herein.

B. Neighborhood development principles

1. It is intended that the urban area shall be designed as a group of integrated residential neighborhoods and appropriate commercial and industrial and public facilities. The neighborhood, as a *planning unit*, is intended as an area principally for residential use, and of a size that can be served by one elementary school. Provision for religious, recreational, educational and shopping facilities to serve the residents of the neighborhood should be considered in the design of each neighborhood.
2. The size of lots and blocks and other areas for residential, commercial, industrial and public uses should be designed to provide adequate light, air, open space, landscaping and off-street parking and loading facilities.

3. The arrangement of lots and blocks and the street system should be designed to make the most advantageous use of topography and natural physical features. Methods for preservation of tree masses and large individual trees shall be presented by the Subdivider or his subcontractor to the Commission. Environmentally sensitive areas shall be identified and made the subject of special requirements in the platting process. The system of sidewalks and roadways and the lot layout should be designed to take advantage of the visual qualities of the area.

C. Circulation

1. Circulation within the urban area shall be provided in accordance with the design criteria in this Section.
2. Each subdivision shall provide for the continuation of all arterial streets and highways as shown in the Comprehensive Plan.
3. Local streets shall be designed to provide access to each parcel of land within the residential neighborhoods and within industrial areas, and in a manner that will discourage use by through traffic. They shall be planned so that future growth will not require the conversion of local streets to collector or arterial traffic functions. Ingress and egress to residential properties shall be provided only on local streets.
4. Collector streets shall be designed to provide a direct route from local streets to the arterial streets and highways. Because collector streets are not designed in detail as a part of the Comprehensive Plan it is necessary to set down guidelines in these regulations as to how they will be developed. In order that the collector streets be able to function for their major purpose, the collection of traffic, they must be designed in accordance with the following principles:
 - a. Collector streets must handle a volume of movements ranging between two thousand four hundred (2,400) and eight thousand (8,000) average daily traffic. Because of this special function, these regulations require that the classifications of local and collector streets be designated on the face of the Preliminary Plat and Final Plat;
 - b. To provide collection when this number of movement occurs (2,400), collector streets must be located in the neighborhood patterns so as to serve each area of approximately two hundred fifty (250) dwelling units, including those in future developments. In order to provide continuity to the arrangement of collector streets from one addition to another, the Commission and staff must be involved in the earliest stages of subdivision planning, the drawing of the Preliminary Plat; and
 - c. To accomplish the traffic collection function, collector streets shall be built thirty-two (32) feet wide (face-of-curb to face-of-curb). The rights-of-way for collector streets shall be sixty (60) feet wide.
5. Pedestrian ways should be separated from roadways used by vehicular traffic. In order to provide residential building areas with pedestrian access to all neighborhood facilities, including elementary schools, parks, playgrounds, churches and shopping centers, sidewalks shall be installed along both sides of designated collector streets. Sidewalks shall be located one foot inside the street right-of-way unless other locations are approved by the Public Works Director on the basis of physical conditions, such as topography, existing trees, etc. Sidewalks shall be a minimum of four feet in width.

Sec. 46-21 Applicable Standards

Improvements within subdivisions must be installed and designed in accordance with the standards of this Chapter, and all other applicable requirements of this UDC and the following, as applicable:

- A. All applicable provisions of Oklahoma Statutes;
- B. The City's Building and Construction Codes;
- C. The intent of the Comprehensive Plan, Official Zoning Map, and Capital Improvements Program, including all streets, drainage systems, and parks shown on the Official Zoning Map or Comprehensive Plan, as adopted;
- D. Rules and regulations of the Department of Environmental Quality;
- E. Rules of other local and state agencies responsible for approving facilities and services, as applicable;
- F. The rules of the Oklahoma Department of Transportation where applicable and as specified herein; and
- G. The standards and regulations adopted by the Planning Commission and all boards, commissions and agencies of the City.

Sec. 46-22 Land Suitability.

- A. Land subject to flooding, improper drainage and erosion, and land deemed to be topographically unsuitable for residential or for any other uses as may continue such conditions or increase danger to health, safety, life or property unless approved steps are taken to diminish the above mentioned hazards may be set aside for uses as set out by the Planning Commission.

Sec. 46-23 *Access to Public Right-of-Way*. Every subdivision and lot, tract or parcel therein shall abut and be served by a publicly dedicated street or private street.

Sec. 46-24 Street Names and Addresses

The Planning Commission and City Council shall have the authority to determine the street names, subdivision names and numbers and to require changes in any proposed names. All proposed lots, consecutively numbered, their dimensions, building setback lines, and street addresses shall be designated on each residential plat. Such names and addresses may be subject to change by the City and should never be relied on in place of legal descriptions.

- A. The Developer shall be responsible for proposing Street Names and Addresses and shall submit same on the Preliminary Plat. Street Names and Addresses shall be subject to the approval of the Planning Commission.
 - 1. No street names shall be used which will duplicate or be confused with the names of existing streets.
 - 2. Streets that are obviously in alignment with other already existing streets shall bear the names or numbers of said existing streets.

3. Addresses shall follow the procedure established by the Community Development Department.
- B. **Street Name-Change Procedures.** Proposed street name changes, whether or not the street is part of a recorded plat, shall be subject to the following review process:
 1. A legal advertisement for a public hearing by the City Council shall be published 7 days prior to the hearing.
 2. Notice of the proposed name change public hearing shall be mailed to the owners of property having access to, and an address on, the subject street. Said notice shall be mailed at least 10 days prior to the hearing.
 3. The proposed name shall not duplicate, or sound like, an existing street name within the service district of the local 911 office.
 4. The legal advertisement shall identify the beginning and terminus points of the name change along the street.
 5. The proposed Street Name Change shall be approved only if the City Council approves said name change by resolution, stating the date by which the name change becomes official.

Sec. 46-25 Street Design Standards

- A. ***Conformity to comprehensive plan.*** The arrangement, character, extent, width, grade and location of all streets shall conform to all of the elements of the Comprehensive Plan and shall be designed in accordance with the following provisions:
 1. All streets shall have 6" tall curbs and provide storm drainage as required by City Codes.
 2. All streets shall be contained in right-of-way as defined hereafter, unless otherwise approved by the Commission and the City Council.
 3. Major streets shall be planned to conform with the major street plan;
 4. Whenever a subdivision abuts or contains an existing or proposed major street, the Planning commission may require service streets, reverse frontage with screen planting contained in a nonaccess reservation along the rear property line, deep lots, or such other treatment as may be necessary for adequate protection of residential properties and to afford separation of arterial and local traffic;
 5. Where a subdivision borders on or contains a railroad right-of-way or limited access highway right-of-way the Planning commission may require a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of intervening land. Such distances also shall be determined with due regard for the requirements of approach grades and future grade separation structures;
 6. Reserve strips controlling access to streets shall be prohibited except where their control is placed in the city under conditions approved by the Planning commission and acceptable to the Subdivider;
 7. Where the plat to be submitted includes only part of the tract owned or intended for development by the Subdivider, a tentative plan of a proposed future street system for the unsubdivided portion may be required by the Planning commission;

8. Where a tract is subdivided into larger than normal building lots or parcels, such lots or parcels shall be arranged to permit the logical locations and opening of future streets and appropriate re-subdivision, with provision for adequate utility easements;
9. Minor streets shall be laid out so that their use by through traffic will be discouraged;
- B. *Street widths*. Street right-of-way widths, grades, paving widths, horizontal and vertical alignments, and sight distances shall meet standards of Table 1, Design Standards for Chickasha City Streets. The paved width of all streets shall be adequate to serve the existing and future estimated traffic load for the facility and shall comply with these design standards.
 1. No street centerline grade shall be less than five-tenths of a percent (0.5%). This minimum grade shall be maintained in all directions within intersections. Sag vertical curves shall be designed so that positive drainage is maintained along the gutter to the drainage collection point.
 2. Where two (2) collectors, local streets, or cul-de-sacs at any location or right-of-way meet at an angle between eighty (80) and one hundred (100) degrees at a dead end, a knuckle will be required in lieu of the one hundred (100) foot centerline radius requirement. See the Standard Drawings for knuckle dimensions.
 3. There shall be a tangent section of fifty (50) feet in length or as required by AASHTO between all reverse curves to provide for a smooth flow of traffic.
 4. Sight distance for vertical alignment shall be determined by measuring from a point four (4) feet above the roadway surface along a line of sight to a point four (4) inches above the roadway surface.
- C. The following special provisions shall apply:
 1. Cul-de-sac: A cul-de-sac shall not exceed five hundred (500) feet in length, measured from the nearest street right-of-way line to the outer curb line of the cul-de-sac. A cul-de-sac shall be provided with a turnaround having a radius of not less than fifty (50) feet at the property line and not less than forty-two (42) feet at the curb line. There may be provided in the center of the turnaround an unpaved island, improved with grass and landscaping that will not interfere with sight distance, which will leave a minimum paving of twenty-six (26) feet in width (curb-face to curb-face). Where center medians are used in cul-de-sacs, they shall be so designed that they will conform to the shape or form of the outside paving radius of the turnaround in order to promote a safe and more orderly traffic flow.
 2. When topography or ownership create a hardship, the Planning Commission may waive the 500' maximum cul-de-sac length, but in no case shall the cul-de-sac length be in excess of 1000'.
 3. Dead-end streets shall not be permitted except where they relate to the extension of the street in the development of adjoining land. Such temporary dead-end streets shall terminate with a turnaround, as described in subsection K of this Section, in an appropriate right-of-way.
- D. Design Standards for Intersections
 1. Streets shall intersect at approximately right angles (90 degrees).
 2. No more than two (2) streets shall intersect at anyone point unless specifically approved by the Planning Commission.

3. Street jogs. Street jogs with centerline offsets of less than 200 feet shall be avoided.
 4. Street corners shall have a minimum radius of twenty-five (25) feet at the curb line. Street intersections involving major streets and highways shall have a minimum street corner radius of thirty (30) feet at the curb line.
 5. Alley intersections and abrupt changes in alignment within a block shall have the corners rounded to permit safe vehicular movement in accordance with Section 46-22 and standard engineering practice.
- E. Half streets shall be prohibited, except where essential to the reasonable development of the subdivision in conformity with the other requirements of these regulations, and provided that the Planning commission finds it will be practical to obtain the dedication of the other half of the street easement when the adjoining property is subdivided. Wherever a half street is adjacent to a tract to be subdivided, the other half of the street shall be constructed. The longitudinal joint shall be as shown on the Standard Drawings.
- F. The arrangement of streets shall be such as to cause no undue hardship in the subdividing of adjacent properties. The Planning commission may require the dedication of street rights-of-way to facilitate the development of adjoining properties.
- G. Driveways of a width sufficient for the parking of two (2) cars are encouraged where the function of the street renders curbside parking inadvisable.
- H. Street signs shall be placed by the Developer in accordance with Section 46-45 of this Code.
- I. Property lines at street intersections shall be rounded with a radius of twenty (20) feet or a greater radius where the Planning commission may deem it necessary. The Planning commission may permit comparable cutoffs or chords in place of rounded corners.
- J. At least two (2) separate points of access to an arterial street shall be provided for each subdivision and/or neighborhood containing more than fifty (50) lots. The location of the access points shall be designed such that they meet the intent of providing separate access during emergency situations. Said access may be made through existing subdivision streets to the arterial streets. An all-weather road may be used as one of the access points provided it is approved by the City Engineer and the fire marshal. The all-weather road must have adequate base to support any fire equipment and emergency vehicles and must have oil and chip surface as a minimum. The easement for this road shall be dedicated on the record plat or granted to the City prior to the approval of the Final Plat by Council.

Sec. 46-26 Driveway Standards

A. Purpose of Section

It is the intent of these requirements to set forth standards and criteria for curb openings and driveways in order to:

1. Minimize hazards to pedestrians by reducing areas of possible conflict between pedestrians and vehicles and to define such areas;
2. Reduce hazards to vehicles by limiting areas of conflict between vehicles;
3. Increase the capacity of roads and intersections by reducing points of conflict between vehicles;

4. Ensure that vehicles diverge from and merge with the roadway traffic at a proper angle and in conformity with the rules of the road;
5. Provide sufficient space for the installation of traffic-control devices, utilities and crosswalks.

B. General requirements.

1. The requirements of this Article shall uniformly apply to all land within the city.
2. All driveways shall be permanently paved with hard-surfaced pavement. The requirement of hard-surfaced access driveways may be waived by the Public Works Director in areas not designated for urban development and in other areas if it is determined that the public convenience, health or safety is not adversely affected. However, all portions of access driveways on public rights-of-way, connected to paved streets for which the grade has been established, must be permanently paved with hard-surfaced pavement and comply with all City of Chickasha Codes relating to driveway construction. Permanent hard-surfaced pavement shall mean a surface covering over earth, gravel or other natural or artificial base or foundation, which shall meet or exceed the minimum standards listed herein.
3. Any new curb openings or driveways or any future additions or changes to existing curb openings or driveways shall comply with the requirements set forth herein and in other applicable sections of this Code.
4. Prior to making any curb opening or driveway an application shall be submitted to the Building Official. The application shall be accompanied by a plot plan fully dimensioned and drawn to scale, in duplicate, which shows the existing and proposed access, proposed surfacing, drainage and location of permanent structures and aboveground utilities. The application will also have, as an attachment, proof of ownership.
5. Once proper application is made, the plot plan and other supporting data shall be reviewed by the Public Works Director and Community Development Director. Upon completion of their respective reviews, they shall forward their recommendations to the Building Official for a final disposition. If approval is granted, the necessary permit will be issued upon payment of the required fees as set forth in the latest approved City of Chickasha Fee Schedule. No permits shall be issued until or unless all required fees have been paid in full. If approval is not granted, the applicant shall receive a written notice from the Building Official explaining the reasons for disapproval.
6. Curb opening applications shall not be required when the applicant submits curb opening information on a building permit application or for cutting of a curb in conjunction with a paving cut for which a permit has been obtained under the provisions of Chapter 10 of this Code.
7. No building, construction, site improvement or other development issued a driveway permit or building permit shall be considered satisfactorily completed until driveway construction or modification therein required has been completed, and no Certificate of Occupancy or Completion shall be issued therefore until such driveway construction or modification is completed.
8. In accordance with Section 54-75 of this Code, no building, construction, site improvement or other development shall be considered satisfactorily completed until public pedestrian sidewalks and curb ramps have been completed, and no Certificate

- of Occupancy or Completion shall be issued therefore until construction of such sidewalks and curb ramps are completed.
9. Building Permits or other Permits for remodeling or expansion of commercial or industrial properties that constitute a substantial improvement as defined in this chapter shall be issued contingent upon modifications being made by the applicant to existing non-conforming driveways. In instances where full compliance with these standards is impractical, the Building Official, in consultation with other City Staff members as appropriate, may approve alternative improvements in order to control turning movements and to restrict the number and width of driveways. These alternative improvements may include, but shall not be limited to:
 - a. Reduction of existing driveway openings
 - b. Installation of returns
 - c. Installation of barrier islands adjacent to the edge of the street
 - d. Modification of parking arrangement or striping to restrict backing onto a public street.
 10. Sealed surface driveways – single- or multi-family residences
 - a. All driveways and off-street parking areas located on platted residential lots in the city shall be paved with a sealed surface pavement and maintained in such a manner that no dust will be produced by continued use. Other pavement material may be used upon approval by the planning commission. The width of the driveway shall extend a minimum of one foot beyond each side of the garage door opening with a minimum width of 12 feet.
 - b. Building Permits or other Permits for remodeling or expansion of single- or multi-family residential properties that constitute a substantial improvement as defined in this chapter shall be issued contingent upon modifications being made by the applicant to existing non-conforming driveways. This provision shall not apply to permits issued for decks, porches, and ramps and shall apply only if the public road that serves the residence has a paved surface. The width of the driveway shall extend a minimum of one foot beyond each side of the garage door opening with a minimum width of 12 feet for drives that are located in such a manner as to allow two vehicles to park without encroaching upon the easement. For driveways that are not of sufficient depth to allow two vehicles to park outside of the easement, the drive shall be a minimum of 18 feet wide to allow for the side-by-side parking of two vehicles.
 - c. If the requirement of subsection (b) of this section creates a topographic or financial hardship, then an appeal may be made to the city planning commission.
 11. Any new curb opening or driveway or any future changes to existing curb openings or driveways which connect with a state or federal highway shall be approved by the appropriate office of the State Department of Transportation.
 12. If any new curb openings or any future changes to existing curb openings result in the abandonment or closing of an existing curb opening, the existing curb opening shall

be restored to be compatible with the adjacent curbing, as approved by the Public Works Director, at the expense of the property owner.

C. Design requirements for curb openings and driveways

1. The location, number and size of curb openings and driveways shall conform to the requirements stated herein and shall be subject to approval by the Building Official, Public Works Director and the Community Development Director.
2. No curb opening or driveway may be placed within, on or across any sight triangle as defined in this Chapter, except for public fire and police responder facilities. The sight triangle in all R-3, R-4, commercial and industrial zones shall be defined by barrier curb to prevent encroachment.
3. The number of curb openings permitted and size of driveways shall conform to the standards outlined in Figure 1, contained in this Chapter.
4. Curb openings and driveways in C-2 and C-3 districts for a planned neighborhood shopping center or planned community shopping center shall conform to Figure 5, of this Chapter, as to placement, size and curb radii.
5. Curb openings and driveways to one- and two-family dwellings shall conform to Figures 1, 2, 3, 4, and 11, of this Chapter, as to placement, size and curb radii.
6. Curb openings and driveways in all districts, except for one- and two-family dwellings and planned neighborhood shopping centers within the C-2 district and planned community shopping centers within the C-3 district, shall conform to Figures 6 and 7 of this Chapter, as to placement and separation.
7. All curb radii shall conform to the standards established in Figure 8 of this Chapter, except for one and two-family dwellings and planned neighborhood shopping centers within the C-2 district and planned community shopping centers within the C-3 district.
8. The center line of all driveways shall intersect with a public street at a ninety-degree angle to a minimum sixty-degree angle for maximum sight distance.
9. All driveways on public street right-of-way shall be constructed as detailed in Figure 11 of this Chapter.
10. All one-lane egress and ingress driveways for all uses except for one- and two-family residential uses shall be greater than fifteen (15) feet but less than twenty (20) feet wide, with the combined width not to exceed the maximum in Figure 1 of this Chapter.
11. For other than one- and two-family residential uses, alleys shall not be the primary means of access to the main parking area but paved alleys with a minimum width of twenty (20) feet may be a secondary means of access to the main parking area or a primary means of access to a secondary parking area.
12. Any curb opening or driveway in existence as of the date of adoption of this Land Development Code, connecting to an arterial street with a curb radius less than that required in Figures 2, 3, 4, 5, 6, 7, and 8 of this Chapter may be continued, improved, and/or reconstructed with the existing curb radius.

Sec. 46-27 Alleys

- A. For commercial and industrial lots, alleys shall not be the primary means of access to the main parking area but paved alleys with a minimum width of twenty (20) feet may be a

secondary means of access to the main parking area or a primary means of access to a secondary parking area.

- B. Alleys shall be provided in commercial and industrial districts, except the City Council may waive this requirement where other definite and assured provision are made for service access, such as off-street loading, unloading and parking consistent with and adequate for the uses proposed.
- C. Alleys serving commercial and industrial areas shall be not less than thirty (30) feet in width of right-of-way.
- D. Alleys are not required for residential areas but when provided shall be not less than twenty (20) feet in width of right-of-way.
- E. Alley intersections and sharp changes in alignment shall be avoided; but, where necessary, corners shall be rounded sufficiently to permit safe vehicular movement.
- F. Dead-end alleys shall be avoided where possible but if unavoidable, shall be provided with adequate turnaround facilities at the dead end, as determined by the Commission and approved by the Council.
- G. No obstructions shall be permitted in areas reserved for alleys.

Sec. 46-28 Stormwater, Drainage and Erosion Control

- A. The purpose of this Section is to establish standard principles and practices for the design and construction of drainage systems within the city.
- B. The design and construction of all developments shall comply with the provisions of Chapter 46, Article VI, Stormwater Quality and Chapter 46, Article VII, Floodplain Development and Management. In the event of conflict between any other ordinance or regulation of the City of Chickasha and these Articles, the provisions of these articles shall govern.
- C. It is the goal of this Section to limit stormwater runoff rates after development to their historic rates or less, as an aid in erosion control and to decrease the probability of downstream flooding.
- D. The City's design criteria and minimum drainage requirements are published in the General Drainage Policy for the City of Chickasha, latest edition, and shall be utilized for all new development and redevelopment within the City of Chickasha.

TABLE 1 DESIGN STANDARDS FOR CHICKASHA CITY STREETS					
ELEMENT	FREEWAY	MAJOR ARTERIAL	MINOR ARTERIAL	COLLECTOR	LOCAL
DESIGN SPEED Outlying Area	65 mph	50 mph	40 mph	30 mph	30 mph
DESIGN SPEED Urbanized Area	55 mph	40 mph	30 mph	30 mph	30 mph
Minimum Centerline Radius (feet) (ARC Type Curve)	500	400	300	100	100
MAXIMUM GRADE Outlying Area	4%	7%	7%	10%	15%
MAXIMUM GRADE Urbanized Area	6%	7%	7%	10%	15%
Minimum Grade	Per ODOT Design Manual	0.5%	0.5%	0.5%	0.5%
Stopping Sight Distance (feet)	600 / 475	350	200	200	200
Number of Traffic Lanes	4 min.	4 min.	4	2	2
Total Minimum Street Width (feet) (Face to Face of Curbs)	Per ODOT Design Manual	50	50	32	26
MINIMUM PAVING THICKNESS Asphalt Section	Structurally Designed	(See Standard Drawings)			
MINIMUM PAVING THICKNESS Concrete Section	Structurally Designed	Structurally Designed	Structurally Designed	6"	6"
Minimum Right-of-way Width (feet)	Per ODOT Design Manual	120	100	60	50
Access Control	Full	Planned	Planned	NOT REQUIRED	NOT REQUIRED
Structural Design Load	HS-20	HS-20	HS-20	H-15	H-15
Vertical Clearance	16.5'	15.5'	15.5'	15.5'	15.5'
Surface Type	Paved	Paved	Paved	Paved	Paved

Sec. 46-29 Easements and dedications

A. Generally.

1. The Developer shall provide and bear all cost of dedication to the City of easements and rights-of-way in accordance with the requirements in this Chapter.
2. Public and/or city-owned easements shall be maintained free of buildings, fences or other permanent structures, except as:
 - a. Required screening; or
 - b. Fences located on or near a side or rear property line of two adjacent lots or properties whenever such property line is located within the boundaries of a utility easement. Permitting or acquiescing in the construction and/or maintenance of a fence over a public or city-owned easement shall not constitute abandonment or extinguishment of such easement by the City.
3. Any fence or other screening structure located inside the boundaries of a public and/or city-owned easement may be removed without liability by the City or the City utilities authority, or an agent or contractor of the City or the City utilities authority, to gain access for the installation, removal, extension or repair of utility lines and equipment. In all cases, except for emergencies, affected property owners shall be notified orally or in writing at least 48 hours prior to such action by the City or its agent/contractor.
4. No permanent structure shall be constructed and/or maintained within the boundaries of a utility or drainage easement. No permanent structure shall be constructed and/or maintained within ten feet of any existing utility or drainage facility that is not located within a utility easement.
5. The grantor of any right-of-way, easement, or improvement dedicated to the City shall be responsible for the preparation of any document or instrument conveying title and the cost of filing such document or instrument with the County Clerk after acceptance by the City Council. Any document or instrument purporting to convey right-of-way, easement, or an improvement to the City shall be in a format prescribed by the City and tendered as both paper and electronic media. The original document or instrument dedicating any such right-of-way, easement, or improvement shall be delivered to the City Clerk by the grantor after filing with the County Clerk.

B. Utility easements.

1. *Rear utility easements required.* Where alleys are not provided, easements not less than ten (10) feet wide shall be provided resulting in a twenty (20) foot total easement along each rear lot line. If the area abuts property not previously subdivided, a twenty (20) foot easement is required along the boundary of the subdivision; however, if the subdivider is able to obtain a ten (10) foot utility easement (by separate document in favor of the City) on this abutting property, then the subdivider is required only to dedicate ten (10) feet of easement on his property.
2. Where utility easements are necessary or required along side lot lines of individual lots, a ten (10) foot easement shall be required centered on the property line with five (5) feet in each abutting lot. On such side lot easements, the side yard setback line will be measured from the near edge of the utility easement to the structure.

3. The City Council may require the grant of an easement of greater width for the extension of a primary stormwater drainage facility, sanitary sewer main and/or other utilities when necessary.
 4. Easement location shall be continuous and contiguous from one property to the next.
 5. Whenever the total required width of a utility easement cannot be divided equally between two adjoining lots or properties, a Developer or Subdivider may apportion the entire required width of the easement to one of the lots or properties.
 6. The final grade across any utility easement shall not exceed a Horizontal to Vertical slope of 4:1 (25 percent gradient), except where:
 - a. Unusual topographic conditions exist; and
 - b. A written request and justification for a modification to this requirement is approved by the Community Development Director and City Engineer; provided, however, the City may require the reduction or elimination of any slope whenever such is necessary for the construction of certain surface structures or equipment.
- C. Drainage and detention/retention easements.
1. Drainage easements shall be sized to carry, at minimum, a one percent chance storm. Such easements shall be continuous and contiguous from one property to the next.
 2. A drainage easement shall be required:
 - a. Where stormwater runoff is designed to exit the public right-of-way and enter private property. Such easement shall be located at and extend from the point of entry onto private property to the point where the runoff enters another property, intersects another drainage easement, or enters a drainage facility or another public right-of-way.
 - b. Where stormwater runoff enters a property from an adjacent property through a channel, stream, or other conveyance. Such easement shall be located at and extend from the point of entry onto the site to the point where the runoff enters another property, intersects another drainage easement, or enters a drainage facility. An easement is not required whenever stormwater runoff is due to sheet flow.
 3. Detention/retention easements shall be provided as follows:
 - a. Around the boundaries of drainage/retention facilities.
 - b. Such easement shall be adequate in size to permit access to such facility from a public right-of-way and around the perimeter of such facility for maintenance. In general, the easement perimeter shall be a minimum of 15 feet beyond the toe of slope or outlet end(s) of structure(s), but the Director may require greater widths when deemed necessary by the City Engineer.

Sec. 46-30 Parks and Open Spaces

A. Generally.

1. The City of Chickasha will not accept dedication of land for new neighborhood parks upon adoption of this code. However, land offered for a community park, or the

continuation or expansion of an existing neighborhood park may be considered for dedication following the procedures as provided below.

2. For purposes of this Chapter, the following definitions shall apply.
 - a. Neighborhood Park
 - i. Description - Provides recreational opportunities within reasonable walking distance to the neighborhood it serves. Neighborhood parks should be separate facilities. However, they may be located adjacent to elementary schools or linear parks.
 - ii. Typical Facilities may include play apparatus for all ages of children, multi-use paved surfaces, picnic areas with shelters, informal ball fields, walkways, tennis and/or basketball courts, restrooms and landscaping.
 - iii. The service area shall be approximately a one (1) mile radius and the park shall be intended to serve a population of 1,000 to 5,000.
 - iv. Size of Park – three (3) acres per 1,000 population served, with a 3-acre minimum.
 - b. Community Park
 - i. Description - Provides recreational facilities for the community to utilize. Facilities should be provided for people of all ages. Should be located on arterial or collector streets and accessible by pedestrians and bicyclists. Vehicular parking areas should be provided.
 - ii. Typical Facilities may include Swimming pools, lighted athletic fields and tennis courts, pedestrian and exercise trails, large picnic areas with shelters, landscaped areas to buffer adjacent developments, areas of natural value and water areas.
 - iii. The service area shall be approximately a five (5) mile radius and the park shall be intended to serve a population of 15,000 to 20,000.
 - iv. Size of Park – three (3) acres per 1,000 population served with a 20-acre minimum.
3. If a developer proposes to dedicate land for a public park, the proposed park shall be shown on the Preliminary Plat for the subdivision. The Preliminary Plat will be reviewed by City Staff who may seek comments from the Planning Commission. Comments from all City departments and the Planning Commission shall be provided to the developer. Construction plans for developments proposing dedication of land for public park purposes shall be reviewed by City Staff and the Planning Commission

The Planning Commission shall make a recommendation to the City Council as to whether dedication of land for a public park is to be accepted or whether fee in-lieu of park land is to be required. The City Council will determine whether to accept dedication of land for a public park or whether to require a fee in-lieu of park land. If the City Council accepts dedication of land for a public park, it shall be shown on the Final Plat and the acreage of land to be dedicated shall be calculated as shown hereafter. If the City Council requires deposit of fee in-lieu of land, the amount of said fee shall be calculated as shown hereafter.

4. If the park is to be dedicated in phases, a phasing plan shall be required with the Construction Plan submission. If a phasing plan is not submitted, the total amount of park land shall be dedicated with the first phase of the development with the developer receiving credits for the additional land provided.
5. The developer shall provide access to the park with the first phase of the development. If the park does not abut an existing street or a street to be constructed in the first phase of the development, a public access easement shall be provided with the Final Plat. The access easement shall connect a public street to the park and be a minimum of fifty (50) feet wide. The Planning Commission may require additional access as deemed necessary.
6. The developer may propose a name for a new park. The Planning Commission shall designate the official name of the park. The name of the park shall be shown on the Final Plat. The Community Development Director upon request shall inform the county tax assessor of the property involved and that it has been reserved for the public benefit and shall request that it be assessed on the tax rolls at the minimum value.
7. The size of land to be dedicated as a public park shall be determined based on the rate of three (3) acres of land for each 1,000 persons projected to occupy the fully developed one-mile radius of land surrounding the park, with a minimum of three (3) acres. The number of persons projected to occupy the fully developed land shall be based on 3.25 persons per dwelling unit.
8. The fee in-lieu of land shall be determined based on the rate of \$12,500.00 per acre of land as calculated above.

B. Use of money paid in lieu of dedicating of land.

1. A separate fund to be deposited at the highest interest rate permitted by law to be entitled "park fee fund" shall be and is hereby created and the money paid in by developers, owners, subdividers, and applicants at final approval of subdivision plats in lieu of the dedication of land and interest thereon, shall be held in such fund in trust to be used solely and exclusively for the purpose of purchasing or improving public neighborhood park and recreational land in the general area in which the subdivision is located.
2. At such time as the City Council, based upon the recommendations of the Planning Commission, determines that there are sufficient funds derived from a certain area in the park fee fund to purchase usable parkland, the City Council shall cause negotiations to be undertaken to purchase the site by mutual agreement or by condemnation proceedings. The principal and interest deposited and kept in the park fee fund shall be used solely for the purpose of purchasing land or providing improvements for public neighborhood park and recreation uses, as provided in subsection 3. and shall never be used for maintaining or operating other public park facilities, or for any other purpose.
3. The use of funds for park improvements, as provided in subsections 1. and 2. above described, may occur only when a neighborhood park has reached its maximum size or is otherwise surrounded by existing development. The City Council, upon the

recommendation of the Planning Commission, may utilize any new park fee dedications, including accrued interest, to construct park improvements within that neighborhood park.

Sec. 46-31 Blocks

- A. The lengths, widths and shapes of blocks shall be determined with due regard for the following:
 - 1. Provision of adequate building sites suitable to the special needs of the type of use contemplated;
 - 2. Zoning requirements as to lot sizes and dimensions;
 - 3. Needs for convenient access, circulation, control and safety of street traffic; and
 - 4. Limitations and opportunities of topography.
- B. Blocks for residential use along local or collector streets shall not be longer than five hundred (500) feet, measured along the center line of the block. Wherever practical, blocks along primary and secondary arterial streets shall be not less than one thousand (1,000) feet long.
- C. The Planning Commission may require a dedicated easement not less than fifteen (15) feet in width and a paved crosswalk not less than four (4) feet in width to provide pedestrian access, if such easement is deemed essential to provide circulation or access to schools, playgrounds, shopping centers, transportation or other community facilities.
- D. Blocks used for residential purposes should be of sufficient width to allow for two tiers of lots of appropriate depth.
- E. Blocks intended for business and industrial use should be of a width suitable for the intended use, with due allowance for off-street parking and loading facilities.
- F. Each corner of each block shall be marked with a permanent marker (iron pin or iron pipe of not less the one-half inch diameter).

Sec. 46-32 Lots

- A. The lot arrangement shall be such that there will be no foreseeable difficulties for reasons of topography or other conditions, in securing a building permit; all lots shall be arranged to comply with the Comprehensive Plan, the Zoning Ordinance all Drainage Ordinances and Building Codes and all other Ordinances of the Chickasha Municipal Code; and to provide access from an approach street.
- B. Lot dimensions shall comply with the minimum standards of the Zoning Code. Additional requirements shall be as follows:
 - 1. Other than town houses, residential lots shall be not less than fifty (50) feet in width at the front building line and shall abut a street a distance of not less than thirty-five (35) feet; except that a corner lot shall be not less than sixty (60) feet in width at the front building line.
 - 2. For townhouses, the acceptable minimum lot width shall be 25 feet per dwelling unit. The lot shall not be required to abut a private or public street; however, there shall be provision for parking in accordance with Chapter 54, Article IV of this Code in

convenient proximity to the dwelling unit served. For the purposes of this Chapter, convenient proximity shall not exceed one hundred fifty (150) feet.

3. Other than town houses, side lot lines should be approximately at right angles or radial to street lines.
4. Other than town houses, the depth of residential lots shall not be less than eighty (80) feet, except that lots that back up to or face an arterial street shall not be less than one hundred twenty (120) feet.
5. Other than town houses, the area of residential lots shall not be less than six thousand (6,000) square feet.
6. Each corner of each lot shall be marked with a permanent marker (iron pin or iron pipe of not less the one-half inch diameter).

Sec. 46-33 Building lines

Building lines shall be provided for all residential subdivisions as follows:

- A. A front building line shall be located twenty-five (25) feet back of the street right-of-way line;
- B. A side yard building line on the side of a corner lot abutting the street right-of-way when such lot is back to back with another corner lot shall not be less than fifteen (15) feet, and not less than twenty (20) feet back of the street right-of-way line in every other case;
- C. A side yard building line shall be provided not less than ten (10) feet back of the center of a crosswalk right-of-way line on the side of a lot abutting a midblock crosswalk;
- D. In situations where zero lot lines are permitted, appropriate provisions in plats and restrictive covenants may be submitted; and
- E. Restrictions requiring buildings to be located within the building lines shown on the plat shall be set forth on the plat or on a separate record instrument.

Sec. 46-34 Planned unit developments

Whenever a subdivision is developed in accordance with Chapter 54-36 of this Code, the Planning Commission, subject to approval by the City Council, may vary the requirements of design as required by this Article in order to allow the Subdivider more freedom in the arrangement of streets and lots, but at the same time protect the convenience, health, safety and welfare of the probable future residents of the subdivision as well as the character of the surrounding property and the general welfare of the entire community.

- A. In addition to requirements of the Planned Unit Development Zoning Ordinance, the following requirements shall apply:
 1. Review relative to subdivision requirements shall be carried out simultaneously with the processing of the PUD application if the division of land, vacant or improved, into two (2) or more lots, parcels, sites, units, plats, or interests for the purpose of offer, sale, lease, or development, either on the installment plan or upon any or all other

- plans, terms, or conditions, including re-subdivision, whether residential or nonresidential, is part of an integral to the PUD application.
2. The applicant may submit an application for Preliminary Plat review and approval for all or part of the development concurrent with an application for PUD even though such submittal is not mandatory under this Chapter.
- A. The following procedure shall be required for simultaneous Preliminary Plat review and approval as set forth in the above section.
1. An application for Preliminary Plat review or approval shall be submitted along with the application for PUD approval to the Planning Commission in accordance with the requirements and procedures of these regulations.
 2. The Planning Commission shall review the PUD application and shall forward its comments and recommendations to the City Council.
 3. The Planning Commission shall review the Preliminary Plat and if it finds that said plat conforms to these regulations and other applicable regulations, may grant tentative approval pending approval of the PUD application by the City Council. Tentative approval of such plat shall vest no rights or interest to the applicant until the PUD is approved by the City Council.
- B. A PUD may be subdivided or re-subdivided for purposes of sale or lease after the PUD has been finally approved and development completed or partially completed, except when the proposed subdivision creates a change in the PUD design. If said changes affects PUD boundaries, density of uses or if there are major changes to streets, drainage, utilities, etc., then the Planning Commission may approve the subdivision or re-subdivision subject to City Council's approval of an amended PUD.

Sec. 46-35 Gated Subdivisions (Controlled Access Developments)

A. General Requirements

1. *Required standards.* All gated subdivisions shall comply with the following site standards:
 - a. No public street shall be obstructed. Gated access will only be considered for private streets, approved planned unit developments, apartment projects, or other subdivision plats approved by the City Council for private streets;
 - b. The gate shall be located a sufficient distance from a public street to allow three cars to line up at the gate without interfering with vehicles utilizing the public street; however, in no case shall the gate be located closer than 70 feet from the curb or edge of pavement of a public street;
 - c. A turnaround lane shall be provided for vehicles unable to enter the gated development;
 - d. Road spikes, barbs or other tire damaging devices shall not be allowed;
 - e. The City Council shall approve all circulation plans for this type of development and may require multiple entrances;
 - f. Adopted City standards for drainage, streets, sidewalks, fire lanes, sanitary sewerage, water supply, fire hydrants, and other engineering and development requirements shall apply to controlled access developments;

- g. The minimum gate opening width, including clearance for all improvements related to the gate, shall be not less than 20 feet if accommodating two directions of traffic and no less than 14 feet for each gate accommodating each direction of traffic;
 - h. A Knox box or other similar device approved by the Fire Department shall be located near the normal access route in a manner approved by the Fire Department, for access by the Fire Department only to the development.
 - i. An entry key pad shall be located on a pedestal near the normal access route. The entry code shall be used for non-emergency access. The access code shall be given to the Police Department, Public Works Department and all other emergency and city services;
 - j. An emergency release hitch pin shall be installed on the control arm. This hitch pin, when removed, will detach the control arm from the gate and allow the gate to swing open freely with manual intervention;
 - k. A battery backup system shall be provided for each gate. The batteries shall be trickle charged to maintain electrical energy, and in the event of loss of normal electrical current, cause the gate to open and stay open until reset by a responsible member of the Homeowners' Association;
 - l. The location of all entrance pedestals, emergency pull boxes, key pads, hitch pins, related equipment, operation of gate, signage, opening design, swinging or sliding operation of the gate, or any other design specifications shall be constructed and installed in accordance with the plans approved by the Community Development Director, Public Works Director and the Fire Chief;
 - m. Should any problem occur in the operation of the gate, or any violation of this Section occur, the gate shall remain open and accessible until the problem is resolved and/or the gate is repaired and tested; and
 - n. When a covered entry is requested, the minimum clear height of the covered entry shall be no less than 16 feet.
2. *Requirement of emergency rapid access devices for gated communities.*
- a. Gated communities shall include all controlled access gates that serve housing developments, apartment complexes, townhouse complexes, and any other controlled access gates where a gated access affect's the health, safety, and welfare of the public served.
 - b. Emergency rapid access devices. For the purpose of this Section, emergency rapid access devices shall include rapid access key boxes, keyed switches, and keyed padlocks. The keys and devices shall be UL certified and approved by the Fire Chief or his designee.
 - c. Requirement. All new gated communities as described in subsection 2.a of this Section shall install and maintain rapid entry devices as described in subsection 2.b of this Section. All existing gated communities as described in subsection 2.a of this Section shall install and maintain rapid entry devises as described in subsection 2.b of this Section.
3. *Homeowners' association required.* A Homeowners' Association shall be established for all controlled access developments. The Homeowners' Association will be responsible for the following:

- a. Providing the names, addresses, and emergency contact numbers of all officers to the Fire Department, Police Department and the Public Works Department.
- b. Maintenance and repairs of the private streets, open spaces, parks and/or fire lanes, and to provide the funds therefor through the use of assessments.
- c. Maintenance, testing and repairs of all functions of the gate.
- d. Establishing the access code to the gate and ensuring that the Fire Department, Police Department, Public Works Department and other emergency services have the proper code number. Changing the code shall not be permitted without proper notification.
- e. Accompanying the Fire Department during annual inspection and testing of the operating systems.
- f. Maintaining a service agreement with a qualified contractor to ensure year-round maintenance.

B. Administration

1. The City manager, upon recommendation of the Community Development Director, Public Works Director, Fire Chief and Police Chief, shall approve an access agreement with the Developer, Homeowners' Association, or other responsible property owners, providing for an annual inspection of each gate to ensure that each gate is tested to meet all of the requirements of this Article prior to it being approved for operation or continued operation. The access agreement shall include a hold harmless clause, wherein the Developer, Homeowners' Association, or other responsible property owners agree to hold the City harmless in the event that the emergency devices on the gates fail, and the Fire Department, Police Department or Public Works Department or other emergency services entity are compelled to crash the gates in order to respond to an emergency call or situation. In the event that damage to any city-owned vehicle is caused by the failure of the Developer, Homeowners' Association, or other responsible property owners to notify in a timely fashion the Fire Department, the Police Department and the Public Works Department of a new access code, or failure to submit a key to a new lock on the emergency pull box, the Developer, Homeowners' Association, or other responsible property owners shall be liable for the cost of repairs to city-owned equipment as a result of a crash of the gate.
2. A copy of the verification of the access agreement shall be kept on file at the Fire Department, the Police Department and the Public Works Department.
3. Verification of the access agreement and a copy thereof shall be kept on file at the Fire Department, the Police Department and the Public Works Department.
4. The gate service contractor's name, address, 24-hour telephone numbers, and the Developer, homeowners' representative, or responsible property owners name, address, and emergency access telephone numbers shall be kept current and provided to the Fire Department, the Police Department and the Public Works Department as minimum requirements for approval of the annual inspection of the gate.
5. The Fire Department shall conduct the annual inspection on the anniversary date each year of the date of approval of the access agreement.

Sec. 46-36 MANUFACTURED AND MOBILE HOMES

A. Definitions

The following words, terms and phrases, when used in this Section, shall have the meanings ascribed to them as follows, except where the context clearly indicates a different meaning:

Building inspector means the legally designated inspection official of the city or his authorized representative.

License means a written license issued by the city clerk permitting the mobile home park to operate under this article and the regulations promulgated thereunder.

Mobile home means all types of every kind and character of any home that is mobile and moved to a location on which the same is to be located regardless of any improvements, additions or deletions which may have taken place or has taken place before and after the placing of the home on location, except modular, pre-built, or pre-constructed houses. The term "mobile home" does not include vehicles ordinarily referred to as campers attached to vehicles unless the same is used for residential purposes and, in any event, permits shall be necessary for such installations.

Mobile home park means any rental plot of ground upon which five or more mobile homes are located, that are occupied for dwelling or sleeping purposes on a permanent basis.

B. License required.

It is unlawful for any person to construct, maintain, operate or alter any mobile home park within the city unless he owns a valid license, which shall be issued annually by the city clerk. Any person desiring to establish a mobile home park shall follow the city's subdivision procedures and requirements found in the mobile home park zoning district. After approval by the city council, the city clerk shall be authorized to issue a license for the mobile home park.

C. Fee; proration of fees; term of license

The city clerk shall issue an annual permit to the mobile home park owner for the operation of a mobile home park, in accordance with the latest approved City of Chickasha fee schedule. The permit shall expire on January 1 immediately following the date of issuance. License fees may be prorated on a monthly basis. Locations with less than five mobile home spaces existing on the effective date of the ordinance from which this article is derived are not required to obtain a license and shall be considered a nonconforming use as defined by city zoning regulations.

D. Inspections

The city inspector is authorized and directed to make inspections to determine the condition of mobile home parks located within the city in order that he may perform his duty of safeguarding the health and safety of the occupants of mobile home parks and

general public property for the purpose of inspecting and investigating conditions relating to the enforcement of this article or regulations promulgated thereunder.

E. Utilities.

All mobile home parks shall meet the standards set forth by the city under its subdivision regulations, plumbing, electrical, and other utility codes, standards and regulations. All water, sewer, electrical and sanitation services shall meet the same regulations and rules as any residential subdivision.

F. Size of lots or space.

Each mobile home park must contain five or more mobile home lots or spaces, and each mobile home shall be placed on a lot or space containing a minimum of 4,000 square feet, excluding all roadways and alleys. All mobile home parks shall contain 50 feet right-of-way wherein a public street is located and shall be furnished with alleys for utility service. All mobile homes shall have a minimum setback of 15 feet from the front right-of-way and shall be located a minimum of seven and one half feet from each rear and side lot line.

G. Tie-downs and safety equipment.

All mobile home parks shall comply with federal and state requirements and regulations relating to tie-downs and safety equipment.

H. Individual mobile home.

1. Hereinafter, individual mobile homes shall not be located upon any lot or tract of land within the city unless located in a licensed mobile home park or meeting provisions found elsewhere in city ordinance.

2. Existing individual mobile homes shall be considered nonconforming uses and if property is vacated for a period of six months or more, then any new installation shall conform with the provisions of this article.

ARTICLE IV. - REQUIRED IMPROVEMENTS IN GENERAL

Sec. 46-37 General Provisions

A. Improvements shall be installed only in accordance with a Final Plat that has been approved by the Planning Commission. Said improvements must be in accordance with construction plans approved by the City Engineer, Planning Commission, and City Council.

B. *Improvement compliance.* All improvements shall be designed and installed in accordance with all of the elements of the general plan and shall meet the minimum standards established by the ordinances and regulations relating thereto.

C. Improvement inspection fees. The City may charge and collect inspection fees in all unplatted and platted developments for all water, sanitary or storm sewer and paving improvements based on the cost of the improvements as set by the Council by motion or resolution.

D. *Standards.* All improvements required within this Chapter, hereinafter referred to as "required improvements," shall be designed and installed in accordance with City standards. When the City has not adopted a standard for a particular improvement, state or national accepted industry standards (such as ODOT or ASTM standards), or manufacturer's recommendations shall apply. When a Developer wishes to propose an

alternative to the City standard, a design with supporting documentation must be submitted to the Community Development Director or designee, for review.

- E. *Improvement design, materials, and installation.* The Developer is responsible for providing at no cost to the City the design, materials, and installation of all improvements required for a development. If the City desires to have improvements beyond those necessary to serve a development and not otherwise required in this Chapter, the City shall be responsible for the design, materials, and installation of the improvements which exceed the Developer's requirements.
- F. The Developer shall furnish, at no cost to the City, all engineering services in connection with the design and construction of the required improvements. Said engineering services shall be performed by a professional engineer licensed in the state and shall conform to the standards and criteria for the design and construction of the required improvements as established by this Code and all other applicable requirements or regulations.
- G. *Rights-of-way*
 - 1. *Acquisition prior to commencing construction.* Prior to commencing the construction of any of the required improvements, the Developer shall acquire, if necessary, at no cost to the City, good and sufficient rights-of-way and easements on all lands and facilities to be traversed by the required improvements.
 - 2. *Conveyance.* All such public and/or city rights-of-way and easements shall be conveyed under general warranty deed or by plat dedication containing a general warranty of the dedication.
 - 3. *Right-of-way permit required.* No work proposed within an existing right-of-way or easement shall commence prior to the issuance of a right-of-way permit by the City.
- H. All improvements shall be designed and installed so as to provide for a logical system of utilities, drainage and streets and to create continuity of improvements for the development of adjacent properties.

Sec. 46-38 Construction

- A. *Notice to Proceed.* The Community Development Director will issue a Notice to Proceed upon satisfactory completion of the following:
 - 1. Acceptance of the Construction Drawings and related documents (e.g., Stormwater Management Plan)
 - 2. Issuance of any other required permits (e.g., ODEQ Permit to Construct)
 - 3. Posting of the required Maintenance Bonds.Such Notice to Proceed shall serve as authorization for the Developer to begin construction. No construction shall be permitted prior to issuance of the Notice to Proceed.
- B. *Developer to conform to construction requirements.* The Developer shall furnish and install, at no cost to the City, the labor and material necessary to complete the required improvements. Said construction shall conform with the plans as accepted by the City, this Code and all other applicable requirements or regulations (collectively "construction requirements").
- C. *Plan amendments.* All changes to previously approved plans shall be submitted to the City for review and approval prior to proceeding with the change. Projects or phases of projects

that have been noticed for noncompliance shall not be considered substantially complete until such time that the Developer has demonstrated that the changes are in strict compliance with the construction requirements, or the noncompliant work has been removed and re-constructed in accordance with the approved plans.

- D. Time for completion. The required improvements shall be completed within two years from the date the plans are accepted by the City or such later date for completion as may be established and acknowledged in writing by the Director. Work conducted in the public right-of-way shall be completed without delay.
- E. Erosion control. Developer shall, at no cost to the City, provide all erosion and sediment control measures that are necessary to comply with the Stormwater Quality requirements of this Code and the ODEQ.
- F. Traffic control. At all times during construction and prior to acceptance of the required improvements, the Developer shall be responsible for the erection and maintenance of temporary traffic control devices in accordance with the standards contained within the latest version of the Manual on Uniform Traffic Control Devices.
- G. Street closures. No temporary lane or street closures on existing streets shall be allowed without the prior approval of the Public Works Director. Requests for temporary lane or street closures on existing streets shall be made in writing to the Public Works Director no less than four business days prior to the planned closure. All requests shall include a traffic control plan. Traffic control plans shall be prepared in accordance with the standards contained within the latest version of the Manual on Uniform Traffic Control Devices. The Public Works Director may require special construction sequencing or any other condition of approval to provide for the minimal impact and inconvenience to the traveling public. Access to existing private drives that are impacted by the project shall be maintained at all times by the Developer until permanent improvements are in place and have met City standards. The Developer shall, at its own expense, be responsible for keeping on-site streets, off-site streets used as construction routes and rights-of-way clear of mud, rock and debris at all times during said construction. Should Developer fail to meet said requirements, City may take corrective action and charge the Developer for the actual cost of cleanup.
- H. The City reserves the right to mandate haul routes to and from the development and points of access to the development. Non-compliance with such haul routes and/or points of access, may result in enforcement action in accordance with Sections 1-14 and 1-15 of this Code.

Sec. 46-39 Testing and inspection

- A. The Developer shall employ, at no cost to the City, a qualified testing company to perform the materials testing necessary to demonstrate compliance with any approved plans and construction requirements and shall furnish copies of test results to the City weekly throughout the construction period. All test reports shall be provided to the City prior to Final Approval and Acceptance.
- B. The City shall have the right to inspect materials and workmanship at any time during the construction process. All materials used and work completed shall strictly conform to the plans and the construction requirements.

- C. Any material or work not conforming to the plans and the construction requirements shall be repaired or removed and replaced at the Developer's expense. Such construction or work shall remain accessible and exposed for inspection purposes until approved.
- D. The City shall issue a notice of noncompliance (notice) whenever an inspection determines that construction does not comply with any approved plans and construction requirements. Notice will be issued to the Developer's contractor at the construction site if the contractor is available and a copy of the notice will be sent to the Developer. The contractor shall notify the City Inspector when the item has been corrected and is ready for inspection.

Sec. 46-40 Substantial completion of required improvements.

- A. When the Developer has substantially completed the required improvements as defined in this Article, the Developer may request a substantial completion inspection. Such request shall be in writing and directed to the Community Development Director. Upon receipt of the request, the City will perform a substantial completion inspection of the required improvements, and if necessary, issue a list of items that to be corrected. If it is determined that deficiencies exist and the project is not substantially complete, the City will notify the Developer in writing, and the substantial completion inspection shall be delayed until such time as such deficiencies are addressed by the Developer. Upon confirmation by the City that the project is substantially complete, a notice of substantial completion will be issued to the Developer by the Community Development Director. Issuance of a notice of substantial completion shall not be deemed or construed as an acceptance or final approval of any of the required improvements.
- B. The City will not conduct a substantial completion inspection until the required improvements are accessible and cleaned sufficiently to allow for detailed inspection. If the required improvements are not accessible or cleaned sufficiently to allow for a detailed inspection, the Developer will be notified in writing that the inspection has been delayed until such time that the required improvements are sufficiently accessible and cleaned.

Sec. 46-41 Final approval and acceptance.

- A. Upon completion of the required improvements, the Developer shall request a *final* inspection in writing from the Community Development Director. Upon receipt of the request, the City will perform a *final* inspection of the required improvements, and if necessary, issue a list of items that need to be corrected, within five calendar days from the *final* inspection. If the project is not complete and/or not ready for a *final* inspection, or if the required improvements are not sufficiently accessible and cleaned, the City will notify the Developer in writing. The City will not inspect the required improvements until they are accessible and cleaned sufficiently to allow for detailed inspection. Upon confirmation by the City that the required improvements have been constructed and the record drawings prepared in accordance with any construction requirements, a notice of completion will be issued to the Developer and will state the date in which the public improvements will be scheduled for acceptance by the City Council.

- B. The portion of the required improvements intended for public ownership shall be conveyed to the City at no cost or expense to the City and free of any liens, charges, or encumbrances.
- C. As each portion of the required improvements intended for public ownership are accepted by the City Council, the accepted improvements will become public facilities and the property of the City, and such acceptance shall commence the Maintenance Bond period and performance obligations contained in Section 46-43.

Sec. 46-42 As-Built drawings

As-Built drawings for the improvements as required by this Chapter, signed and sealed by a professional engineer licensed in the state, shall be submitted to the Community Development Director with or prior to the Developer's request for acceptance of the improvements by the City Council. The City will review the record drawings for general compliance with the accepted construction plans and the improvements as constructed in the field. The City will notify the Developer in writing that the record drawings are acceptable, or why they are not. The record drawings shall be revised, if necessary, and accepted prior to the scheduling of the acceptance by the City Council of any improvements constructed by the Developer.

Sec. 46-43 Public improvement Maintenance Bond and Warranty Period

- A. Prior to the acceptance by the City Council of any improvement, a maintenance bond for the full amount of the contract to construct such improvement will be filed with the City Clerk. The bond shall be in effect for one year from the acceptance of the improvement by the City Council (warranty period), shall name the City of Chickasha as obligee and shall identify the location of the improvement(s) and the improvement(s) being bonded. The Developer shall ensure the correction of any defect in materials or workmanship that are necessary to restore and maintain said improvements to the same standards applicable at the time of the City's acceptance of said improvements.
- B. Inspection. The City may perform a warranty inspection prior to the end of the warranty period, and if necessary, issue a list of items (list of deficiencies) that are required to be corrected.
- C. Deficiencies. All deficiencies identified in the list of deficiencies shall be corrected by the Developer no later than seven calendar days prior to the expiration of the warranty. If all deficiencies are not corrected at least seven days prior to the expiration of the warranty, the warranty period shall be extended until all deficiencies have been corrected.
- D. Re-inspection. The Developer shall inform the City upon completion of correction of the list of deficiencies. The City will re-inspect the improvements identified in the list.
- E. Warranty release. Upon determination that the improvements identified in the list of deficiencies are in compliance with this Article and City standards, the City shall issue a release of warranty obligation to the Developer.
- F. Defective improvements. Nothing herein shall be construed or deemed as requiring the City to release the Developer from its obligations on any improvements that are defective.

Sec. 46-44 ASSURANCE FOR COMPLETION AND MAINTENANCE OF REQUIRED IMPROVEMENTS

A. Generally.

1. The improvements must be installed in accordance with construction plans approved by the City Engineer, Planning commission and City Council. The Developer may submit a construction phasing plan.
2. The Developer shall build and pay all costs of any temporary improvements required by the Planning commission and City Council and shall maintain the temporary improvements for the period specified.
3. All required improvements shall be made by the Developer at his expense, without reimbursement by the City or any improvement district therein, except when approved by the City Council.
4. Approval shall be deemed to have expired in subdivisions for which no assurance for completion has been posted and the improvements have not been completed within the period specified by the provisions of this Chapter. In those cases where a performance bond or other instrument has been required and improvements have not been completed within the terms of the performance bond or other instrument, the City Council may declare the bond to be in default and require that all the improvements be installed.

B. Methods of assurance

1. Prior to approval of the Final Plat, the Developer shall complete, in accordance with the approved construction plans, all improvements required in this Chapter as specified in the Final Plat and/or planned unit development master plan and master development plan map, and, when required, shall dedicate the improvements to the City in accordance with this Chapter. The Final Plat shall be signed by the Planning commission and by the City Council only after satisfactory completion and acceptance of the required improvements.
2. In lieu of completion of all improvements prior to Final Plat approval, the City Council may, at its discretion, enter into a revocable agreement with the Developer, whereby the Developer shall guarantee to complete all improvements as may be specified by the Planning Commission and approved by the City Council. To secure this agreement, the Developer shall provide, subject to the approval of the City Council, one of the following guarantees:
 - a. *Surety bond.* The Developer shall file a surety bond with the City as set forth in this Section in the amount of 110 percent of the estimated construction costs of the required improvements. A professional engineer shall furnish estimates of the costs of all required improvements and utilities to the City Engineer, who shall review the estimates in order to determine the adequacy of the bond for insuring the construction of the required facilities. All dedications, easements and improvements relative to the Final Plat and to the surety bond shall be brought before the City Council for its acceptance. Upon such acceptance, the applicant shall file the Final Plat with the County Clerk. The bond shall be released when all improvements are certified as complete by the Director and accepted by the City Council, and a copy of the as-built plans on linen or other acceptable reproducible

material, prepared by a professional engineer, showing the location of all improvements, is submitted to the Director.

- b. *Escrow account.* The Subdivider shall deposit cash, or other instrument readily convertible into cash at face value, either with the City or in escrow with a bank or savings and loan institution, acceptable to the City. The use of any instrument other than cash shall be subject to the approval of the City Council. The amount of the deposit shall be 110 percent of the full amount of the cost of the required improvements, as estimated by a professional engineer and approved by the City Engineer. In the case of any escrow account, the Developer shall file with the City Council an agreement between the financial institution and himself guaranteeing the following:
 - i. That the funds of the escrow account shall be held in trust until released by the City Council and may not be used or pledged by the Developer as security in any other matter during that period; and
 - ii. That in the case of a failure on the part of the Developer to complete the improvements, the financial institution shall immediately make the funds in the account available to the City for use in the completion of those improvements.
 - c. *Letter of credit.* Subject to the approval of the City Council, the Developer shall provide a letter of credit from a bank or other reputable institution or individual, acceptable to the City. This letter shall be submitted to the City Council and shall certify the following:
 - i. That the creditor does guarantee funds equivalent to 110 percent of the full amount as estimated by a professional engineer and approved by the City Engineer;
 - ii. That, in the case of failure on the part of the Developer to complete the specified improvements within the required time period, the creditor shall pay to the City immediately and without further action such funds as are necessary to finance the completion of those improvements, up to the limit of credit stated in the letter; and
 - iii. That this letter of credit may not be withdrawn, or reduced in amount, until approved by the City Council according to the provisions of this division.
- C. **Maintenance of improvements**
- 1. *Responsibility for maintenance.* The Developer shall be required to maintain all public improvements until acceptance of the improvements by the City Council. As a condition of dedication to and acceptance by the City Council of all public improvements, maintenance bonds shall be posted and submitted to the Director according to procedures established by the Director.
 - 2. *Maintenance bonds.* Maintenance bonds shall be filed in the following amounts and periods of time:
 - a. **Paving:** A maintenance bond from the Developer's contractor naming the City of Chickasha as obligee in the amount of fifty (50%) percent of the construction cost shall be submitted to the City of Chickasha for the first year, and ten (10%) percent for the next five (5) years subsequent to the acceptance of the development by the City Council of the City of Chickasha.

- b. Sanitary Sewer, Storm Sewer and Water Systems: A maintenance bond from the Developer's contractor naming the City of Chickasha as obligee in the amount of fifty (50%) percent of the construction cost shall be submitted to the City and said bond shall be for a period of two (2) years subsequent to the acceptance of the utility by the City Council of the City of Chickasha.

ARTICLE V. - REQUIRED IMPROVEMENTS - SPECIFIC REQUIREMENTS

Sec. 46-45 Public Street Improvements

- A. The Developer of any subdivision designed to be used for residential, commercial, industrial or other purposes or any other development subject to this Chapter shall lay out, grade and otherwise improve all streets that are designated on the approved plat or that directly serve the subdivision in accordance with the design specifications herein and the Standard Details for Subdivision Streets as established by the City Engineer and in accordance with the following provisions:
 1. The design of an improvement of an intersection of any new street with an existing state or federal highway shall be in accordance with the specifications of the Oklahoma Department of Transportation, but in no case shall the standard be less than the applicable City specifications;
 2. Whenever a subdivision contains an arterial street that requires a street facility that is more costly than is required to serve the future occupants of the subdivision, the Subdivider shall be required to pay only the portion of the cost of an improvement required to serve only the subdivision, as determined by the Commission; and
 3. The City will provide adequate engineering inspection and will bill the Developer according to rates established in the latest approved Fee Schedule.
 4. Street surfacing shall be in accordance with the transportation plan and street standards as approved by the City Council and, where applicable, the state department of transportation.
- B. Streetlights.
 1. *Conformity to comprehensive plan.* The arrangement, character, extent and location of all streetlights shall conform to all of the elements of the Comprehensive Plan and shall be designed in accordance with the following provisions:
 1. The Developer shall be responsible for having street lighting installed in all subdivisions and shall be responsible for all installation costs.
 2. A streetlight standard of 30 feet mounting height shall be installed at all street intersections, at the end of all cul-de-sacs, and at intermittent spacing necessary to produce a minimum of 0.6 maintained footcandles for collector streets and 0.4 maintained footcandles for local streets, with a uniformity ratio not exceeding three to one. Luminaires shall have minimum 175-watt high intensity discharge lamps.
- C. Driveways

All driveways which connect with public streets shall be constructed in accordance with this Chapter and the Driveway Standards established by the City Engineer.
- D. Sidewalks

1. Subdivision design shall provide for the convenience and protection of pedestrian traffic. Sidewalks shall mean a system of paved walkways for pedestrian traffic located between the street paving and the abutting property for the continuous length of the block.
2. A system of sidewalks shall be provided for adequate pedestrian circulation on all streets and approaches to focal points of pedestrian traffic, as set forth in Section 46-20 of this Code.
3. The Planning commission may require the construction of such sidewalks to connect with existing or proposed sidewalks in areas within or adjacent to the subdivision where such sidewalks are needed for pedestrian circulation.
4. All sidewalks shall be constructed in accordance with the specifications governing sidewalk construction. The minimum width of sidewalks shall be four feet. Sidewalks shall be provided on both sides of minor arterial, collector and all residential streets at locations one foot inside the right-of-way as shown on the Standard Drawings unless other locations are approved by the Planning commission due to such physical features as right-of-way, topography, existing trees, etc.
5. The sidewalk shall be designed to reduce conflict with other infrastructure improvements and with other private utilities.
6. The Developer shall not be responsible for installation of the sidewalk within new lots platted as part of his development on residential streets; however, the sidewalk will be constructed in association with the structure as required in Section 46-20 of this Code. The Developer shall be responsible for the construction of sidewalks in all other locations as required by this Code and the Planning commission including lots or parcels to be dedicated to the City, retained by the Developer, or transferred to an Ownership Association.
(Moore provides for an in lieu of fee, and other requirements. Stillwater has similar requirements. Mustang requirements are similar to Lawton's)

E. Street and traffic signs.

All street and traffic signs within the development shall be furnished at the expense of the Developer and shall conform to the standards set forth in this Section. All street and traffic signs shall be supplied and installed by the City of Chickasha Public Works Department. Subdivider shall provide and submit it to the Public Works Department a detailed list of signs to be installed. The Public Works Department will invoice the Subdivider for cost of the sign materials and installation labor, which shall be due and payable upon receipt.

All traffic-control signs shall conform to the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways" as published by the Federal Highway Administration. All signs required hereunder for a particular purpose shall so far as practicable be uniform as to type and location throughout the city. All traffic-control devices so erected and not inconsistent with the provisions of state law or this chapter shall be official traffic-control devices.

1. **Stop Signs.** All stop signs on Major Streets and at intersections of Major Streets with other streets shall be 36 inches by 36 inches. Stop signs at all other locations shall be 30 inches by 30 inches.

2. Street Name Signs. All street name signs shall have white lettering and border on green background. Letter heights on signs on Major Streets and at intersections of Major Streets with other streets shall be nine (9) inches. Letter heights at all other locations shall be six (6) inches.
3. All other signs shall be provided by the City of Chickasha.

Sec. 46-46 Private Roads/Streets

- A. Private streets may be used to provide access to a development in lieu of dedicated public streets provided that the streets meet the minimum width and minimum structural standards of the City and are inspected by the City. Private streets shall be maintained by the owners of record. A private street access and maintenance agreement between the owners, their heirs, executors, administrators, successors, and assigns, shall be filed contemporaneously with the filing of the Final Plat at the county courthouse; said agreement shall include, but shall not be limited to, the following requirements:
 4. The agreement shall be recorded in the office of the County Clerk for the purpose of reflecting the provisions of said agreement within the abstracts of title of the lots within the subdivision.
 5. When in the interest of providing public access to adjacent properties that may not otherwise have access to public streets, the City Council may require the dedication of public right-of-way and may further require that public streets be provided within said right-of-way.
 6. Upon annexation of any subdivision containing private streets, the private streets shall remain private unless accepted by the City Council and made available to the general public.
- B. Areas where permitted.
 1. Rural land not served by City water and sanitary sewer facilities shall be permitted the use of private roadways in either platted or unplatted areas and building permits may be issued to property owners abutting upon private roadways under the conditions set out in this Section.
 2. Private local streets may be permitted in a PUD but shall be constructed and inspected to City standards with the following exceptions:
 - a. Private streets may be reduced in width to 22 feet back of curb to back of curb with no on-street parking or another design as approved by development services; and
 - b. Private streets may provide an alternate design to curb and gutter. Private streets shall be contained within the PUD and within private roadway easements unless utilities are installed in combination with the development of streets. All utilities shall be placed in publicly dedicated easements.

All easements for private local street use shall be identified and labeled as an outlot. Sidewalks or pedestrian trails not located in the public right-of-way shall be designated on the final PUD plan and the PUD Final Plat as a pedestrian easement.

- C. General standards for other than Planned Unit Developments.

1. The location of the private roadway easement shall be in compliance with the transportation plan map and City street standards, regardless of the size of the abutting property.
2. The private roadway easement shall be at least 50 feet in width in the case of local streets, or 60 feet in width in the case of collector streets.
3. All drives and curb cuts contained within the private roadway system shall comply with this Chapter.
4. The tracts, lots, sites or parcels of land contained within the private roadway subdivision shall contain not less than two acres each, including respective portions of the adjacent roadways. However, public right-of-way on section line roads is not to be included in the two-acre requirement.
5. The nearest boundary of the property contained within the proposed subdivision must be more than one-quarter mile (1,320 feet) from sewer and water facilities furnished by the City. The measurement shall be the actual number of feet of sewer and/or water lines required to serve the property, to be determined by good engineering practices.
6. All storm drainage shall be in compliance with this Chapter. Open type bar ditches shall be prohibited. All stormwater runoff must be contained within the street curb line and removed in a safe manner from the subdivision.
7. The private roadway shall not be dedicated to the public, but reserved for future dedication, and until such future dedication it shall be the private roadway of the abutting property owners.
8. Private roadways shall be surfaced and improved in accordance with the transportation plan map and City street standards.
9. The private roadway shall be maintained by the owners of the property within the subdivision.
10. The City shall have no responsibility for the maintenance and repair of the private roadway or easement.
11. If the property is platted, there shall be emblemized on the face of the plat, clearly conspicuous, a notice that the streets shall always be open to police, fire and other official vehicles of all state, federal, county and city agencies, and subject to all traffic regulations of these agencies.
12. Every deed shall clearly acknowledge that the roadway is private and not maintained by the City.
13. All names for private roadways shall be approved by the Planning commission in both platted and unplatted areas.
14. *Street signs.* The Developer shall install street signs at the intersection of all private roadways. The markers shall conform in style and quality with the standard street markers adopted by the City. After initial installation, the street signs shall be maintained by the property owners within the subdivision.
15. *Private roadway sign.* Prior to the sale of any parcel of land in the subdivision, a conspicuous sign shall be posted at the entrance into the subdivision, reading "Private Roadway not maintained by the City of Chickasha, Oklahoma." The sign shall meet the following specifications:
 - a. The sign shall be of 20-gauge steel;

- b. The dimensions shall be 36 inches by 48 inches;
 - c. Letters shall be three inches high and block style;
 - d. The color shall be a green background and white reflective lettering; and
 - e. The sign shall be affixed on two metal poles, with its lowest point not less than seven feet above grade
16. Maintenance. After initial installation, the required street signs and the "private roadway" sign shall be maintained by the property owners within the subdivision. The property owners within the subdivision shall be given ten days' written notice by certified mail if a damaged, dilapidated or faded street sign or "private roadway" sign is not replaced or repaired. The procedure for abatement of a public nuisance, as outlined in Chapter 34 shall be followed if the sign is not replaced or repaired after the property owners have been given proper notice. Any cost for materials or labor suffered by the City shall be recovered directly from the property owners or collected from the property owners by the county treasurer in the manner prescribed by the laws of the state.

Sec. 46-47 Public Water Distribution System Improvements

- A. All subdivisions of land and developments shall be designed to provide public water service to each lot and tract of land in compliance with current Oklahoma Department of Environmental Quality (ODEQ) regulations, unless otherwise authorized in accordance with this Section.
- B. Water system required; connection of subdivision to public water supply.
 - 1. The Subdivider shall provide a water supply and distribution system to a proposed subdivision capable of meeting water use and fire protection requirements in accordance with this Chapter and other applicable ordinances, standards and specifications.
 - 2. The Subdivider shall, at his expense, provide a water system capable of supplying water to each lot within the subdivision. All such construction must comply with City standards and specifications and must be approved by the City Engineer.
 - 3. Where an approved public water supply is reasonably accessible or procurable, the Subdivider shall connect with the water supply. For purposes of this Section, a public water supply is considered reasonably accessible if an existing or funded water main serves any quarter section in which the subdivision is wholly or partially located or is within one-quarter mile (1,320 feet) of any exterior boundary of the subdivision, whichever is the greater distance. Water supply is considered procurable unless the City or other public agency owning and maintaining the public water system cannot or will not, by reason of statute, ordinance, regulation or policy, furnish water to the subdivision. All water main construction must conform to the City standards and specifications and must be approved by the City Engineer. Exceptions, under the special circumstances set forth in this subsection, to these construction standards and specifications for the sizing of water mains may be granted by the City Council.
- C. Water main extensions required; use of public water supply

1. Water main extensions are required to serve all new subdivisions or new institutional, commercial or industrial structures, or multiple-family dwellings in areas not currently served by public water supply.
 2. Individual water wells may be allowed when a public water supply is adjacent, however, water wells shall be allowed for outside watering purposes only. In no case shall a water well be connected to the house service line. Water well drilling permits are required on all water wells drilled for domestic and outside watering purposes.
 3. When any building, structure, facility, lot, parcel or tract of land has once been connected to a public water supply, it shall not be disconnected, or use discontinued unless authorization has first been secured from the City Council for discontinuance.
 4. Any person violating any provision of this Section shall, upon conviction, be punished as provided in Section 1-14 and 1-15, and each day that the facility is disconnected from City water and connected to an individual water system is a violation thereof shall constitute a separate offense.
- D. *Code compliance.* The Developer shall install water lines, valves and fire hydrants, and installation shall be in accordance with the City specifications governing water line construction.
- E. *Public water extension.* Public water shall be extended to serve all zoning districts except A-1, Agricultural District.
- F. *General Standards*
1. Refer to the Standard Drawings for the placement of fire hydrants.
 2. As an additional general standard, all main water lines shall be ductile iron pipe, thickness class 50, or polyvinyl chloride (PVC) pipe having a minimum Dimension Ratio of DR 14 in accordance with AWWA standards.
 3. Size of water mains.
 - a. Water mains constructed along section line roads shall be twelve 12 inches in diameter.
 - b. Water mains constructed along quarter section lines or along the closest street to be built to a quarter section line shall be ten (10) inches in diameter.
 - c. All other water mains shall be not less than an eight (8) inches in diameter.
 4. Whenever the City's water supply is not available, the Planning Commission shall require the Subdivider to provide an adequate potable water supply to serve all of the lots and provide adequate fire protection within the subdivision. All community or individual water supplies so constructed shall be in accordance with the minimum requirements of the Oklahoma Department of Environmental Quality.
 5. Whenever both the water and the sanitary sewer mains are to be located in the front of the lot within a public utility easement or street right-of-way, the mains will be located on opposite sides of the street.
- G. *Water supply for fire protection; fire hydrants and fire lanes.*
1. *Water supply for fire protection required.* The Developer of any subdivision containing four or more lots or building sites for single-family or two-family residences shall extend water mains for fire protection at his expense, except as provided in this Section. All sites other than single-family or two-family residences shall provide water main extensions for fire protection, except as provided in this Section.

2. *Interconnection of mains.* Water mains shall be interconnected to form a grid system. The length between interconnections shall not exceed the following:
 - a. Eight-inch line: 1,200 feet.
 - b. Ten-inch line: 2,640 feet.
 - c. Twelve-inch line: 6,000 feet.
3. *Diameter of mains; hydrants required; alternate fire protection plan.* The City Engineer shall not approve a water main supplying fire hydrants which is less than six inches in diameter. Fire hydrants of a type and manufacture approved by the Fire Chief shall be available to serve the building site of all commercial, industrial, mercantile, educational, institutional, assembly, hotel, motel, single-family, two-family, multifamily and mobile home park occupancies prior to the start of construction. In lieu of the required water line extension and fire hydrant installation, a Developer may submit to the Fire Chief and City Council for their approval an alternate fire protection plan for single-family and two-family residences in a subdivision containing less than four building sites and for business occupancies, other than mercantile, containing less than 5,000 square feet of gross floorspace. The alternate fire protection plan may include but is not limited to a special building requirement or an on-site water supply. The Council and Fire Chief may approve, approve conditionally, or disapprove such plan after hearing such proposal and reviewing any other alternatives.
4. *Hydrants to be shown on building plans.* Building plans for all new construction involving the occupancies listed in subsection (3) of this Section shall show the location of fire hydrants on both public and private property as approved by the Fire Chief and the City Engineer before any actual construction is undertaken.
5. *Hydrant location and standards.* Hydrant location and standards shall be as follows:
 - a. All hydrants are to be installed according to City standards;
 - b. Fire hydrant requirements and locations shall be determined pursuant to Chapter 10 of the Chickasha Code of Ordinances; and
 - c. Fire hydrants shall be located apart from buildings and shall be fully accessible from paved driveways and fire lanes.
6. *Marking of fire lanes.* The marking of fire lanes on private property devoted to public use shall be approved by the Fire Chief and chief of police of the city.
7. *Access by fire equipment.* Fire lanes and driveways shall be located so that all buildings served by them are accessible to fire equipment.
8. *Standards for fire lanes.* The contractor or designated person in charge of any construction site for commercial, industrial, mercantile, educational, institutional, assembly, hotel, motel, single-family, duplex, and multifamily dwelling or mobile home park uses shall provide and maintain an approved hard-surfaced all-weather access fire lane, not less than 20 feet in width, as shown on approved site plans. Such access fire lane, at the beginning of and during construction, shall be at least a graded roadbed with a gravel surface. At such time that construction has progressed to completion, the access lane shall be an approved hard-surfaced all-weather lane before any occupant shall be allowed to occupy the structure.
9. *Fire department connections and fire hydrants.* The location of the fire department connections ("FDC") shall provide hose connections that shall not block access to the

building or obstruct other fire apparatus from accessing the building. A fire hydrant shall be located within 100 feet of the FDC measured along a fire apparatus access road. FDC's and fire hydrants shall have a four-inch Storz connection without any downturn and shall include an approved locking cap as specified by the fire marshal. Fire hydrant hose nozzles shall be 2 1/2" nominal diameter and shall use National Standard Threads.

H. Upon approval by the Planning commission, the City Council and ODEQ, the Director or the City Engineer shall issue a notice to proceed for the approved water improvements. The Developer shall not commence construction of water improvements until receiving the notice to proceed.

I. Individual water wells.

1. Generally.

- a. Where an approved water supply is not procurable as described in Section 46-43 A. 3, the subdivision, institution, commercial or industrial structure or single- or multiple-family dwelling may be served by individual water wells upon the express approval of the City Engineer, the Planning commission and the City Council. Individual water wells must meet federal and state drinking water standards.
- b. Individual water wells shall meet state health design standards and construction specifications and shall provide adequate capacity to meet domestic demand.
- c. Individual water wells shall have a minimum capacity of five gallons per minute. If soil and geological data indicates a possible groundwater deficiency, the applicant must demonstrate, at his expense, that the water is available in adequate quantity and quality.
- d. As a fire protection measure, a minimum distance of 50 feet separation between residential structures shall be maintained in any residential district utilizing private water wells as the main source of water.
- e. Developments and subdivisions shall contain provisions and completed infrastructure for connection to City water service when such service becomes accessible. Therefore, in addition to the temporary water well system, such subdivisions or developments must meet requirements for water service as though such service were available. This water infrastructure must allow for connection of the properties included in the subdivision or development to City water service at a single connection site and will be dedicated to the City as a part of the Final Plat approval process. Water infrastructure, as used in this Section, refers to water mains or refers to the complete installation and acceptance by the City of the water mains, valves, fire hydrants, service lines, meter boxes and appurtenances required to serve the proposed development or subdivision.
- f. If a Developer desires to connect to City water service at the time of development when such service is not otherwise procurable as defined in this Section, upon approval of the City Council, the City will furnish materials and the Developer will provide installation for connection lines. Such approval shall be solely within the discretionary authority of the City Council and such decision shall be made based

g. The City may connect the subdivision or other properties to City water service when such service becomes accessible. There will be no additional charge or fee to property owners for such connection. Under no circumstances will any private water well be connected to the City system.

a. *Infrastructure required.*

- ### 3. *Exceptions.*

- ## Sec. 46-48 Sanitary Sewer Collection System Improvements

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1. Connection to the city-owned sanitary sewer system; or
 2. On-site package treatment under permit issued by the ODEQ; or
 3. Septic system treatment on single parcels of two acres or more under ODEQ permit.
- A copy of the ODEQ permit shall be provided to the Building Official prior to issuance of a certificate of occupancy for any residential structure.
- C. Lagoon-type or open containment systems are prohibited within the corporate boundaries of the City.
- D. The design shall meet the requirements of this Code and the state department of environmental quality (ODEQ) and provide sewer service to all points on the property. The sanitary sewer collection system design calculations shall be submitted to the City with the submission of the sanitary sewer improvement plans. The proposed plans will not be approved by the City and released for review by ODEQ until the City has determined that the proposed plans and system calculations meet the City standards.
- E. Whenever it is necessary for a Developer to expend funds for the construction of a sewer main that will serve areas other than his own, the Developer may enter into a sewer main lease purchase agreement with the City as provided for in Chapter 41.
- F. The minimum size for a gravity sewer line shall be eight inches.
- G. No connection shall be made to the City sewer collection system to serve property located outside the corporate limits of the City, unless the owner of such property to be connected first petitions for annexation into the City in accordance with the provisions set forth in 11 O.S. § 21-105. If said property cannot be annexed under said statute, the property owner shall instead execute a written consent to annexation sufficient to meet the requirements of 11 O.S. § 21-103, and such consent shall be filed in the land records of the County Clerk to provide notice to all successors in interest that such consent to annex has been given. This provision shall not apply to connections made to such properties prior to the effective date of the ordinance from which this Chapter is derived.
- H. General Standards
1. As a general standard, all gravity sanitary sewer mains shall be constructed of polyvinyl chloride (PVC) or cement-lined ductile iron pipe.
 - a. Materials of construction shall meet or exceed the latest revision of the following standard specifications:
 - i. Polyvinyl chloride:
 - a.) Pipe-ASTM D3034 or ASTM F789
 - b.) Joints-ASTM D3212
 - c.) Gaskets-ASTM F477
 - ii. Cement-lined Ductile Iron:
 - a.) Ductile iron pipe-AWWA C151 (ANSI A21.51)
 - b.) Fittings-AWWA C110 (ANSI A21.10) or AWWA C115 (ANSI A21.15)
 - c.) Gaskets-AWWA C111 (ANSI A21.11)
 - d.) Interior coating-AWWA C104 (ANSI A21.4)
 - e.) Exterior coating-1 mil application of bituminous or coal tar coating
 - f.) Polyethylene encasement-AWWA C105 (ANSI A21.5)

- b. Wall thickness of pipe used is to be determined in accordance with the latest revision of the following standard specifications for the field conditions anticipated or the wall thickness as specifically stated below.
 - i. Polyvinyl chloride: Standard dimension ratio 35 or lower (DR 35) for pipe materials covered by ASTM C3034 or in accordance with ASTM F789 for materials covered by that specification.
 - ii. Ductile iron
 - a.) Ductile iron pipe-AWWA C150 (ANSI A21.5) for laying condition Type 4
 - b.) Fittings-Minimum pressure rating of 150 psi
 - c. The sanitary sewer mains are to be constructed in accordance with the latest revision of the following standard specifications.
 - i. Polyvinyl chloride: ASTM D2321 with minimum bedding of Class I or II materials for four (4) inches under pipe and to the springline for overburden depths to twenty (20) feet.
 - ii. Ductile iron-AWWA C600 with minimum bedding of Type 4 as described in AWWA C150 (ANSI A21.50).
- 2. Sanitary sewer lines shall be placed in easements at the rear of properties or at the front of the lot on the opposite side of the street from the water main in a minimum fifteen foot (15') public utility easement in accordance with Figure 19.
 - 3. All sewer service lines shall be privately owned and maintained from the point of connection to the public sewer main (including wye's, saddles, and appurtenances forming such connection) to the termination within the building(s) being served.
 - 4. The property owner will be responsible for replacing/repairing the paved roadway within a public street right-of-way required as a result of a necessary repair to a private sewer service line crossing under the paved roadway. The Public Works Director shall be notified in writing seventy-two (72) hours in advance of such replacement/repairs to determine the requirements of the work and to make the necessary arrangements.
 - 5. All lots requiring installation of backflow prevention devices as part of the private plumbing improvements shall have such requirement clearly indicated on the construction plat.
 - 6. When alternative disposal systems are authorized and used, said use shall be in accordance with the following provisions:
 - a. Before construction of individual sewage disposal units, all plans and specifications shall be submitted to the Building Official for approval; and such approval shall be based upon the minimum specifications of the Oklahoma Department of Environmental Quality.
 - b. No individual sewage disposal unit shall be covered or placed in operation until final inspection for compliance with approved plans and specifications has been made by the Building Official; and
 - c. No portion of any unit disposal system shall be located closer than ten (10) feet to the lot line of the lot on which the system is located.
 - 7. The use of sewer lift stations within the boundaries of the Sanitary Sewer Service Area, as defined by the Comprehensive Plan shall be contingent upon the following:

- a. Every person desiring to use a sewer lift station within the boundaries of the drainage area shall submit engineered drawings showing the following information to the Planning commission.
 - i. Proposed location;
 - ii. Location of existing sewer mains in close proximity to the proposed development; and
 - iii. Proposed point of connection to existing sewer.
- b. The City Engineer shall make a determination of need for installation of a sewer lift station, based upon information submitted by the Developer and the city's plans for construction of gravity sewer lines into the area. The City Engineer shall forward his recommendation in writing to the Planning commission. The recommendation shall address, at a minimum, the following:
 - i. Each lift station shall contain an auxiliary power source to provide continuous service during periods when no electrical power is available;
 - ii. Each lift station shall have a wet-well capacity sufficient to accommodate a twenty-four-hour flow;
 - iii. Each lift station shall contain an alarm system to alert on-call personnel; and
 - iv. The applicant shall submit data showing that the proposed development can be better served by a lift station than by use of a gravity sewer line laid deep enough to overcome the differences in elevation;
- c. The use of sewer lift stations shall be subject to approval by the Oklahoma Department of Environmental Quality.
- d. When the development is outside the city limits, the application for the use of a sewer lift station shall be accompanied by the written request of the owner(s) of the area that the development be annexed to the City.
- e. The Developer or owner of the proposed development shall bear the entire cost of the sewerage lift station and all appurtenances. The Developer or owner shall submit a certified cost statement outlining the cost of the lift station and appurtenances and certified documentation showing that bids were sought for construction of the lift station. The proposed lift station shall be adequate in size, except as specified in paragraph h of this subsection, to serve the proposed development. The City Engineer shall ensure that plans submitted by the Developer indicate the total number of square feet capable of being served by the lift station within the drainage area.
- f. All sewerage lift stations, with appurtenances, shall, upon completion, become the sole and exclusive property of the City and shall be operated and maintained as a part of the City sewerage system.
- g. A one-year maintenance bond shall be posted by the Developer or owner responsible for installation of the sewerage lift station and force main.
- h. If a lift station is so located as to render it possible for tracts of land not owned by the Developer or owner of the proposed development to be served by the proposed lift station, the lift station shall be of sufficient size, including wet-well capacity and force main as determined by the City Engineer, to accommodate the potential development. The Planning commission may recommend to the Council that an

exception to the above requirement be granted when the proposed lift station is to be temporary in nature. Such a determination shall be based upon a capital improvements program, adopted by the Council, which budgets funds for the construction of gravity sewer mains which will serve the area contained within the proposed development during the current operating fiscal year of the program:

- i. Any person seeking to make connection to the sewerage lift station and force main shall be required to pay a connection charge to the City, exclusive of equipment replaced in accordance with subparagraph ii of this paragraph h, in proportion to the area of the proposed development, in square feet, to be served by the lift station;
 - ii. Any person seeking to make connection to the sewerage lift station shall be required to bear the cost of installation of any additional pumps or mechanical or electrical equipment or modifications required to accommodate additional effluents generated by his development in proportion to the area to be served; and
 - iii. The City reserves the right to connect to the lift station or force main for the public benefit at no return to the Developers or owners.
- i. Except as hereinafter provided, sanitary sewer service shall not be extended beyond the boundaries of the drainage area, as previously described above. Exceptions may be granted in accordance with the following criteria:
- i. The extension of sanitary sewer service beyond the boundaries of the drainage area would be of substantial benefit to residents of the City, i.e., the installation of a major industry; or
 - ii. The proposed development is consistent with the Comprehensive Plan, including a capital improvements program.

Sec. 46-49 Stormwater Drainage Improvements

- A. The design and construction of all developments shall comply with the provisions of Chapter 46, Article VI, Stormwater Quality and Chapter 46, Article VII, Floodplain Development and Management. In the event of conflict between any other ordinance or regulation of the City of Chickasha and these Articles, the provisions of these articles shall govern.
- B. It is the goal of this Section to limit stormwater runoff rates after development to their historic rates or less, as an aid in erosion control and to decrease the probability of downstream flooding.
- C. The City's design criteria and minimum drainage requirements are published in the General Drainage Policy for the City of Chickasha, latest edition, and shall be utilized for all new development and redevelopment within the City of Chickasha.
- D. Designation of Responsibility. It is intended that responsibility for drainage be allocated as follows, unless otherwise specifically designated:
 1. The Developer is responsible for the following:
 - a. Construction of facilities to accommodate the increased surface drainage within the development and future developed flows from upstream properties and shall convey same to a point on an identified existing stream system. Such stream system shall have the hydraulic capability to accommodate the increased surface

water flow or shall be modified by the Developer in a manner approved by the City to do so.

- b. Obtaining off-site flowage easements and the construction of facilities to accommodate increased flow. Said easements shall be dedicated to the City. Where such off-site facilities are necessary, the City shall allow the Developer the option of constructing on-site detention and retention structures when environmental and economic conditions prohibit or make off-site improvements infeasible.
 - c. The improvement of all minor and major tributaries and channels lying within the development.
 - d. Any significant increase in rate or quantity of runoff in any minor or major tributary or minor or major channel which results from the development.
 - e. Provision for the maintenance of all storm water systems and fringe areas of tributaries and channels which have not been dedicated to the public.
2. The City and other levels of government will be responsible for the maintenance of floodway and flood-fringe areas dedicated to the public.

ARTICLE VI. – STORMWATER QUALITY

Sec. 46-50. - Purpose.

It is the intent of this chapter to protect, maintain, and enhance the environment of the city and the short-term and long-term public health, safety, and general welfare of the citizens of the city by controlling discharges of pollutants to the city's stormwater drainage system and to maintain and improve the quality of the water into which the stormwater drainage system flows, including without limitation, the lakes, rivers, streams, creeks, ponds, and wetlands in the city.

This chapter establishes methods to regulate the introduction of pollutants to the municipal separate storm sewer system (MS4) and enables the city to comply with all applicable state and federal laws including, but not limited to, the Clean Water Act (33 U.S.C. 1251, et seq.), the Oklahoma Environmental Quality Act (Title 27A O.S. § 1-1-101, et seq.) and the stormwater regulations (40 CFR Part 122). The objectives of this chapter are to allow the city:

- (1) To regulate the contribution of pollutants to the municipal separate storm sewer system by stormwater discharges by any user;
- (2) To control the introduction to the municipal separate storm sewer system of spills, dumping, or the disposal of materials other than stormwater;
- (3) To prohibit illicit discharges to the municipal separate storm sewer system;
- (4) To carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with this chapter;
- (5) To comply with the conditions in the state department of environmental quality general permit for phase II municipal separate storm sewer system discharges for small cities (OKR04) or any other federal or state laws pertaining to stormwater quality to which the city is subject.

(Ord. No. 2016-13 , § I, 6-20-2016)

Sec. 46-51. - Definitions.

Unless otherwise provided in this chapter, for the purposes of this chapter, the following words and phrases shall have the meanings given herein:

Accidental discharge means a discharge other than stormwater runoff or other approved discharges listed in section 46-B(b) into the city's stormwater drainage system, the watercourses of the city, or the waters of the state or United States which occurs by chance and without planning or consideration prior to occurrence.

Agricultural stormwater runoff means any stormwater runoff from orchards, cultivated crops, pastures, range lands, and other nonpoint source agricultural activities, but not discharges from concentrated animal feeding operations as defined in 40 CFR Section 122.23 or discharges from concentrated aquatic animal production facilities as defined in 40 CFR Section 122.24 and any addition or amendment thereto.

City means the City of Chickasha.

Contaminated means containing a harmful quantity of any substance.

Discharge means to cause or allow to throw, drain, release, dump, spill, empty, emit, blow, or pour any pollutant or non-permitted substance into the municipal separate storm sewer system (MS4J, any watercourse of the city, or any water of the state or United States.

Discharger means any person who causes, allows, permits, or is otherwise responsible for a discharge, including, without limitation, any operator of a land disturbance site or a construction site or an industrial facility, any owner of a commercial property or a residential property or an agricultural property, and any owner or transporter of a source of discharge.

Illicit discharge means any intentional discharge to the municipal separate storm sewer system, any watercourse of the city, or any water of the state or United States that is not composed entirely of stormwater, except discharges pursuant to any OPDES or NPDES permit and discharges allowed per this chapter.

Monitoring means the performance of stormwater flow measurements, stormwater sampling, sample analysis, visual inspections, and like procedures necessary to determine compliance with stormwater discharge activity.

Motor vehicle fluid means any vehicle crankcase oil, antifreeze, transmission fluid, brake fluid, differential lubricant, gasoline, diesel fuel, gasoline/alcohol blend, and any other fluid used in or from within a motor vehicle.

Municipal separate storm sewer system (MS4) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) owned or regulated by the city and designed or used for collecting or conveying stormwater, and which is not used for collecting or conveying sewage.

Municipal solid waste means solid waste resulting from or incidental to municipal, community, commercial, institutional, or recreational activities, and includes garbage, rubbish, ashes, street cleanings, dead animals, abandoned automobiles, and other solid waste other than industrial waste.

National pollutant discharge elimination system (NPDESJ permit) means a permit issued by EPA (or by the state as an OPDES permit under authority delegated pursuant to 33 U.S.C. § 1342 (b)) that authorizes the discharge of pollutants to waters of the United States (or waters of the state), whether the permit is applicable on an individual, group, or general area-wide basis.

Nonpoint source means any source of any discharge of a pollutant that is not a "point source."

Oklahoma pollutant discharge elimination system (OPDESJ permit). See national pollutant discharge elimination system (NPDESJ permit).

Point source means any discernible, confined, and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.

Pollutant means any dredge spoil, solid waste, incinerator residue, oil, grease, sewage, garbage, sewage sludge, munitions, medical waste, chemical waste, industrial waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, sediment from construction sites and graded areas, agricultural and industrial waste, and any characteristics of wastewater (i.e. acidity or alkalinity (pH), temperature, total suspended solids (TSSJ), turbidity, color, biological oxygen demand (BOD), chemical oxygen demand (COD), toxicity, odor).

Sanitary sewer (or sewer) means the system of pipes, conduits, and other conveyances which carry industrial waste and domestic sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, to a sewage treatment plant and to which stormwater, surface water, and groundwater are not intentionally admitted.

Solid waste means any garbage, rubbish, refuse, municipal solid waste, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material including solid, liquid, semi-solid, or contained gaseous material resulting from

industrial, municipal, commercial, mining, agricultural operations, community and institutional activities, including metal shavings, plastic pellets, paint chips, carpet fibers, wood chips, sawdust, grass clippings, and leaves.

Stormwater drainage system means any facility, structure, improvement, development, equipment, property or interest therein, or other structural or nonstructural element made, constructed, used, or acquired for the purpose of collecting, containing, storing, conveying, and controlling stormwater wherever located, including, but not limited to, storm sewers, streets, gutters, curbs, street drains, conduits, natural and manmade channels, pipes, culverts, and detention or retention ponds whether public or private.

Storm drainage program or program means an overall strategy and framework for the stormwater management activities of the city.

Spill means any release that, in the opinion of the city manager or his authorized representative, negatively impacts the quality of water within or discharges from the city's municipal separate storm sewer system, or causes damaging or deleterious effects to the city's municipal separate storm sewer system including all structures or appurtenances, and/or the waters to the storm sewers, and/or the city's watercourses or the waters of the state or United States.

Storm drainage management means the collection, conveyance, storage, treatment, and disposal of stormwater runoff in a manner to meet the objectives of Title 23 of the Chickasha Municipal Code and its terms, including, but not limited to, measures that control the increased volume and rate of stormwater runoff and water quality impacts caused by manmade changes to the land.

Stormwater means any rainwater runoff, surface runoff, and drainage related to rain or storm events or snow melt.

Wastewater means any water or other liquid, other than uncontaminated stormwater, discharged from a facility.

Watercourse means any lake, river, stream, creek, pond, or wetland.

(Ord. No. 2016-13 ,§ I, 6-20-2016)

Sec. 46-52.- Monitoring.

The city manager or his authorized representative shall have the right to detect, identify, and monitor the type, quantity of, and the concentration of pollutants in stormwater discharges, in discharges entering the city's MS4 or the watercourses or the waters of the state or United States within the city, as well as directly in the aforementioned conveyances and waterbodies themselves.

(Ord. No. 2016-13 , § I, 6-20-2016)

Sec. 46-53. - Illicit discharges.

- (a) The city manager or his authorized representative shall take appropriate steps to detect and eliminate illicit connections to the city's stormwater drainage system, including the adoption of a program to screen for illicit discharges and identify their source or sources.
- (b) The city manager or his authorized representative shall take appropriate steps to detect and eliminate improper discharges, including programs to screen for improper disposal and programs to provide for public education, public information, and other appropriate activities to facilitate the proper management and disposal of used oil, toxic materials, and household hazardous waste.

(Ord. No. 2016-13 , § I, 6-20-2016)

Sec. 46-54. - Inspections.

- (a) The city manager or his authorized representative is authorized to enter a structure or premise to determine whether any hazard to life, property, or public welfare or any public nuisance exists. This shall include authority to enter properties for regular or periodic inspections, investigations, monitoring, observation, measurement, enforcement, sampling, and testing to effectuate the provisions of this chapter. The owner of said property or the representative on-site shall be duly notified and the inspection shall be conducted at a reasonable time.
- (b) In the event the city manager or his authorized representative reasonably believes that discharges from the property into the city's stormwater drainage system may cause an imminent and substantial threat to human health or the environment, the inspection may take place at any place at any time and without notice to the owner of the property or a representative on-site. The inspector shall present proper credentials upon reasonable request by the owner or representative.
- (c) Upon refusal by any property owner to permit an inspector to enter or continue an inspection, the inspector shall terminate the inspection or confine the inspection to areas over which no objection is raised. The inspector shall immediately report the refusal and the grounds to the city manager. The city manager may seek appropriate compulsory process.
- (d) The city manager or his authorized representative may request information from an owner or representative concerning processes, methods, records, permits, or other information that reasonably can be used to determine compliance with this chapter.

(Ord. No. 2016-13 , § I, 6-20-2016)

Sec. 46-55. - Unauthorized discharge a public nuisance.

No person shall conduct, allow, or permit the discharge of stormwater in any manner in violation of this chapter, of any condition of a permit issued pursuant to this chapter, or of any stormwater discharge permit issued by the state or federal agency. Such discharge is hereby declared a public nuisance and shall be corrected or abated by any owner and by any operator.

(Ord. No. 2016-13 , § I, 6-20-2016)

Sec. 46-56. - Illicit discharge and illegal dumping.

- (a) No person shall conduct, allow, or permit the direct or indirect discharge of any material other than stormwater into the MS4, the watercourses in the city, or the waters of the state or United States. The following direct or indirect discharges are examples of prohibited discharges; this list is not all-inclusive:
- (1) Sewage dumping or dumping of sewage sludge;
 - (2) Chlorinated swimming pool discharge;
 - (3) Discharge of any polluted household wastewater, such as but not limited to laundry wash water and dishwater, except to a sanitary sewer or properly operating sewage disposal system;
 - (4) Leaking sanitary sewers and connections;
 - (5) Leaking or improperly operating sewage disposal system, private or otherwise;
 - (6) Leaking water lines;
 - (7) Commercial, industrial or non-exempt public vehicle wash or power wash discharge and commercial, industrial, or non-exempt cosmetic cleaning;
 - (8) Garbage, rubbish, litter, trash, or sanitary waste disposal;
 - (9) Dead animals, animal fecal waste, or fecal absorbent such as cat litter or cedar mulch;
 - (10) Non-stormwater discharges, except pursuant to a permit issued by the state or federal agency;
 - (11) Dredged or spoil material;
 - (12) Solid waste and commercial or industrial process by-products;
 - (13) Chemical waste, industrial waste, and hazardous waste and substances;
 - (14) Wrecked or discarded vehicles, appliances, or equipment;
 - (15) Wastewater;
 - (16) Motor vehicle fluid;
 - (17) Oil or used oil;
 - (18) Paint;
 - (19) Yard waste such as grass clippings, leaves, or limbs;
 - (20) Sediment, litter, building materials, chemicals, concrete wash-out or slurry, or sanitary waste from a construction site;

- (21) Municipal solid waste.
- (b) The following non-stormwater sources are the "allowable and occasional incidental discharges" which the city has determined to not be substantial contributors of pollutants to the MS4 and are therefore allowed:
- (1) Water line flushing;
 - (2) Landscape irrigation;
 - (3) Diverted stream flows;
 - (4) Rising ground waters;
 - (5) Residential building wash water without detergents;
 - (6) Uncontaminated pumped ground water;
 - (7) Uncontaminated ground water infiltration;
 - (8) Discharges from potable water sources;
 - (9) Foundation drains;
 - (10) Air conditioning condensate;
 - (11) Irrigation water;
 - (12) Springs;
 - (13) Water from crawl space pumps;
 - (14) Footing drains;
 - (15) Lawn watering;
 - (16) Individual residential car washing;
 - (17) De-chlorinated swimming pool discharges;
 - (18) Street wash water;
 - (19) Fire hydrant flushings;
 - (20) Non-commercial or charity car washes;
 - (21) Discharges from riparian areas and wetlands;
 - (22) Discharges or flows from emergency fire-fighting activities provided that the incident commander, fire chief, or other on-scene fire-fighting official in charge makes an evaluation regarding potential releases of pollutants from the scene. Measures shall be taken to reduce any such pollutant releases to the maximum extent practicable subject to all appropriate actions necessary to ensure public health and safety.

(Ord. No. 2016-13 . § I, 6-20-2016)

Sec. 46-57. - Accidental discharges.

- (a) In the event of any discharge or a hazardous substance in amounts which could cause a threat to public drinking supplies, a "significant spill," or any other discharge which could constitute a threat to human health or the environment, the owner or operator or the facility shall give notice to the city's drainage utility manager and the field office of the state department of environmental quality as soon as practicable, but in no event later than the close of business on the day following the accidental discharge or the day the discharger becomes aware of the circumstances. If an emergency response by governmental agencies is needed,

the owner or operator should also call 911 immediately to report the discharge. A written report must be provided to the city's storm drainage utility manager within five days of the time the discharger becomes aware of the circumstances, unless this requirement is waived by the city manager or his authorized representative for good cause shown on a case-by-case basis, containing the following particulars: 1) a reasonably precise description of the discharge, 2) the exact date and time of discharge, and 3) steps being taken to eliminate and prevent recurrence of the discharge.

- (b) The owner and operator shall take all reasonable steps to mitigate any adverse impact to the city's MS4, the watercourses in the city, or the waters of the state or United States, including such accelerated or additional monitoring as necessary to determine the nature and impact of the discharge. It shall not be a defense for the discharger in an enforcement action that it would have been necessary to halt or reduce the business or activity of the facility in order to maintain water quality and mitigate any adverse impact that the discharge may cause. The mitigation plan shall be approved by the drainage utility manager.

(Ord. No. 2016-13 . § I, 6-20-2016)

Sec. 46-58. - Construction and post-construction stormwater control requirements.

- (a) The city may regulate construction and land disturbing activities on any size lot, regardless of whether that activity also requires a department of environmental quality construction permit.
- (b) The city may enforce development regulations requiring that any new development or redevelopment include structural or non-structural control measures as necessary to maintain predevelopment runoff conditions.
- (c) Pursuant to this requirement, the city may conduct regular inspections to verify the functionality of the structural or non-structural control measure.

(Ord. No. 2016-13 . § I, 6-20-2016)

Sec. 46-59. - Administrative enforcement.

- (a) Notification of violation. Whenever the city manager or his authorized representative finds that any permittee or any person discharging stormwater has violated or is violating this article, or a stormwater permit or order issued hereunder, the city manager or his authorized representative may serve upon said person or permittee written notice of the violation. Within ten calendar days of the receipt date of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the city manager. Submission of this plan in no way relieves

the permittee or person of liability or criminal prosecution for any violations occurring before or after receipt of the notice of violation.

- (b) Consent orders. The city manager or his authorized representative is hereby empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the compliance and for the noncompliance. Such orders will include specific action to be taken by the discharger, operator and owner to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraph (d) below.
- (c) Show cause hearing. The city manager or his authorized representative may order any person who causes or contributes to violation of this article or stormwater permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten calendar days prior to the hearing. Such notice may be served on any individual or the individual or the principal executive, general partner or manager of any legal entity or person of legal age at the office or business address of the permittee or violator.
- (d) Compliance order. When the city manager or his authorized representative finds that any person has violated or continues to violate this article or a permit or order issued thereunder, the city manager or his authorized representative may issue an order to the violator directing that, following a specified time period, adequate structures or devices be installed or procedures implemented and properly operated, supervised, and administered. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and best management practices.
- (e) Cease and desist orders. Notwithstanding any other notice, order, or administrative process provided by this section, when the city manager or his authorized representative finds that any person has violated or continues to violate this article or any permit or order issued hereunder, and also finds that such violation may cause an impairment of water quality or that a permit is required and has not been issued, the city manager or his authorized representative may issue an order to cease and desist all such violations and direct those persons in noncompliance to:
 - (1) Comply forthwith; or
 - (2) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations or terminating the discharge or both.
- (f) Appeal. A person receiving an order may file a written notice of appeal with the city manager no later than the tenth calendar day after receipt of the order. Such notice shall include an explanation as to why the person believes the enforcement action

should not be taken. A person receiving a cease and desist order may file a written notice of appeal with the city manager and obtain relief from such order upon a showing that the alleged violation will not cause an impairment of water quality or that a permit is not required. A hearing on the appeal will be scheduled within a reasonable time after receipt of the notice of appeal and the required explanation. All notices of appeal shall be signed by the owner or operator of the premises or activities in controversy, and shall include name and address of the person filing the notice of appeal. Notice of hearing on the appeal may be served by facsimile or first-class mail at the number or address given in the written notice of appeal.

(Ord. No. 2016-13 , § I, 6-20-2016)

Sec. 46-60. - Unlawful acts.

It shall be unlawful for any person to:

- (1) Violate any provision of this chapter;
- (2) Violate the provisions of any permit issued pursuant to this chapter;
- (3) Fail or refuse to comply with any lawful notice to abate issued by the city manager or his authorized representative within the time specified by such notice; or
- (4) Violate any lawful order of the city manager or his authorized representative, or fail to comply with such an order within the time allowed by such order.

(Ord. No. 2016-13 . § I, 6-20-2016)

Sec. 46-61. - judicial proceedings and relief.

- (a) The city council may authorize the city manager by and through the city attorney to initiate proceedings in any court of competent jurisdiction against any person who has or is about to:
 - (1) Violate the provisions of this chapter;
 - (2) Violate the provisions of any permit issued pursuant to this chapter;
 - (3) Fail or refuse to comply with any lawful order issued by the city manager which has not been timely appealed to the appropriate court within the time allowed by this chapter;
 - (4) Violate any lawful order within the time allowed by such order.
- (b) Any person who is required by any provision of this chapter or by any other law to obtain a permit prior to engaging in conduct that is regulated by this chapter, and who fails or neglects to obtain such a permit, or who fails to exhibit such a permit upon request by a city official, shall be guilty of an offense against the city. Each

day on which a violation shall occur or continue to occur shall be deemed a separate offense.

- (c) The city manager, with consent of the city council, may also initiate civil proceedings in any court of competent jurisdiction seeking monetary damages for any damages caused to publicly owned stormwater facilities by any person, and to seek injunctive or other equitable relief to enforce compliance with the provisions of this chapter or to enforce compliance with any lawful orders.
- (d) The city manager may petition the Oklahoma Department of Environmental Quality to regulate and prosecute stormwater dischargers which cannot be adequately controlled by municipal resources.

(Ord. No. 2016-13 , § I, 6-20-2016)

Sec. 46-62. - Reconsideration.

- (a) Any person subject to: a denial of a permit issued under this chapter, a compliance order, a stop work order, an emergency suspension of utility service, or any other enforcement action in this chapter which allows for reconsideration and hearing under this section, may petition the city official who took such action to reconsider the basis for the action. In order for the petition to be re-considered, it shall be filed with such city official no later than the tenth calendar day after receipt of the notice/order.
- (b) Failure to submit a timely written petition for reconsideration shall be deemed to be a waiver of any further right to administrative reconsideration or review of the action.
- (c) In its petition, the petitioner shall indicate the action objected to, and the reasons for the objection(s), any facts that are contested, the evidence that supports the petitioner's view of the facts, any alternative terms of an order that the petitioner would accept, whether the petitioner requests a hearing on its petition and the address where notice of hearing will be received and accepted.
- (d) The effect of a compliance order or stop work order shall be stayed pending the city manager's reconsideration of the petition, and any hearing thereon, unless the city manager expressly makes a written determination to the contrary. The effect of an emergency suspension of utilities shall not be stayed pending the city manager's reconsideration or any hearing, unless the city manager expressly, and in writing, stays the emergency order.
- (e) Within a reasonable time of the submittal of a petition for reconsideration, the city manager shall either grant the petition and withdraw or modify the order or modify or grant the permit accordingly; deny the petition if no material issue of fact is raised; or if a hearing has been requested and/or a material issue of fact has been raised, set a hearing on the petition.

(Ord. No. 2016-13 . § I, 6-20-2016)

Sec. 46-63. - Hearings.

- (a) The city manager may also set a hearing if the city manager determines that a show cause hearing should be conducted, if grounds exist to revoke or suspend a permit issued under this chapter, or if grounds exist to terminate utilities on a non-emergency basis.
- (b) Written notice of the hearing shall be served on a petitioner/violator at least ten calendar days prior to the hearing. Notice shall be served in person or by mail, return receipt requested.
- (c) Notices shall specify the date, time, and place of the hearing.
- (d) A Notice that is mailed shall be deemed received five calendar days after it is placed in a mail receptacle of the United States Postal Service.
- (e) No decision may be rendered at a hearing by reason of the petitioner/violator's failure to appear unless proof of service is shown.
- (f) For purposes of this section, the city manager shall be empowered to administer oaths and to promulgate procedural rules for the conduct of the hearing.
- (g) Whenever any deadline specified in this section falls upon a Saturday, Sunday, or a city-recognized holiday, the deadline shall be the next regular city business day.
- (h) The date of an order or ruling required to be made under this section shall be deemed to be the date it is signed.
- (i) Decisions shall be based on a preponderance of the evidence. The city shall have the burden of proof in all hearings except permit denial hearings. In permit denial hearings, the burden of proof shall be on the petitioner.
- (j) The city manager shall act as the hearing officer.
- (k) After the conclusion of the hearing, the city manager shall make written findings of the fact and conclusions of law and shall issue a written decision without undue delay.
- (l) A hearing shall exhaust all administrative remedies of the petitioner/violator.

(Ord. No. 2016-13 ,§ I, 6-20-2016)

Sec. 46-64. - Variances.

- (a) The city manager may grant a revocable variance from the requirements of this chapter providing to do so would not result in the violation of any state or federal law or regulation and if exceptional circumstances applicable to the site exist such that strict adherence to the provisions of this chapter will result in unnecessary hardship and will not result in a condition contrary to the intent of the article.
- (b) A written petition for a variance shall be required and shall state the specific variance sought and the reasons, with supporting data, why a variance should be granted. The request shall include all information necessary to evaluate the proposed variance. The petition shall be filed with the city manager.

- (c) The city manager shall conduct a review of the request for a variance within ten working days after receipt and may either support the petition or may object to the petition. If the city manager objects to the variance, the city manager shall state the reasons therefor.
- (d) Once the city manager's review is complete or the ten working days for review have expired, the petition shall be subject to action at the discretion of the city council.

(Ord. No. 2016-13 , § I, 6-20-2016)

ARTICLE VII. – FLOODPLAIN DEVELOPMENT AND MANAGEMENT

ARTICLE I. - IN GENERAL

Sec. 22-1. - Findings of fact.

- (a) The flood hazard areas of the city are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.
- (b) These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

(Code 2012, § 25-1-1(B))

Sec. 22-2. - Statement of purpose.

It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- (1) Protect human life and health;
- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;
- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;

- (6) Help maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize future flood blight areas; and
- (7) Ensure that potential buyers are notified that property is in a flood area.

(Code 2012, § 25-1-1(C))

Sec. 22-3. - Methods of reducing flood losses.

In order to accomplish its purposes, this chapter uses the following methods:

- (1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;
- (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers that are involved in the accommodation of floodwaters;
- (4) Control filling, grading, dredging and other development which may increase flood damage; and
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

(Code 2012, § 25-1-1(DJ))

Sec. 22-4.- Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Accessory structure means a structure that is on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Examples of accessory structures include, but are not limited to, garages and storage sheds.

Area of shallow flooding means a designated AO zone on a community's flood insurance rate map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard is the land in the floodplain within the city subject to a one percent or greater chance of flooding in any given year.

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year.

Base flood elevation means the elevation in feet above mean sea level of the base flood or one percent chance flood.

Basement means any area of the building having its floor sub-grade (below ground level) on all sides.

BFE means base flood elevation.

CFR means Code of Federal Regulations.

Critical feature means an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

Development means any manmade change in improved and unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Development permit means a permit issued by the city floodplain administrator which authorizes development in a special flood hazard area in accordance with this chapter.

Elevated building means a non-basement building built, in the case of a building in zones AO, AE, A, and X, to have the top of the elevated floor adequately anchored so as not to impair the structural integrity of the building during a flood up to the magnitude of the base flood. In the case of zones AE, A, and X, the term "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwaters.

Existing construction means, for the purposes of determining rates, structures for which the start of construction commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. The term "existing construction" may also be referred to as "existing structures."

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before August 4, 1972.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FEMA means the Federal Emergency Management Agency.

FIRM means flood insurance rate map.

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters; or
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood insurance rate map means an official map of the city on which FEMA has delineated both the areas of special flood hazards and the risk premium zones applicable to the city.

Flood insurance study means the official report provided by FEMA for the city which contains flood profiles, water surface elevation of the base flood, as well as the floodway width, section area and mean velocity.

Floodplain or floodprone area means any land area susceptible to being inundated by water from any source.

Floodplain administrator means a person accredited by the OWRB and designated by the city council to administer and implement laws, ordinances and regulations relating to the management of floodplains.

Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage, including, but not limited to, emergency preparedness plans, flood control works and floodplain management regulations.

Floodplain management regulations means zoning codes and ordinances, subdivision regulations, building codes, health regulations, special purpose regulations and ordinances (such as floodplain, grading and erosion control regulations and ordinances) and other applications of police power. The term "floodplain management regulations" describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Flood protection system means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within the city subject to a special flood hazard and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water

surface elevation more than a designated height. A floodway is located within areas of special flood hazard established in section 22-6. A floodway is an extremely hazardous area due to the velocity of floodwaters that carry debris and potential projectiles.

Functionally dependent use means a use that cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term "functionally dependent use" includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Highest adjacent grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure means any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior; or
 - b. Directly by the Secretary of the Interior in states without approved programs.

Levee means a manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

Levee system means a flood protection system which consists of a levee or levees and associated structures, such as closure and drainage devices, that are constructed and operated in accordance with sound engineering practices.

Lowest floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of 44 CFR 60.3.

Manufactured home means a structure transportable in one or more sections that is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle".

Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Mean sea level means, for purposes of the National Flood Insurance Program, the North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on the city's flood insurance rate map are referenced.

New construction means, for the purpose of determining insurance rates, structures for which the start of construction commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, the term "new construction" means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by the city council and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by the city floodplain board.

OWRB means the Oklahoma Water Resources Board.

Recreational vehicle means a vehicle that is:

- (1) Built on a single chassis;
- (2) 400 square feet or less when measured at the largest horizontal projections;
- (3) Designed to be self-propelled or permanently towable by a light-duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Public Law 97-348) includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation.

Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets or walkways; nor does it include excavation for basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

Substantial damage means damage of any origin sustained by a structure where the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before start of construction of the improvement. This includes structures that have incurred substantial damage, regardless of the actual repair work performed. The term "substantial improvement" does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and that are the minimum necessary conditions; or
- (2) Any alteration of a historic structure provided that the alteration would not preclude the structure's continued designation as a historic structure.

Variance is a grant of relief by the city to a person from the terms of this chapter when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this chapter. (For full requirements see 44 CFR 60.6.)

Violation means the failure of a structure or other development to be fully compliant with this chapter.

Water surface elevation means the height, in relation to the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

(Code 2012, § 25-2-1)

Sec. 22-5. - Lands to which this chapter applies.

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the city.

(Code 2012, § 25-3-1(A))

Sec. 22-6. - Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by FEMA in a scientific and engineering report entitled, "The Flood Insurance Study for Grady County, Oklahoma and Incorporated Areas," dated April 3, 2012, with the accompanying flood insurance rate map (FIRM) are adopted by reference and declared to be a part of this chapter.

(Code 2012, § 25-3-1(BJ))

Sec. 22-7. - Establishment of development permit.

A development permit shall be required to ensure conformance with the provisions of this chapter.

(Code 2012, § 25-3-1 (CJ))

Sec. 22-8. - Compliance.

No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of this chapter and other applicable regulations.

(Code 2012, § 25-3-1 (DJ))

Sec. 22-9. - Abrogation and greater restrictions.

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and any other ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(Code 2012, § 25-3-1 (EI))

Sec. 22-10. - Interpretation.

In the interpretation and application of this chapter, all provisions shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the city council; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statute.

(Code 2012, § 25-3-1 (F))

Sec. 22-11. - Warning and disclaimer or liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions, greater floods can and will occur and flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city or any official or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

(Code 2012, § 25-3-1 (G))

Secs. 22-12-22-40. - Reserved.

ARTICLE II. - ADMINISTRATION

Sec. 22-41.- Designation of the floodplain administrator.

The floodplain administrator shall be as designated by the city manager to administer and implement the provisions of this article and other appropriate sections of National Flood Insurance Program regulations in title 44 CFR pertaining to floodplain management.

(Code 2012, § 25-4-1(A))

Sec. 22-42. - Duties and responsibilities of the floodplain administrator.

Duties and responsibilities of the floodplain administrator shall include, but not be limited to, the following:

- (1) Become accredited by the OWRB in accordance with 82 O.S. §§ 1601-1618, as amended.
- (2) Review permit applications to determine whether the proposed building sites, including the placement of manufactured homes, will be reasonably safe from flooding.
- (3) Review, approve or deny all applications for development permits required by this article.
- (4) Review proposed development to assure that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval are required.
- (5) Make the necessary interpretation where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions).

- (6) Notify, in riverine situations, adjacent communities and the OWRB prior to any alteration or relocation of a watercourse, and submit evidence of such notification to FEMA.
- (7) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (8) Require the developer/applicant to determine and provide the base flood elevation on a FEMA elevation certificate as well as other data as required in order to administer the provisions of article III of this chapter.
- (9) When a floodway has not been designated, require that no new construction, substantial improvements, or other development (including fill) shall be permitted within zone AE as delineated on the county FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the city.
- (10) After a disaster or other type of damage occurrence to structures in the city, determine if the residential and nonresidential structures and manufactured homes have been substantially damaged, and enforce the substantial improvement requirement.
- (11) Maintain a record of all actions involving an appeal from a decision of the city.
- (12) Maintain and hold open for public inspection all records pertaining to the provisions of this article.

(Code 2012, § 25-4-1(BJ))

Sec. 22-43. - Permit procedures.

- (a) An application for a development permit shall be presented to the floodplain administrator on forms furnished by him and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:
 - (1) Elevation in relation to mean sea level of the lowest floor (including basement) of all new and substantially improved structures.
 - (2) For nonresidential floodproofed structures, professionally prepared plans along with a stamped certificate from a registered professional engineer or architect stating that the nonresidential floodproofed structure meets FEMA's flood proofing requirements.
 - (3) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.
- (b) Approval or denial of a development permit by the floodplain administrator shall be based on all of the provisions of this article and the following relevant factors:
 - (1) The danger to life and property due to flooding or erosion damage.

- (2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - (3) The danger to life and property due to flooding or erosion damage.
 - (4) The danger that materials may be swept onto other lands to the injury of others.
 - (5) The compatibility of the proposed use with existing and anticipated development.
 - (6) The safety of access to the property in times of flood for ordinary and emergency vehicles.
 - (7) The costs of providing governmental services during and after flood conditions, including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems.
 - (8) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.
 - (9) The necessity to the facility of a waterfront location, where applicable.
 - (10) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.
 - (11) The relationship of the proposed use to the comprehensive plan for that area.
 - (12) The floodplain appeal board membership shall be comprised of the board of adjustment members.
- (c) The floodplain administrator or city council, as applicable, may approve certain development in zones A or AE delineated on the county FIRM which increases the water surface elevation of the base flood by more than one foot, provided that the applicant for the development permit in that case first complies with-44 CFR 65.12.

(Code 2012, § 25-4-1(CJ))

Sec. 22-44. - Variances.

(a) *General provisions.*

- (1) The floodplain board of the city may grant variances for uses which do not satisfy the requirements of the Oklahoma Floodplain Management Act or this article, if the applicant for the variance presents adequate proof that:
 - a. Compliance with this article will result in an arbitrary and unreasonable taking of property without sufficient benefit or advantage to the people; and
 - b. Satisfies the pertinent provisions of this section.

However, no variance shall be granted where the effect of the variance will be to permit the continuance of a condition which unreasonably creates flooding hazards.
- (2) Any variance so granted shall not be construed as to relieve any person who receives it from any liability imposed by the Oklahoma Floodplain Management Act or by other laws of the state.
- (3) In no case shall variances be effective for a period longer than 20 years.
- (4) Any person seeking a variance shall file a petition with the floodplain board, accompanied by a filing fee as established by the city council.

- (5) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in section 22-43 and provisions of this section have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- (6) Any person seeking a variance to build a structure below the base flood elevation will be issued a notice signed by the chairman of the floodplain board which states that:
 - a. The cost of flood insurance will be commensurate with the increased risk resulting from permitting the structure to be built lower than the base flood elevation; and
 - b. Such construction below the base flood level increases risks to life and property.
- (7) At such time as the floodplain board deems the petition ready for notification to the public, the floodplain board shall schedule a hearing and direct the applicant to publish notice thereof in a newspaper of general circulation in the county at least 30 days prior to the hearing.
- (8) The floodplain board shall conduct the hearing and make determinations in accordance with the applicable provisions of this section. The floodplain board shall exercise wide discretion in weighing the equities involved and the advantages and disadvantages to the applicant and to the public at large when determining whether the variance shall be granted.
- (9) Variances shall only be issued upon:
 - a. A showing of good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws, regulations or ordinances; and
 - d. A determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (10) Upon consideration of the factors stated in this section and the intent of this article, the floodplain board may attach such conditions to the granting of a variance as it deems necessary to further the purposes and objectives stated in section 22-43.
- (11) The floodplain administrator shall maintain a record of all variance actions, including justification for their issuance; and a copy of any variance issued by the floodplain board shall be sent by the floodplain administrator to the OWRB and FEMA within 15 days after issuance of the variance.

(b) *Special provisions.*

- (1) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this article.

- (2) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (3) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- (4) Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:
 - a. The criteria of subsections (a)(5), (a)(9), (b)(2) and (b)(3) of this section are met; and
 - b. The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

(Code 2012, § 25-4-1(D))

Sec. 22-45. - Floodplain management fee schedule.

The city shall establish the fee for development in the floodplain by resolution of the city council.

(Code 2012, ch. 25, art. VI, § A)

Sec. 22-46. - Penalties for noncompliance.

- (a) No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this article and other applicable regulations. A structure or other development without the elevation certificate or other certifications required in this article is presumed to be in violation until such time as that documentation is provided. Violation of the provisions of this article by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this article or fails to comply with any of its requirements shall upon conviction thereof be fined not more than the established rate for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the city council or its city attorney from taking such other lawful action as is necessary to prevent or remedy any violation.
- (b) Enforcement of violations. The community development department is authorized to issue citations as set forth below:
 - (1) Each day during which a violation exists shall constitute a separate offense;
 - (2) For each offense cited, a penalty shall be established by resolution of the city council and shall be assessed to the owners of record; or
 - (3) Any person employed in connection therewith and who may have assisted in the commission of such violation.

- (c) In addition to the penalties provided in section 1-14, the city may institute appropriate actions or proceedings at law or equity for the enforcement of the provisions of this article or to correct the violations thereof. The conviction and punishment of any person hereunder shall not relieve such person from the responsibility to correct prohibited buildings, structures, obstructions, or improvements, nor prevent the enforcement, correction, or removal thereof.
- (d) The legally recorded owner of any property located in a special flood hazard area onto which fill material of any nature has been applied, with or without his knowledge and in violation of the provisions of this article, shall immediately and at his expense remove all such material upon written request to do so by the director of community development. Upon failure of the property owner to complete this work in a timely manner, the city council may order the work to be completed and expenses charged to the property owner or levied against the property.

(Code 2012, ch. 25, art. VI, § BI

Secs. 22-47-22-65. - Reserved.

ARTICLE III. - FLOOD HAZARD REDUCTION

Sec. 22-66. - General standards.

In all areas of special flood hazard, the following provisions are required for all new construction and substantial improvements:

- (1) All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
- (4) All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the systems into floodwaters; and
- (7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(Code 2012, § 25-5-1(A))

Sec. 22-67. - Specific standards.

In all areas of special flood hazard, the following provisions are required:

- (1) Residential construction. New construction and substantial improvement of any residential structure shall have the lowest floor (including basement) elevated at least one foot above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection is satisfied.
- (2) Nonresidential construction. New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall have the lowest floor (including basement) elevated at least one foot above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection is satisfied.
- (3) Enclosures. New construction and substantial improvements with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
 - a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
 - b. The bottom of all openings shall be no higher than one foot above grade; and
 - c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (4) Manufactured homes. All manufactured homes to be placed anywhere within the community in flood zone A, AO or AE on the county FIRM shall be installed using methods and practices that minimize flood damage and have the bottom of the I-beam elevated at least one foot above the base flood elevation. For the purposes of this requirement, manufactured homes must be elevated and anchored to a permanent foundation to resist flotation, collapse, or lateral movement. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces. The home shall be installed by a licensed installer according to state law and compliance herewith shall be certified in writing to the floodplain administrator by the installer prior to habitation of the manufactured home.
- (5) Recreational vehicles. Recreational vehicles placed on sites within zones A, AO and AE on the county FIRM shall either:
 - a. Be on the site for fewer than 180 consecutive days;
 - b. Be fully licensed and ready for highway use; or
 - c. Meet the permit requirements of section 22-43, and the elevation and anchoring requirements for manufactured homes in subsection (4) of this section.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions.

- (6) Accessory structure. Accessory structures to be placed on sites within zones A, AO and AE on the county FIRM shall comply with the following:
- a. The structure is unfinished on the interior;
 - b. The structure shall be used only for parking and limited storage;
 - c. The structure shall not be used for human habitation. Prohibited activities or uses include, but are not limited to, working, sleeping, living, cooking, or restroom use;
 - d. Service facilities such as electrical and heating equipment must be elevated to or above the BFE;
 - e. The structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
 - f. The structure shall be designed to have low flood damage potential and constructed with flood resistance materials;
 - g. The structure shall be firmly anchored to prevent flotation, collapse, and lateral movement;
 - h. Floodway requirements must be met in the construction of the structure;
 - i. Openings to relieve hydrostatic pressure during a flood shall be provided below the BFE; and
 - j. The structure shall be located so as not to cause damage to adjacent and nearby structures.

(Code 2012, § 25-5-1(B))

Sec. 22-68. - Standards for subdivisions.

- (a) The applicant for a development permit for any subdivision located in Zones A, AO and AE that is 51 or more lots or greater than five acres shall generate the base flood elevation data for that subdivision.
- (b) All subdivisions including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
- (c) All subdivisions including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

(Code 2012, § 25-5-1(CJ))

Sec. 22-69. - Standards for areas of shallow flooding (AO zones).

Located within the areas of special flood hazard established in section 22-6 are areas designated as shallow flooding.

These areas have special flood hazards associated with flood depths of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. Therefore, the following provisions apply:

- (1) All new construction and substantial improvements of residential structures shall have the lowest floor (including basement) elevated at least one foot or greater above the base flood elevation (the depth number specified in feet on the community's FIRM or at least two feet above the highest adjacent grade if no depth number is specified).
- (2) All new construction and substantial improvements of nonresidential structures shall:
 - a. Have the lowest floor (including basement) elevated at least one foot or greater above the base flood elevation (the depth number specified in feet on the community's FIRM or at least two feet above the highest adjacent grade if no depth number is specified) or:
 - b. Together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight, with walls substantially impermeable to the passage of water, and with structural components having the capability of resisting hydrostatic and hydrodynamic loads or effects of buoyancy. A registered professional engineer or architect shall submit certification to the floodplain administrator that the standards of this section are satisfied.
- (3) Within zone AH or AO, adequate drainage paths shall be required around structures on slopes to guide floodwaters around and away from proposed structures.

(Code 2012, § 25-5-1(DJ))

Sec. 22-70. - Floodways.

The following provisions shall apply to floodways:

- (1) Encroachments, including, but not limited to, fill, new construction, substantial improvements and other development, are prohibited within the adopted floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the city during the occurrence of the base flood discharge.
- (2) If section 22-69(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this article.
- (3) The city may permit encroachments within the adopted floodway that would result in an increase in base flood elevations, provided that the applicant for the development permit complies with all of 44 CFR 65.12.

(Code 2012, § 25-5-1 E))

Appendices

A. Application Forms

- B. Assurance Bond forms?
- C. Plat, PUD, etc. Checklists
- D. Figures
- E. Inspection Reports and checklists
- F. General Drainage Policy
- G. Standard Drawings

DRAFT

CITY OF CHICKASHA

CHAPTER 46

FIGURE 1

DRIVEWAY REQUIREMENTS FOR ALL USES

	1 & 2 Family Dwellings		All Uses Except for 1 & 2 Family Dwellings	
Frontage	Max. No. Curb Openings	Min. & Max. Widths ¹	Max. No. Curb Openings	Min. & Max. Widths ²
60' or less	1	10'-22'	1	25'-36'
61'-70'	2	10'-36'	1	25'-36'
71'-80'	2	10'-36'	1	25'-36'
81'-90'	2	10'-36'	1	25'-36'
91'-100'	2	10'-36'	1	25'-36'
101'-300'	2	10'-36'	2	20'-36'
301'-700'	3	10'-36'	3	20'-36'
701'-1400'	4	10'-36'	4	20'-36'
1401' & over	4	10'-36'	1/350' or major fraction	20'-36'

All one-lane egress and ingress driveways for all uses except for one- and two-family residential uses shall be greater than fifteen (15) feet but less than twenty (20) feet wide, with the combined width not to exceed the maximum listed above.

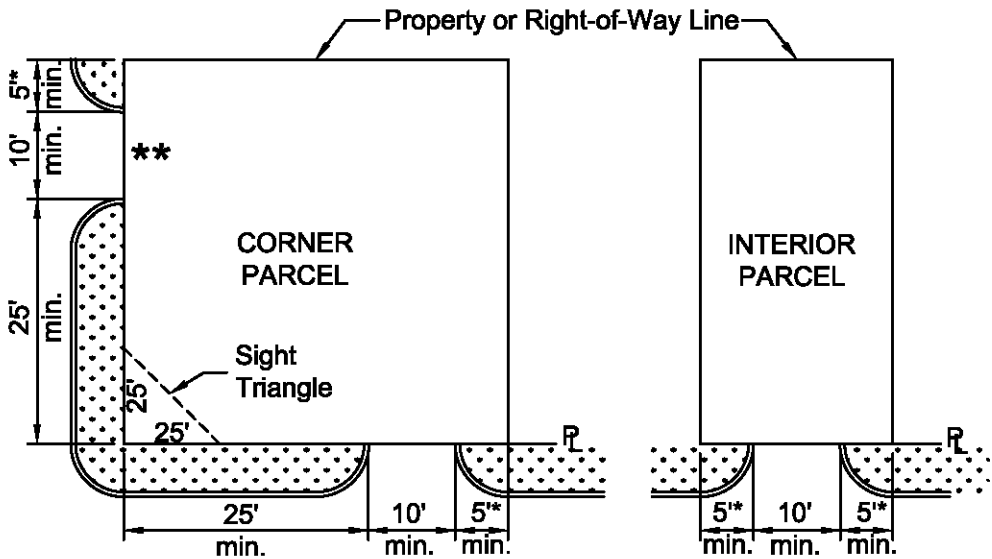
1 Minimums and maximums apply to each driveway measured at the property line with the exception of 1 & 2 family dwellings having frontage of 61' to 300'. The maximum curb opening widths indicated shall be the maximum combined widths of each curb opening for these frontages.

2 For all uses which primarily serve or are served by vehicles requiring larger than normal turn radii or access, such as tractor trailer vehicles, and such use is located in an industrial zoning district classification or for public fire and police responder facilities located in a Public Facilities District the city planner may administratively approve a request for extended curb opening widths. Extended curb opening widths for an industrial zoning district classification use shall not exceed fifty (50) feet. The applicant for such an extended curb opening must be able to adequately demonstrate the need for an extended opening to receive approval.

FIGURE 2

TYPICAL DETAIL

ONE AND TWO FAMILY DWELLINGS USING ONE CURB OPENING

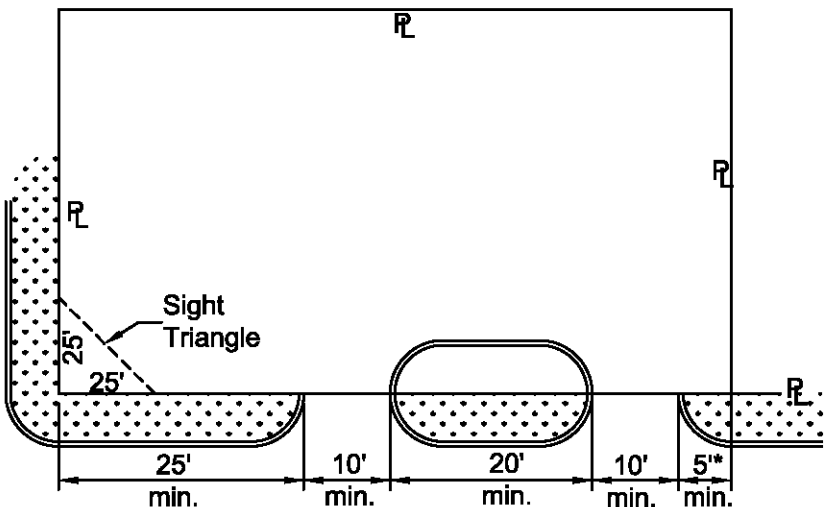


* 15' IF LOCATED ON ARTERIAL STREET

** NOT ALLOWED IF LOCATED ON ARTERIAL STREET AND INTERSECTING STREET IS A NON-ARTERIAL

FIGURE 3

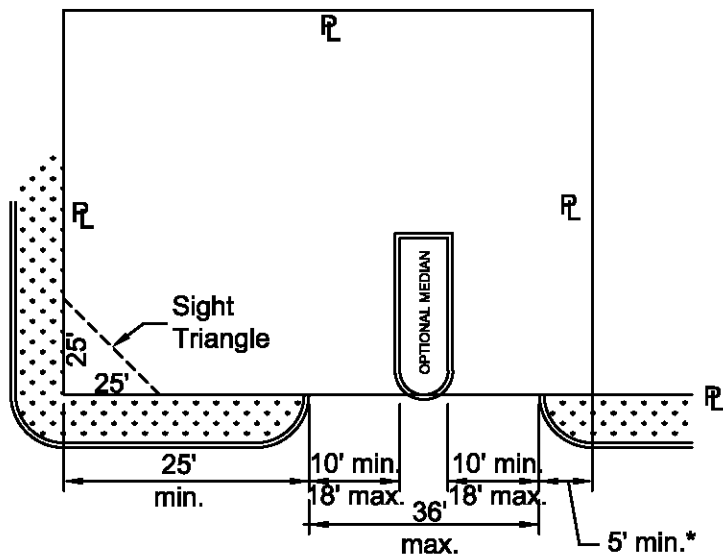
ONE AND TWO FAMILY DWELLINGS
USING CIRCLE DRIVES AND TWO OPENINGS



* 15' IF LOCATED ON ARTERIAL STREET

FIGURE 4

DOUBLE DRIVE FOR TWO FAMILY DWELLINGS ONLY

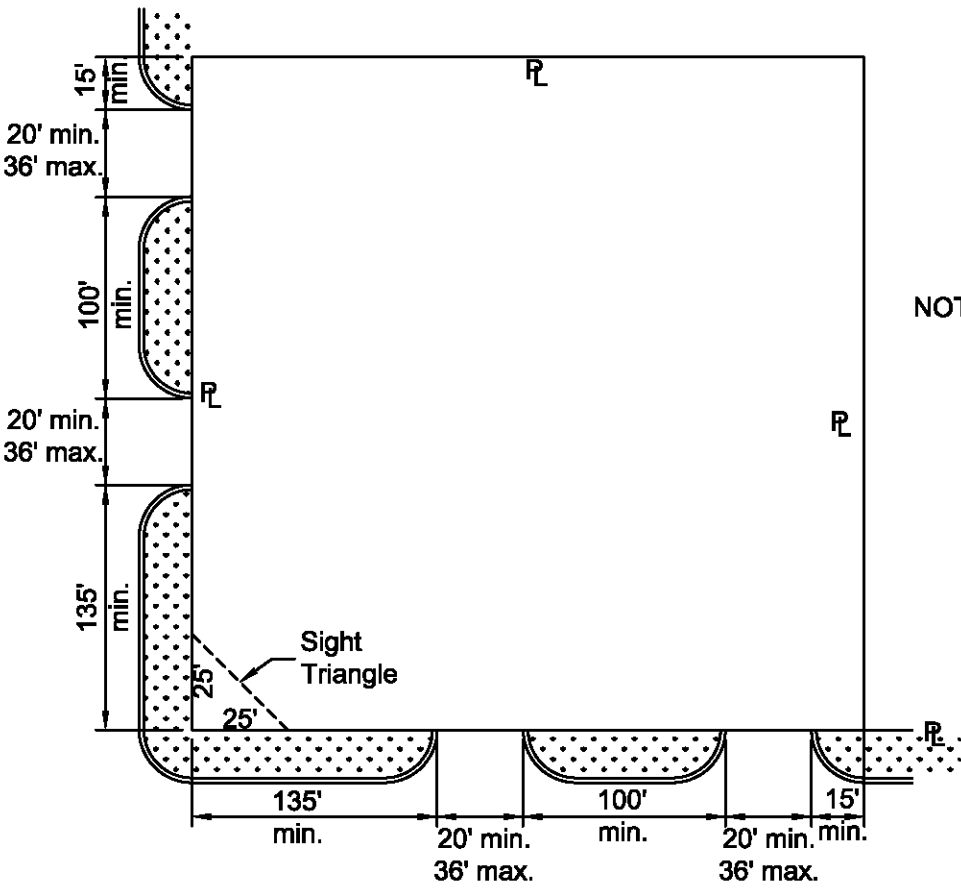


* 15' IF LOCATED ON ARTERIAL STREET

FIGURE 5

C-2 & C-3

PLANNED SHOPPING CENTER



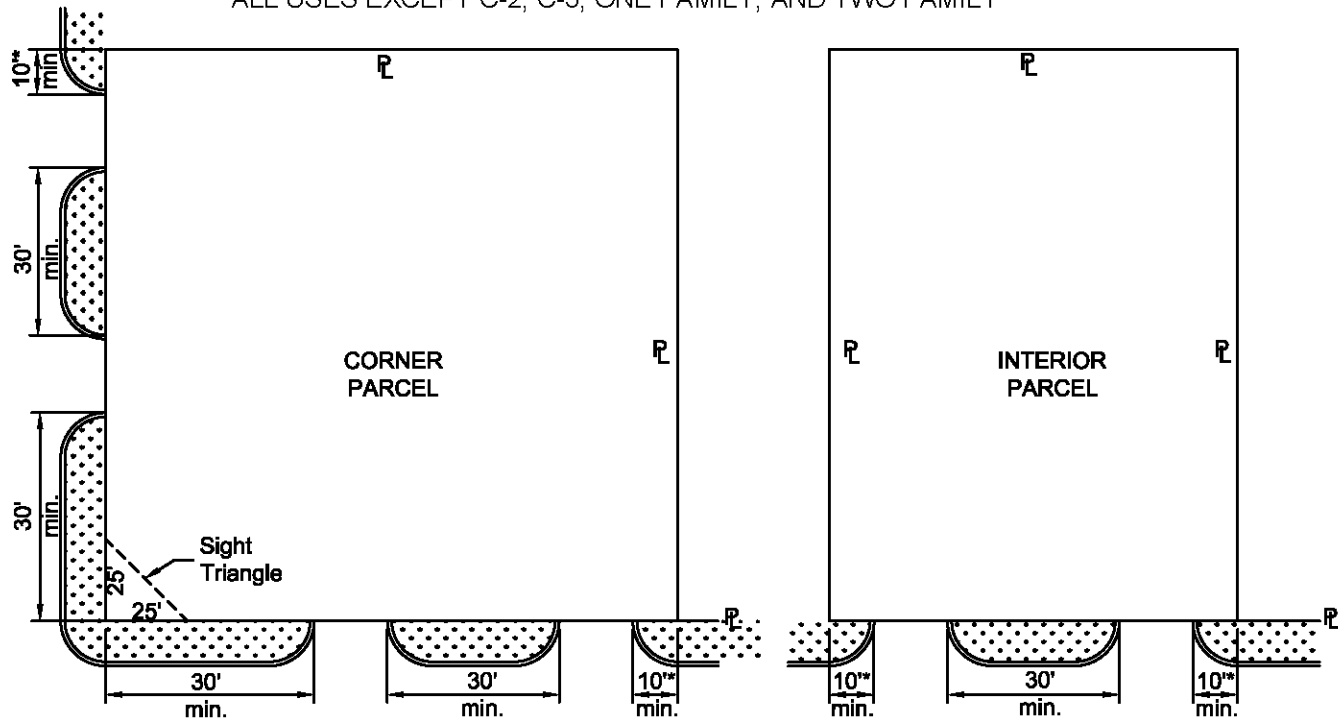
NOTE: Along arterial streets, inside barrier curbs shall be 2.5 feet inside property line. A minimum radius of 15' shall be required on all driveway radii

FIGURE 6

TYPICAL DETAIL

PARCELS USING TWO OR MORE DRIVEWAYS

ALL USES EXCEPT C-2, C-3, ONE FAMILY, AND TWO FAMILY



* 15' IF LOCATED ON ARTERIAL STREET

FIGURE 7

TYPICAL DETAIL

PARCELS LIMITED TO ONE DRIVEWAY

ALL USES EXCEPT C-2, C-3, ONE FAMILY, AND TWO FAMILY

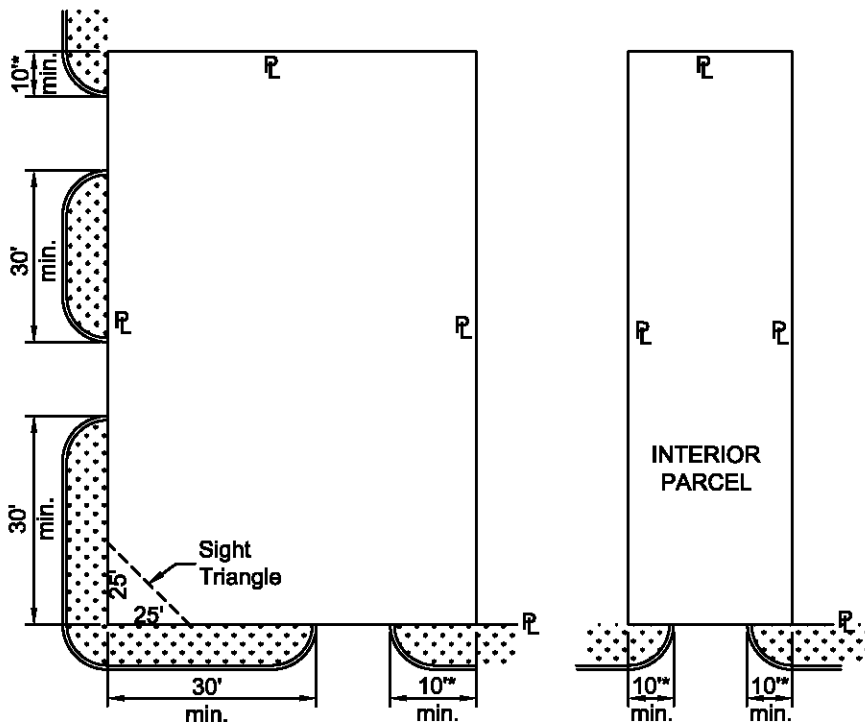
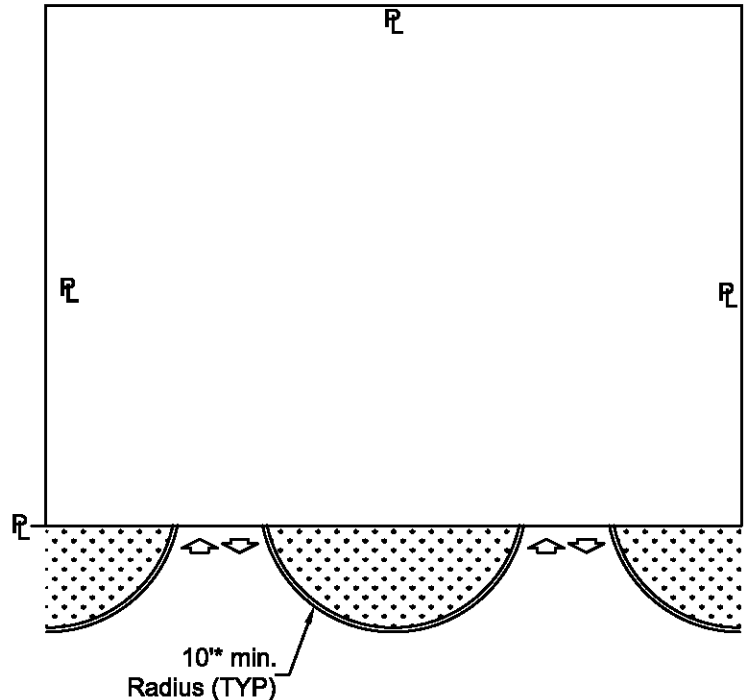
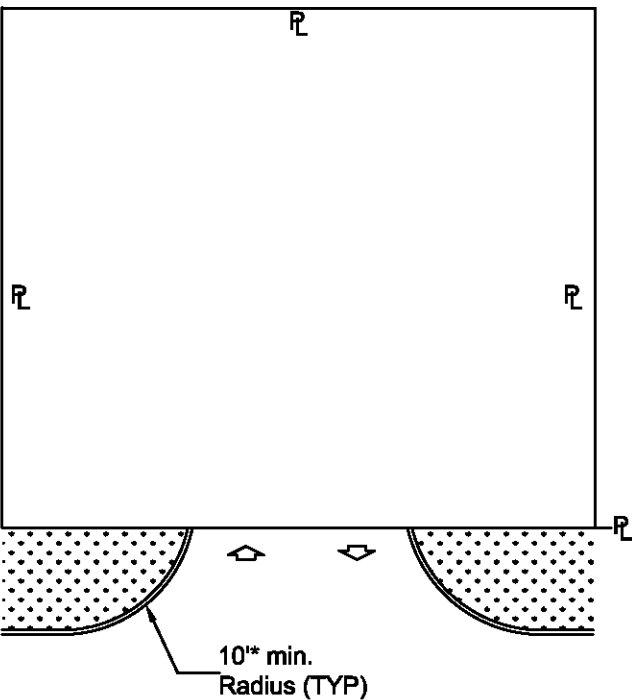
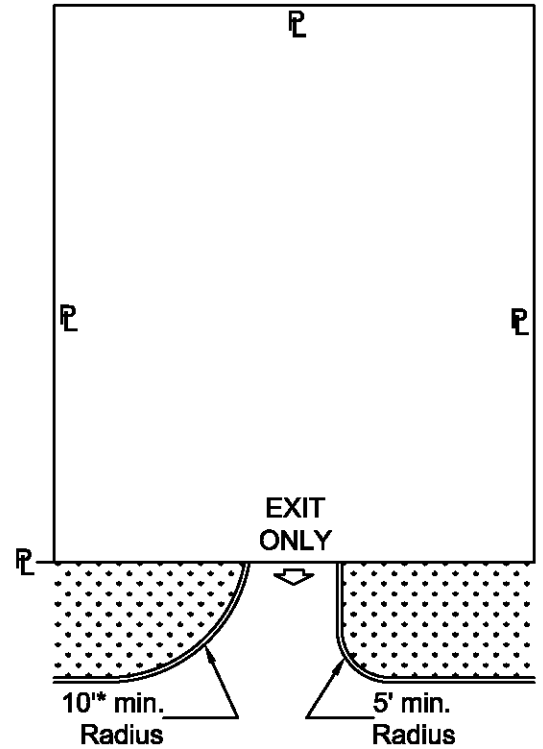
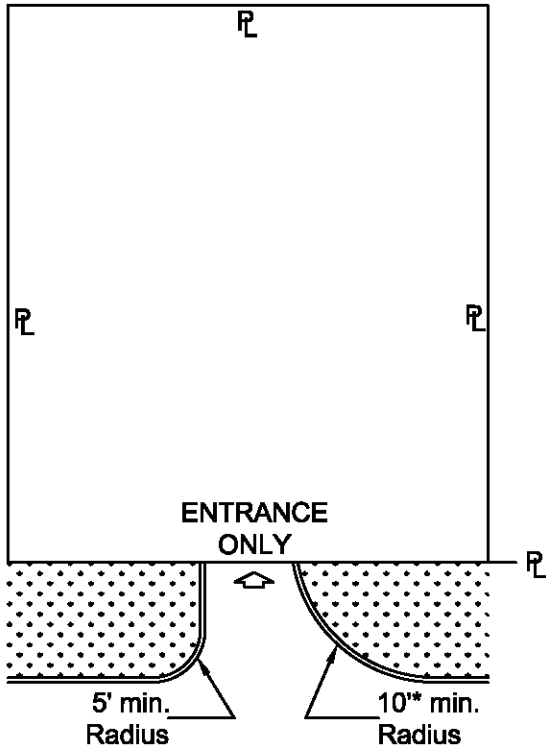


FIGURE 8

TYPICAL DETAILS OF CURB RADII

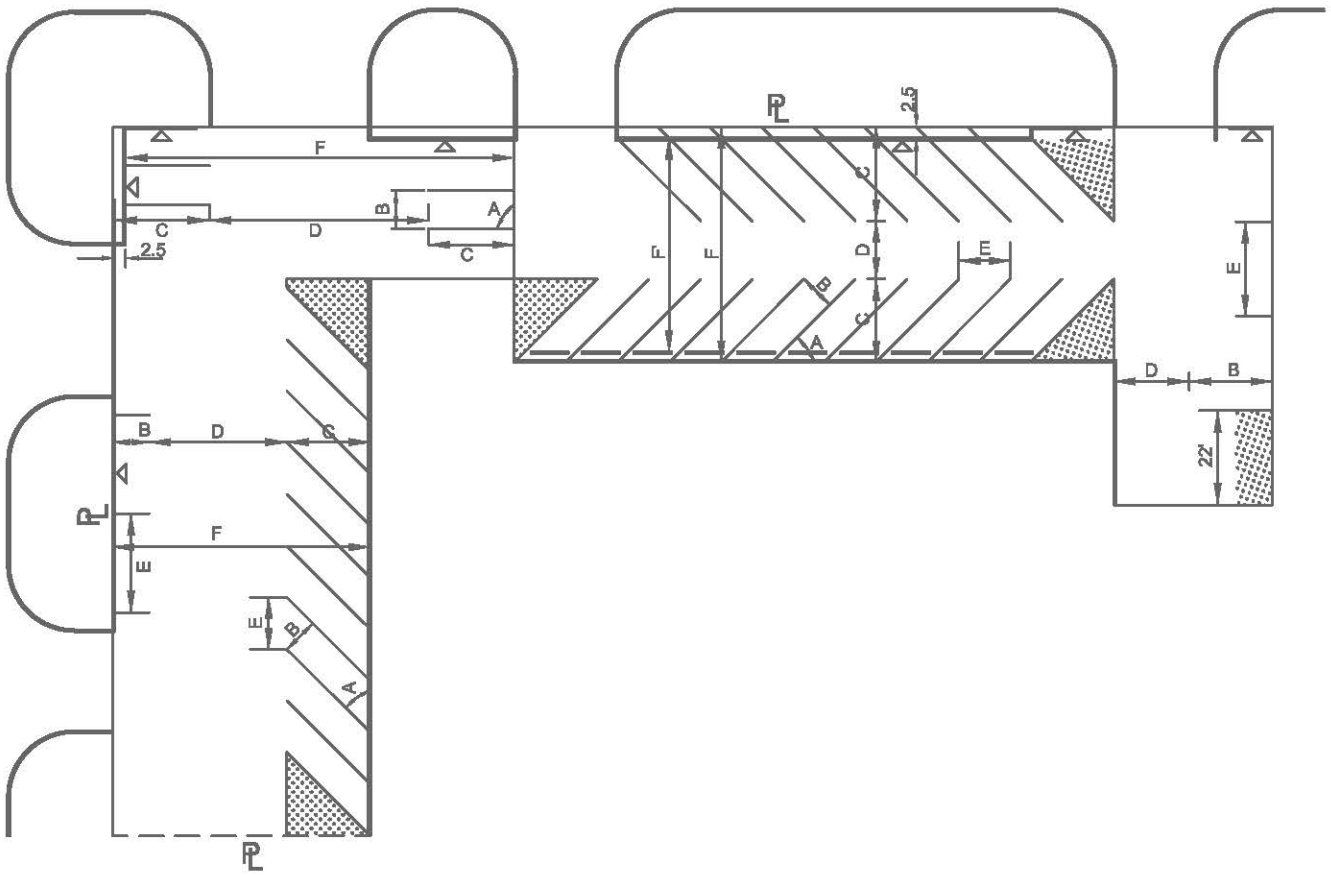
ALL USES EXCEPT C-2, C-3, ONE FAMILY AND TWO FAMILY



* 15' IF LOCATED ON ARTERIAL STREET

FIGURE 9

SPACE REQUIREMENTS FOR OFF-STREET PARKING



A	B	C	D	E	F	F'	A	B	C	D	E	F	F'
0 deg.	9.0	9.0	12.0	23.0	30.0	—	50 deg.	9.0	20.4	15.0	11.7	52.8	47.0
	9.5	9.5	12.0	23.0	31.0	—		9.5	20.7	15.0	12.4	53.4	47.3
	10.0	10.0	12.0	23.0	32.0	—		10.0	21.0	15.0	13.1	54.0	47.6
20 deg.	9.0	15.0	12.0	26.3	41.0	32.5	60 deg.	9.0	21.0	18.0	10.4	60.0	55.5
	9.5	15.5	12.0	27.8	42.0	33.1		9.5	21.2	18.0	11.0	60.4	55.6
	10.0	15.9	12.0	29.2	42.8	33.4		10.0	21.5	18.0	11.5	61.0	56.0
30 deg.	9.0	17.3	12.0	18.0	45.6	37.8	70 deg.	9.0	21.0	19.0	9.6	61.0	57.9
	9.5	17.8	12.0	19.0	46.6	38.4		9.5	21.2	18.5	10.1	60.9	57.7
	10.0	18.2	12.0	20.0	47.4	38.7		10.0	21.2	18.0	10.6	60.4	57.0
40 deg.	9.0	19.1	12.0	14.0	50.2	43.3	80 deg.	9.0	20.3	24.0	9.1	64.3	62.7
	9.5	19.5	12.0	14.8	51.0	43.7		9.5	20.4	24.0	9.6	64.4	62.7
	10.0	19.9	12.0	15.6	51.8	44.1		10.0	20.5	24.0	10.2	65.0	63.3
45 deg.	9.0	19.8	13.0	12.7	52.6	46.2	90 deg.	9.0	18.0	24.0	9.0	62.0	59.0
	9.5	20.1	13.0	13.4	53.2	46.5		9.5	18.0	24.0	9.5	62.0	59.0
	10.0	20.5	13.0	14.1	54.0	46.9		10.0	18.0	24.0	10.0	62.0	59.0

A minimum width of 20' is required for a two-way drive; but, when the figure in Column D is greater than 20' the greater figure must be used.

- A = Angle of parking
- B = Width of stall
- C = Depth of stall 90 deg. to aisle
- D = Width of aisle
- E = Width of stall parallel to aisle
- F = Width for two rows of parking, curb to curb
- F' = Width for two rows of parking, stop to stop
- G = Maneuver area required in front of parallel stalls

▼ When area behind property line fronting on a street is paved and/or used for parking, a 6" barrier curb shall be installed along the property line, ending 3.5' from driveway opening. If parking faces street, this curb will be 2.5' behind property line.

NOTE: Any details not covered in these standards are subject to approval by the Traffic Engineer.

FIGURE 10

LOADING SPACE DESIGN

Overall Length of Tractor-Trailer (feet)	Berth Width (feet)	Recommended Apron Length (feet)	Dock Approach (feet)
40	10 12 14	46 43 39	86 83 79
45	10 12 14	52 49 46	97 94 91
50	10 12 14	60 57 54	110 107 104
55	10 12 14	65 62 58	120 117 113
60	10 12 14	72 63 60	132 123 120
65	10 12 14	77 68 65	142 133 130

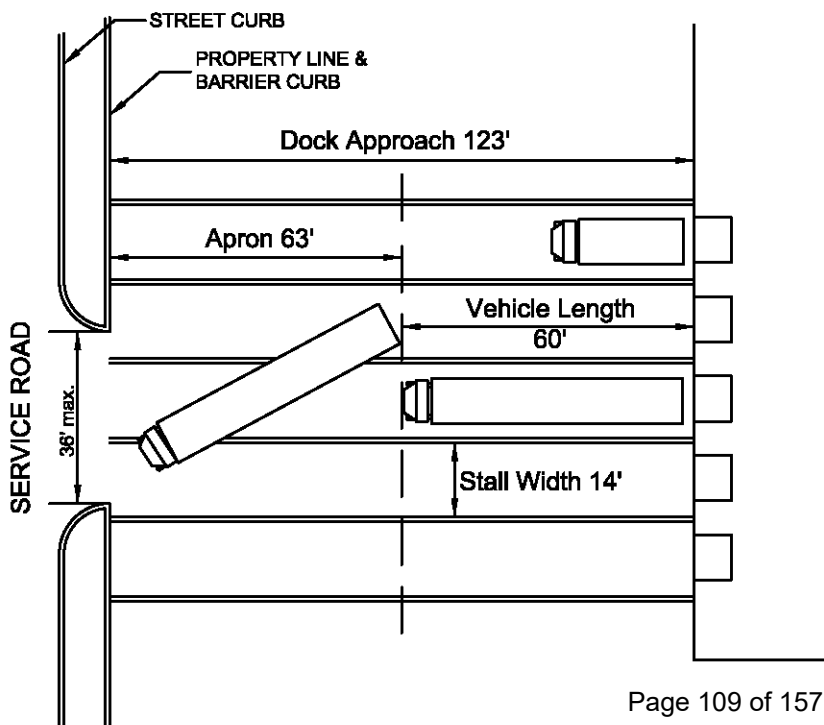
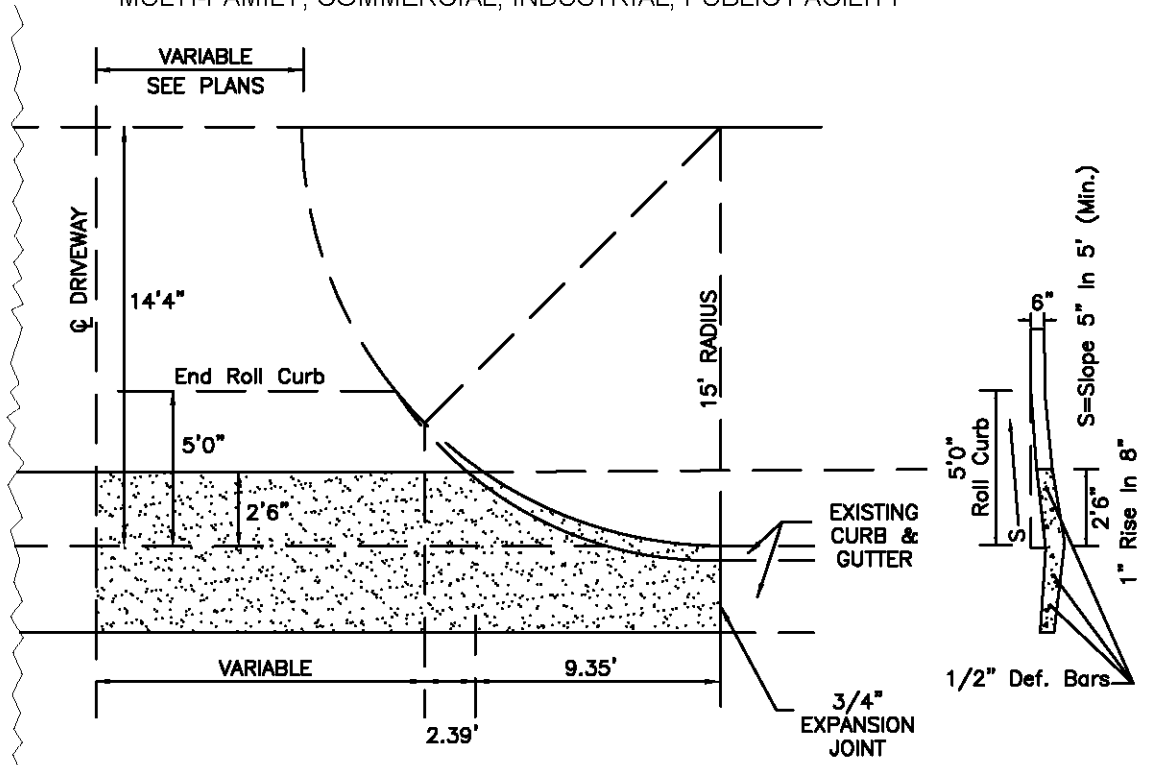


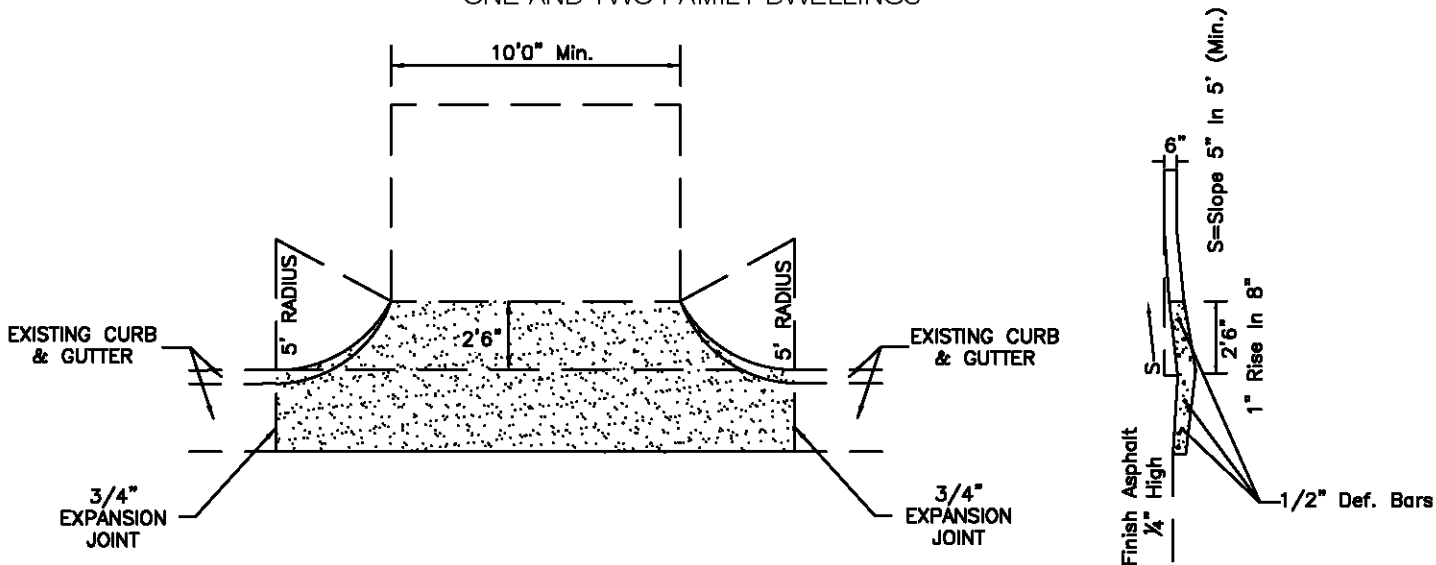
FIGURE 11

DRIVEWAY OPENINGS

MULTI-FAMILY, COMMERCIAL, INDUSTRIAL, PUBLIC FACILITY

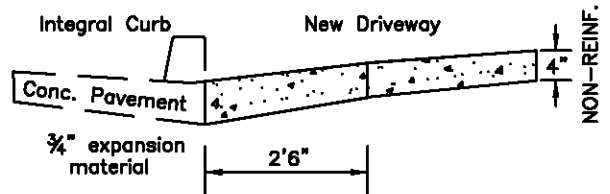


ONE AND TWO-FAMILY DWELLINGS



Where Asphalt Pavement with Curb & Gutter is in place: Remove existing Curb & Gutter thru extent of planned driveway construction. New driveway shall be of P.C. Concrete thru extent shown by shading (minimum). In order to reduce the possibility of water seepage into the paving base, full depth joints should not be allowed within the shaded area.

 Minimum Driveway - P.C. Concrete Surface

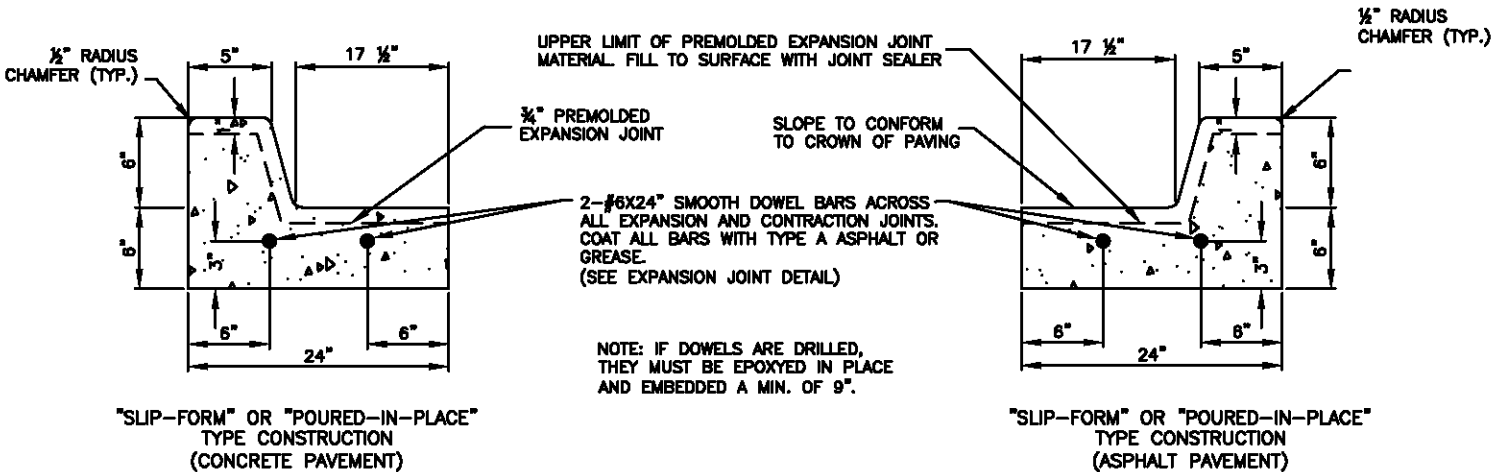


Where Concrete Pavement with Integral Curb is in place: Remove curb to a neat line and construct new driveway using butt joint with 3/4" expansion material between existing paving and new driveway.

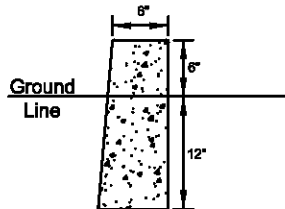
FIGURE 12

CURB & STOP DESIGNS

CONCRETE CURB & GUTTER DETAIL

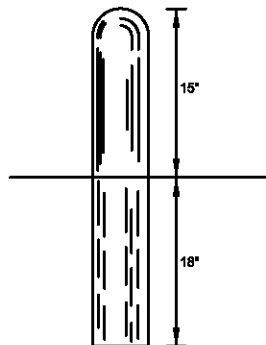


CONCRETE CURB



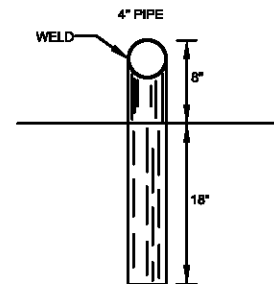
6" REINFORCED CONCRETE CURB
(FOR UNIMPROVED STREETS AND ON PRIVATE PROPERTY)

TIRE STOP



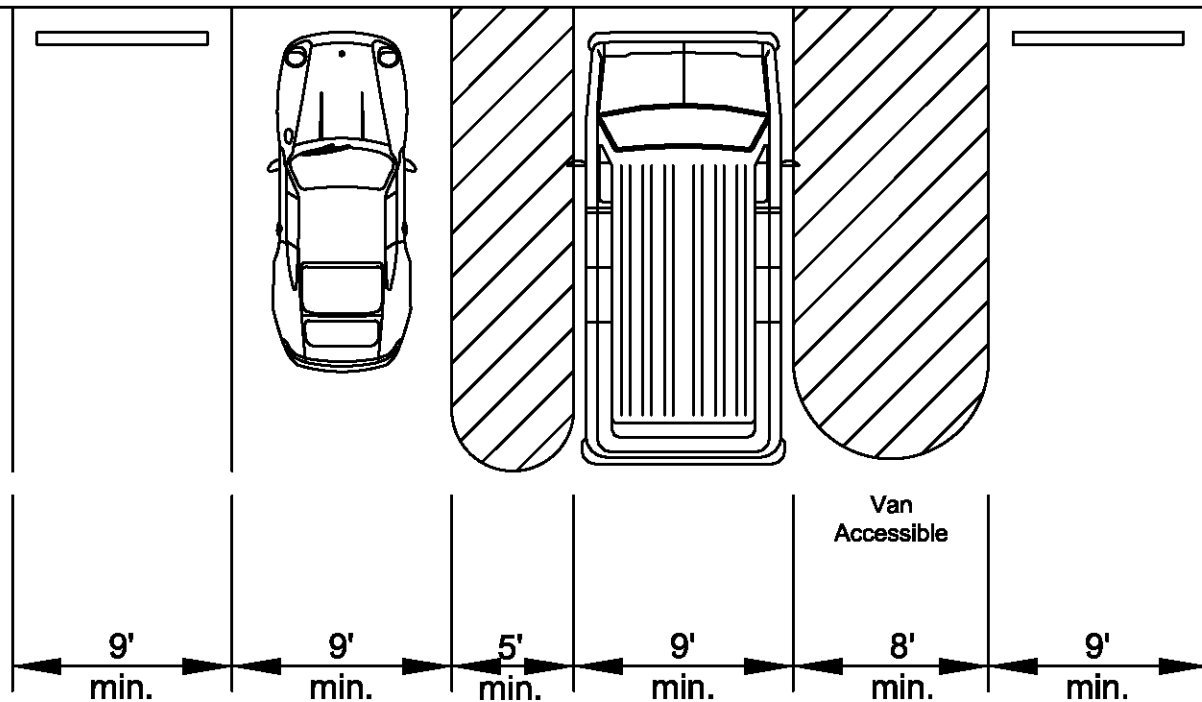
POST TYPE BARRIER
NOTE: POSTS SHALL BE PLACED A MINIMUM OF 6 FEET APART

TIRE STOP



PIPE BARRIER

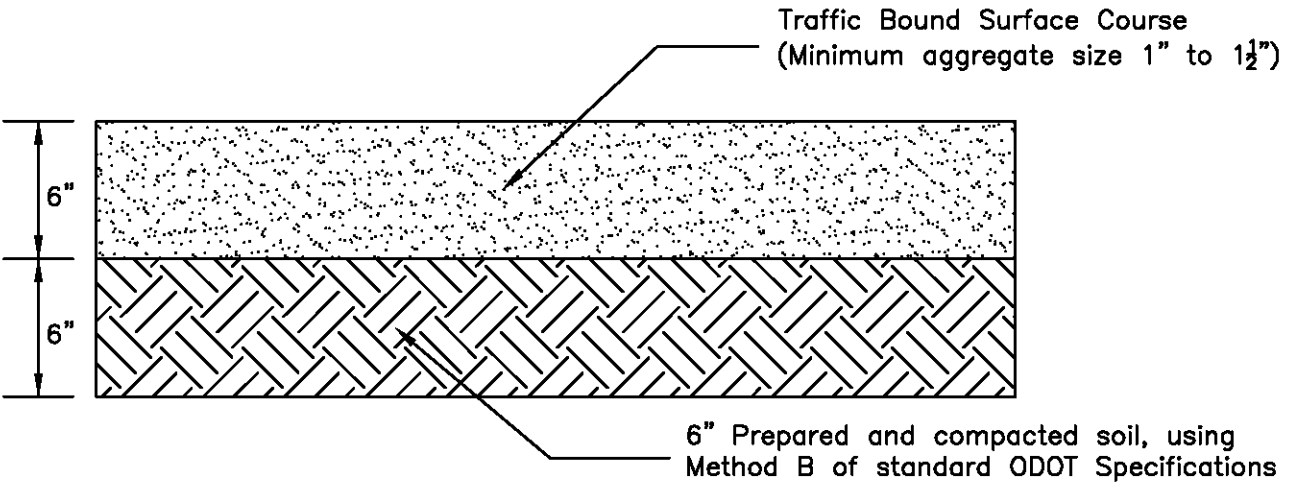
FIGURE 13



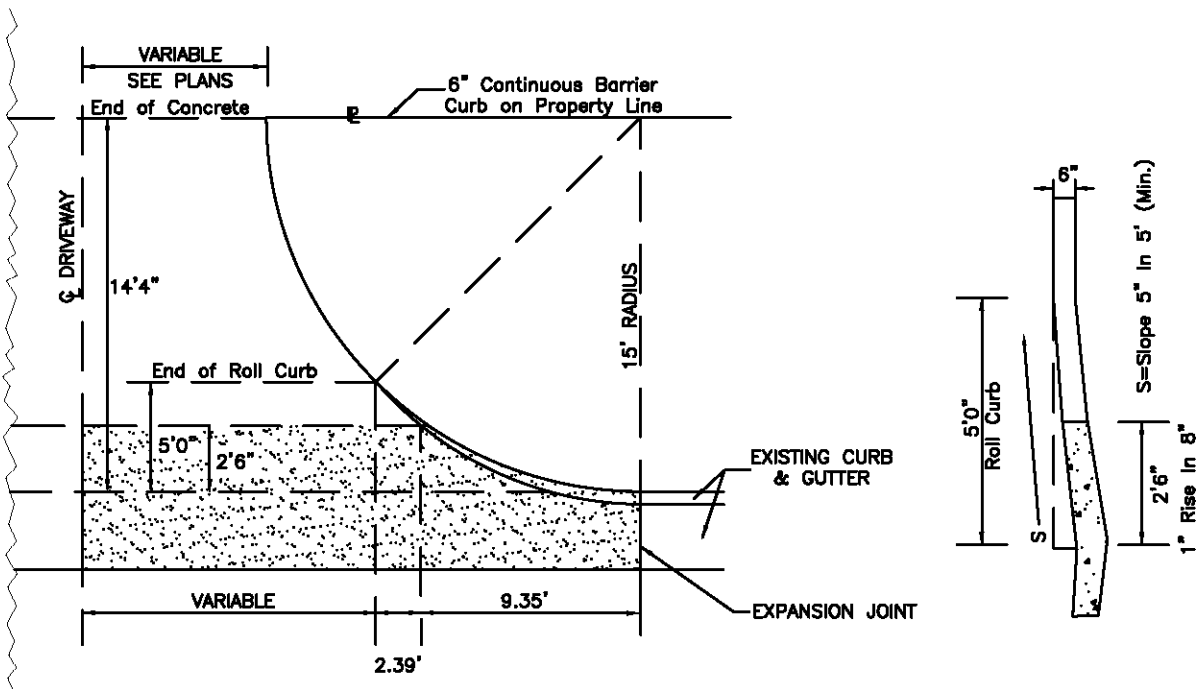
Typical Detail
Space Requirement for Handicapped Parking

FIGURE 14

MINIMUM SURFACE REQUIREMENTS FOR GRAVEL LOADING AND CIRCULATION AREAS



APPROACH FOR GRAVEL LOADING AND CIRCULATION AREAS



Concrete approach shall be installed from curb and gutter line to property line and shall be constructed using 3500psi concrete.

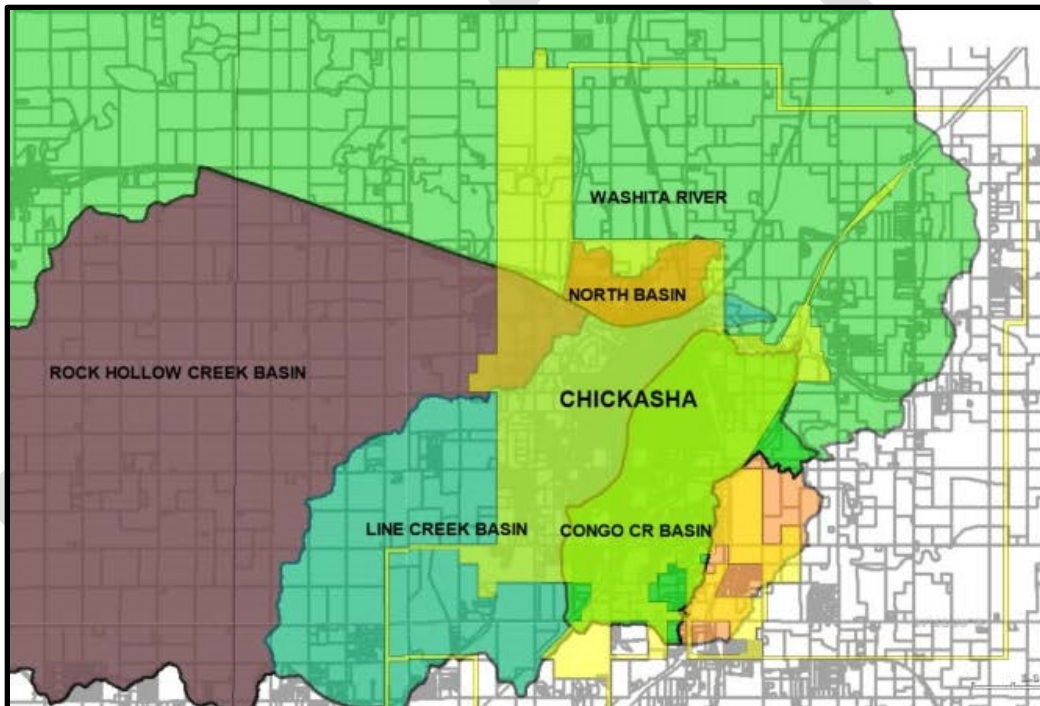
CITY OF CHICKASHA, OKLAHOMA GENERAL DRAINAGE POLICY

Approved by Planning Commission

(date)

Approved by City Council

(date)



Updated August 31, 2022 by:



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**CITY OF CHICKASHA
GENERAL DRAINAGE POLICY**

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SECTION 1.0

GENERAL DRAINAGE POLICY FOR THE CITY OF CHICKASHA

It is the goal of this policy to establish minimally acceptable standards to be utilized in the design of storm water drainage system improvements and where required by sections herein limit storm water runoff rates after development to their historic value.

1.1. PURPOSE:

The purpose of this Drainage Standard is to establish standard practices for the design and construction of storm water drainage systems within the City of Chickasha. The design factors, formula, graphs and procedures are intended for use as a minimum standard in the design of storm water drainage systems.

Methods of design other than those indicated herein should be considered where professional experience clearly indicates the minimum requirements as listed herein will not provide the level of service nor the level of protection intended. However, there should be no variations from the practices established herein without the express approval of the City Engineer.

In the event of conflict between this Policy and any other ordinance or regulation of the City of Chickasha, this Policy shall govern.

Performance Requirements: The overall goal of these standards is to provide guidance in the design, construction, operation, and maintenance of drainage system improvements. As such, an adequate drainage system could be designed, approved by the City and installed according to plan. However, if the proposed improvements do not function as intended by these standards, the site may be in violation of this standard. Therefore, the specific goal is not standards and specifications for practice, but the mandate that the improvements must function as intended. If additional control structures or improvements are needed to ensure total compliance with this standard, the design must be revised and approved, and the new measures shall be installed.

Compliance with Other Requirements: The design and construction of all developments shall comply with the provisions of Chapter 46, Article VI, Stormwater Quality and Chapter 46, Article VII, Floodplain Development and Management. In the event of conflict between any other ordinance or regulation of the City of Chickasha and these Articles, the provisions of these two articles shall govern.

1.2. MINIMUM SURFACE DRAINAGE REQUIREMENTS FOR THE CITY OF CHICKASHA

1.2.1. General Design Criteria:

1.2.1.1. Drainage facilities shall be designed to provide a sufficient storm water drainage system for the conveyance of storm water run-off received from upstream and from the subject property with due allowance having been made for continued conveyance of storm water runoff from adjacent properties as the drainage basin develops.

The drainage system including streets, bridges, culverts, open channels, detention/retention facilities and etc., shall be designed to carry all probable storm recurrence intervals up to and including the 100-year frequency storm event.

1.2.1.2. A dedicated drainage easement shall encompass all land lying below the water surface elevation generated by the 100-year frequency storm event and resulting storm water runoff.

1.2.1.3. Site improvement shall provide for the grading of all building pads to an elevation where the lowest finished floor elevations shall be one (1) foot above the water surface elevation generated by a 100-year frequency storm event. In all developments, surface water from each dwelling lot will flow away from each dwelling to an approved collection or disposal location as required under Section VI of this standard.

1.2.1.4. Erosion and sedimentation control facilities with construction specifications and operation and maintenance procedures detailing all erosion and sedimentation control measures which are established and required maintenance during the life of the development shall be provided.

1.2.1.5. No improvements shall be constructed which will increase the frequency or the water surface elevation during any storm event up to the 100 year frequency storm event upstream or downstream of the development.

1.2.2. Existing Drainage Structures:

Existing structures within and adjoining a proposed development shall be evaluated in terms of hydraulic capacity and structural soundness. Those structures found to be structurally inadequate shall be completely removed by the developer and replaced. Structures found to be hydraulically inadequate for flow and/or for protecting property as result of the changing runoff characteristics shall be replaced or modified to provide the required capacity and/or protection.

1.2.3. Utilities:

All utilities located within the floodplain, or any other open channel or swale shall be designed to prevent infiltration of floodwater and to protect against damage caused by erosion. Location of the utilities shall not restrict flood flows.

1.3. FLOOD PLAIN DESIGNATIONS

Any reference to official flood plain maps shall mean the highest order of flood plain designation recognized by the City of Chickasha. The City of Chickasha Floodplain Administrator will maintain an up-to-date file of such designations.

The highest available order of study shall be the basis of design unless it can be clearly shown that the subject study is in error. Contested studies shall be brought to the attention of the City Engineer.

1.4. DRAINAGE PLAN PREPARATION

1.4.1. Preparations:

1.4.1.1. Plan and profile shall be drawn on sheets 24" X 36" to a horizontal scale of 1" to 20', or 1" to 40' and vertical scale of 1" to 2' or 1" to 4' (except that scales may vary on special projects, such as culverts and channel cross sections).

1.4.1.2. Stationing shall proceed upstream with the North arrow pointing to the top of the sheet, or to the right. The 100-year frequency storm event water surface elevations on all channels shall be provided with cross sections at appropriate terrain changes. A stream profile shall also be provided to enable extrapolation of base flood elevations between the cross sections.

1.4.1.3. Plans for the proposed drainage system shall include property lines, lot and block numbers, dimensions, right-of-way and easement lines, flood plains, street names, paved surfaces (existing or proposed), contract limits, location, size and type of inlets, manholes, culverts, pipes, channels and related structures, outfall details, miscellaneous rip-rap placement, 2' contour lines, title block.

1.4.1.4. Profiles shall indicate the proposed storm drainage system (size and material) with elevations, flowlines, gradients, left and right bank channel profiles, station numbers, inlets, manholes, ground line and curb line elevations, typical sections, rip-rap construction, filling details, minimum permissible slab elevations adjacent to 100-year flood plains, open drainage features, pipe crossings, design flow capacities and title block.

1.4.1.5. Official flood plain designations and delineations of floodways denoting limits of permissible developments shall be shown on all preliminary plans and final plats submitted for approval wherever such plans and plats contain flood plains and/or floodway segments. In any case in which official flood plains are not delineated they shall be determined on the basis of these standards and shall be shown on all preliminary plans and final plats submitted for approval.

1.4.2. Submittals:

Computations and plans to support all drainage designs shall be submitted to the City Engineer for review. The computations and plans shall be in such form as to provide the basis for timely and consistent review and will be made a part of the permanent record for future evaluation. The computations and plans shall be accompanied by the certification of a registered professional engineer licensed to practice in the State of Oklahoma. Before final approval the submitting engineer shall provide a letter of certification stating that the submitted plan complies with all governing ordinances and adopted drainage standards of the City of Chickasha.

SECTION 2.0

DETERMINATION OF STORM RUNOFF

2.1 GENERAL

Numerous methods of runoff computation are available on which the design of storm drainage and flood control systems may be based. The Rational Method will be accepted as adequate for drainage areas up to 40 acres. For larger areas, the U.S. Army Corps of Engineers. Hydraulic Engineering Center River Analysis System (HEC-RAS) and Hydraulic Engineering Center Hydrologic Modeling System (HEC-HMS) shall be used. Other methods, such as the SCS Method, may be used if approved by the City Engineer.

2.2 RATIONAL METHOD OF RUNOFF COMPUTATION

Use of the Rational Method of Runoff computation shall use the following equations and variables, unless otherwise approved by the City Engineer.

$Q = CIA$, in which:

Q = Runoff in cubic feet per second;

A = Area to be drained in acres, as determined by field surveys, City contour maps, the latest government quadrangle maps for larger areas, or other source(s) approved by the City Engineer;

C = Runoff coefficient weighted for various ground covers, may vary between 0.05 and 0.95 (see Paragraph A)

I = Intensity of rainfall over entire drainage area in inches per hour, based on time of concentration (see Paragraph B)

2.2.1 Runoff Coefficient "C":

The runoff coefficient "C" shall be chosen to represent the integrated effects of infiltration, detention storage, evaporation, retention, now routing, and interception.

Acceptable ranges for "C" values are as follows:

<u>Land Use</u>	<u>C</u>
Business:	
Commercial	0.70 – 0.95
Office Park (Residential Type)	0.50 – 0.70
Residential:	
Single-family areas	0.30 – 0.50
Multi-units, detached	0.40 – 0.60
Multi-units, attached	0.60 – 0.75

Suburban	0.25 – 0.40
Apartment dwelling areas	0.50 – 0.70
Industrial:	
Light areas	0.50 – 0.80
Heavy areas	0.60 – 0.90
Parks, cemeteries	0.10 – 0.25
Playgrounds	0.20 – 0.40
Railroad yard areas	0.20 – 0.40
Unimproved areas	0.10 – 0.30
<u>Surface Types:</u>	
Street:	
Asphalt	0.70 – 0.95
Concrete	0.80 – 0.95
Brick	0.70 – 0.85
Drives and walks	0.75 – 0.85
Roofs	0.75 – 0.85
Lawns:	
Sandy soil, flat – 2%	0.05 – 0.10
Sandy soil, average 2% - 7%	0.10 – 0.15
Sandy soil, steep 7%	0.15 – 0.35
Heavy soil, flat – 2%	0.13 – 0.17
Heavy soil, average 2% - 7%	0.18 – 0.22
Heavy soil, steep 7%+	0.25 – 0.35
Agriculture land:	
Bare, packed soil, smooth	0.30 – 0.60
Bare, packed soil, rough	0.20 – 0.50
Cultivated rows:	
Heavy soil, no crop	0.30 – 0.60
Heavy soil with crop	0.20 – 0.50
Sandy soil, no crop	0.20 – 0.40
Sandy soil, with crop	0.10 – 0.25
Pasture:	
Heavy soil	0.15 – 0.45
Sandy soil	0.05 – 0.25
Woodlands	0.05 – 0.25

2.2.2 Rainfall Intensity (I):

The average rainfall rate in inches per hour considered for a particular drainage basis or sub-

basin and selected on the basis of design rainfall duration and design frequency of occurrence.

2.2.2.1 Intensity duration curves acceptable for Chickasha are shown on Figure 1. This graph was reproduced from the Oklahoma Department of Transportation Roadway Drainage Manual, Edition 1.0, November 2014.

2.2.2.2 The time of concentration is the time associated with the peak runoff from the watershed to the point of interest. Street flow shall be considered as being in an open paved channel. Manning's equation is acceptable for determining open channel and free water surface conduit flows.

An acceptable formula for use in determining overland flow is:

$$\text{Time} = K (L^{0.37}/S^{0.2})$$

L = Length of flow in Feet

S = Average Slope in Feet/Foot

K = Constant for Character of Surface

Values of K:

Pavement	0.37
Bare Soil	0.60
Poor Grass	0.90
Average Grass	1.00
Dense Grass	1.13

An acceptable formula for determining channel flow time is:

Time = $K (L^2/S)^{0.385}$	<u>K</u>
Curbed Street	.0035
Concrete Lined Channel	.006
Sodded Swale	.008
Bar Ditch	.012

The time of flow in a closed conduit is the quotient of the length of the conduit and velocity of flow as computed using the hydraulic factors of the conduit.

2.2.3 Drainage Area (A):

The size and shape of the watershed must be determined. Drainage areas shall be determined through the use of planimetric topographic maps, supplemented by field surveys. A drainage area map shall be provided for each project. The drainage area contributing to the system being

designed and drainage sub-area contributing to each inlet point shall be identified. The outlines of the drainage divides must follow actual ridge lines rather than artificial land divisions. Each discharge point of all drainage areas shall be identified.

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SECTION 3.0

FLOW IN STREETS

3.1. GENERAL

The location of inlets and permissible flow of water in the streets should be related to the extent and frequency of interference to traffic and the likelihood of flood damage to surrounding property. Interference to traffic is regulated by design limits of the depth and spread of water into traffic lanes, especially in regard to collector streets and arterials.

3.2. DESIGN CRITERIA:

- 3.2.1. Flow in gutters which are on straight or parabolic crown pavement may be determined by using Manning's Formula for channel flow or acceptable nomographs.
- 3.2.2. Minimum gutter slope on residential streets shall not be less than 0.004 ft./ft. (0.4%). Maximum gutter slope should not be more than 0.08 ft./ft. (8.0%). In a gutter which has a radius of 100' or less, the design flow depth shall not exceed 70% of the curb height.
- 3.2.3. No lowering of the standard height of street crown or splitting of curb heights shall be allowed for the purpose of hydraulic design unless approved by the City Engineer. In no case will it be allowed on collector streets or thoroughfares.
- 3.2.4. All street sections shall have a positive crown except alleys .
- 3.2.5. The flow depth in the gutter of arterial streets shall not exceed 4" for the 50-year frequency storm event nor 6" for the 100-year frequency storm event. The flow depth in the gutter on other classification of streets shall not exceed 6" for the 100-year frequency storm event. Where two (2) or more streets flowing 6" in depth intersect the flow shall be intercepted by appropriate storm sewer techniques prior to the intersection of said streets such that the depth of flow within the intersection will not exceed 4" in depth for the 100 year storm event.
- 3.2.6. The use of a cul-de-sac or dead end street as the terminal point of residential street flow shall not be allowed for drainage areas exceeding five (5) acres. A minimum of 70% of the flow in a residential street shall be removed to a storm sewer or drainage system prior to reaching the point of curvature of a cul-de-sac or the end of the street for drainage areas exceeding five (5) acres in size.

SECTION 4.0

ENCLOSED STORM SEWER

4.1.GENERAL:

An energy equation analysis shall be performed at all culvert locations for the design of these structures. For enclosed storm sewers, an energy equation analysis shall be utilized to design the structure if inlet control or backwater conditions exist. If inlet control or back water conditions do not exist, then the Manning Equation may be utilized for design purposes. Investigations of the capacity of all existing structures on the waterways shall be made. Investigations of the capacity of all existing structures on the waterway shall be made.

In addition, runoff from storms exceeding the design storm shall be anticipated by the developer and disposed of with minimum damages to surrounding property. The sewer must be accessible for maintenance.

4.2.REQUIREMENTS

- 4.2.1. All flow of water across continuous streets or alleys shall be through culverts or bridges. If bridges are used, design of said bridges shall meet the requirements of the Oklahoma Department of Transportation.
- 4.2.2. Bridges and culverts on primary drainage channels shall be sized to accommodate a 100-year frequency storm event, plus one foot of freeboard to low chord on bridges or inside top of structure on culverts, based on the drainage area involved.
- 4.2.3. Bridges and culverts on secondary drainage channels shall be sized to accommodate a hundred-year rain, plus one foot of freeboard to low chord on bridges or inside top of structure on culverts, based on the drainage area involved. However, a 50-year frequency storm event may be used when overflow provisions are incorporated to accommodate a 100-year frequency storm event.
- 4.2.4. Design calculations shall be submitted to and have the approval of the City Engineer.
- 4.2.5. Enclosed storm sewers shall be constructed of pre-cast or prefabricated pipe or built in-place of closed box design to serve a minimum 10-year frequency storm event for the drainage area involved. All storm sewers located in street rights-of-way shall be designed to augment the 100-year frequency storm event flow capacity of the street so that buildings will have 1-foot of free-board.

4.3.DESIGN CRITERIA:

4.3.1. Pipes which are a part of the storm sewer system shall have minimum diameter of fifteen (15) inches.

4.3.2. Enclosed storm drains will be designed for open-channel (free water surface) flow.

4.3.3. Minimum Grades: The slope shall be such to maintain a minimum velocity of 2.5 fps.

4.3.4. Acceptable Roughness coefficient "n" for storm sewers:

<u>Materials of Construction</u>	<u>Design Coefficient Manning's</u>
Concrete Pipe	0.012
Annular Plain Corrugated Metal Pipe	0.024
High-Density Polyethylene (HDPE)	0.009
Pipe Helical Plain Corrugated Metal Pipe	0.016
PVC Pipe (smooth interior wall)	0.009
Coated Corrugated Metal Pipe	"n" as approved by City Engineer

4.3.5. General rules to be observed:

4.3.5.1. Do not discharge a larger pipe into a smaller one.

4.3.5.2. At change in pipe size match top of pipes.

4.3.5.3. A one (1) foot freeboard shall be maintained below the proposed finish grade through the storm sewer system. The submittal of energy calculations shall be required on any reach of a system which exceeds 500 linear feet; on the total system that exceeds 1,500 linear feet; on a reach of a system which has an elevation change exceeding ten (10) feet.

4.3.6. Manhole Locations:

Manholes shall be located at intervals not to exceed 350 feet for pipe sizes 42" or less. Above 42", manholes shall be located at intervals proposed by the Design Engineer and accepted by the City Engineer. Manholes shall be located at conduit junctions, changes of grade, and changes of alignment, and changes in conduit size.

4.3.7. Pipe Extensions:

The use of one material to extend a sewer constructed of a different material shall not be allowed

except at manholes, junction boxes or inlets.

4.3.8. Pipe Laid on Curves:

Degree of curvature shall be as per manufacturer's recommendations.

4.3.9. All storm sewer outlets shall have erosion protection provided by headwalls, flared end sections, curtain walls, etc.

4.3.10. A minimum of 2' of cover is required for storm sewer pipe unless otherwise approved by the City Engineer.

4.4. INLET SYSTEM:

4.4.1. Inlet design and location in street sections must be compatible with the allowable depth of water on the street section.

4.4.2. Inlet location shall not interfere with vehicular or pedestrian traffic.

4.4.3. Whenever possible inlets will intercept water before it reaches a pedestrian crosswalk, or street intersection.

4.4.4. Inlets shall not be located in a curb radius. Where existing conditions exist that necessitate an exception to this requirement, as approved by the City Engineer, the radius shall not be less than 38 feet.

4.4.5. Inlets shall be located to prevent water from minor streets spilling over and flooding major streets.

4.4.6. All hoods in a sump condition shall be 8" opening with the gutter lowered to accommodate the inlet. Transition section shall be 10' each way.

4.4.7. Where a curbed street crosses a bridge or reinforced concrete box structure, gutter flow shall be intercepted and not allowed to flow onto the structure.

4.4.8. Inlets shall be installed at all low points with sufficient inlet design to ensure the ponding depth does not exceed 4" in a 50 year storm event.

All storm sewer systems at a low point shall provide for an overflow channel with a designated drainage easement.

4.4.9. Inlet Capacities. No method of determining capacity is prescribed in this standard. Theoretical capacities using clear water in nomograph form have been published by various sources such as the ASCE & Highway Research Board. When using nomographs submit the source along with drainage calculations.

4.4.10. Any inlet grates over which a bicyclist can ride shall be of a design considered bicycle safe.

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SECTION 5.0

OPEN DRAINAGE CHANNELS

5.1.NATURAL DRAINAGE FLOW.

The creation of swales, alteration of small channel capacity or direction, changing of ground cover and the lining of existing channels with other materials, natural or man-produced, may be necessary in some parts of the system to achieve the objectives of this standard.

5.2.Classification of Drainage Channels.

For the purpose of these regulations, drainage shall be classified as follows:

- 5.2.1. "A minor tributary" is any drainage channel having a drainage basin of 100 acres or less in area.
- 5.2.2. "A major tributary" is any channel having a drainage basin of not less than 1 square mile or greater than 25 square miles.

5.3.OPEN STORM DRAINAGE REQUIREMENTS

- 5.3.1. All primary drainage channels with a floodway located within or adjacent to a development, subdivision, individual tract or building site shall be protected and improved by the developer as follows:

5.3.1.1. All land in the floodway of a 100-year flood, shall be improved and dedicated to the City as right-of-way for the purpose of performing maintenance and shall include sufficient access locations as approved by the City Engineer. The developer shall dedicate to the City as right-of-way or drainage easement the area of the 100-year flood event adjacent to the floodway for maintenance purposes.

If private ownership of the land in the floodway of a 100-year flood is desired, the developer must enter into an agreement with the City of Chickasha requiring that the private entity which owns said floodway will provide proper maintenance such that the area does not create a hazard or nuisance to the community and does not increase 100-year flood elevation. Failure to provide said maintenance will result in fines to be levied by the City, as set forth in said agreement, which will constitute a lien against the property.

- 5.3.1.2. The existing channel shall be cleaned to provide for the free flow of water; and the channel shall be straightened, widened and improved to the extent required to

prevent overflow from the 100-year flood event beyond the limits of the dedicated drainage easement. All State and Federal permits shall be obtained in complying with this requirement.

5.3.1.3. Whenever channel improvement is carried out, sodding, backsloping, cribbing and other bank protection shall be designed and constructed to control erosion for all the anticipated conditions of flow for the segment of channel involved.

5.3.1.4. Concrete trickle channels shall be constructed for all primary channels. A minimum of a 12 ft wide area adjacent to the top of bank with a maximum cross-slope of 12:1 shall be provided on each side of the channel for maintenance purposes and shall be within a dedicated right-of-way or easement.

5.3.1.5. A drainage channel shall not be located in a street right-of-way or easement unless it is placed in an enclosed storm sewer, or unless a paved street surface is provided on both sides of the paved channel to give access to abutting properties.

5.3.1.6. Bridges or reinforced concrete box structures shall be constructed in accordance with ODOT requirements at all locations where drainage channels intersect with continuous streets or alleys.

5.3.1.7. All drainage swales, channels, berms, and other drainage improvements shown on the approved plans shall be constructed prior to the acceptance of the subdivision final plat or to the issue of an occupancy permit for other types of developments.

5.3.1.8. No private wet detention facility (lake) may be constructed upon a primary channel. However, this provision shall not prohibit the City from constructing a detention facility upon a primary channel.

5.3.2. Secondary channels with a floodway located within or adjacent to a development shall be improved and shall meet the following conditions:

5.3.2.1. When a development is traversed by or adjacent to a secondary drainage channel, watercourse or stream there shall be provided a right-of-way or drainage easement adequate to contain all of the floodway of a 100-year flood, including sufficient access locations. The developer shall dedicate a drainage easement for the area of the 100-year flood event adjacent to the floodway for maintenance purposes or said area shall be platted as Common Area and have a maintenance program carried out by the property owners' association.

5.3.2.2. A drainage channel shall not be located in a street right-of-way or easement unless it is placed in a closed storm sewer or unless a paved street surface is located on

both sides of a paved drainage channel to give access to abutting properties.

5.3.2.3.All secondary channels shall be improved by one of the following methods:

- 5.3.2.3.1. Open channels may be improved by providing a minimum five foot (5') wide concrete trickle channel with a sodded section to carry the runoff from a ten-year frequency rainfall in accordance with the Standard Drawings for drainage channels. However, the maximum water surface elevation resulting from a 100 year frequency storm event shall be one (1) foot below the finished floor elevation of any adjacent habitable structure; or
- 5.3.2.3.2. Open channels may be improved by the construction of a concrete channel liner with a sodded section to carry the runoff from a minimum 10-year frequency storm event in accordance with the Standard Drawings for drainage channels. However, the maximum water surface elevation resulting from a 100 year frequency storm event shall be one (1) foot below the finished floor elevation of any adjacent habitable structure.

5.3.2.4.Open paved storm drainage channels shall be designed and constructed in accordance with specifications approved by the City Engineer.

5.3.2.5.All drainage easements shall remain clear of obstructions and encroachments. Prohibited obstructions and encroachments shall include, but are not limited to, fences, driveways, mechanical and electrical equipment, storage sheds, trees and retaining walls.

5.3.2.6.Any channel improvements shall be approved by the City Engineer prior to the commencement of any work thereon.

5.3.2.7.Whenever channel improvements are carried out, sodding, backsloping, cribbing and other bank protection shall be designed and constructed to control siltation and erosion for the anticipated conditions and flow resulting from a 10- and 100-year frequency rainfall.

5.3.2.8.Any channel grading shall be such that water will not gather in pools.

5.3.2.9.Drainage easements sufficient in width to provide a buffer and provide working room for construction and access for channel maintenance shall be provided. A minimum of a 10-foot wide area in accordance with City of Chickasha Standard Drawings shall be provided on each side of the channel for maintenance purposes. A minimum drainage easement width of 25 feet shall be provided.

- 5.3.2.10. All drainage swales, channels, berms, and other drainage improvements shown on the approved plans shall be constructed prior to the acceptance of the subdivision final plat or to the issue of an occupancy permit for other types of developments.

All land adjoining open storm drainage channels, whether natural or improved, having an elevation below the 100-year flood elevation of the channel shall be dedicated drainage easement for the purpose of providing a zone of protection to all property owners and the prohibition of obstructions to stormwater runoff.

5.4.DESIGN CONSIDERATIONS

- 5.4.1. Channels should be trapezoidal in shape, and on as flat a grade as possible.
- 5.4.2. The use of the Manning Equation in the calculations of hydraulic characteristics of open channel flows in prismatic channels without backwater control will be acceptable. When analyzing natural channels or when analyzing any overland conveyance system that has downstream control that could affect the 100-year event water surface elevations, the use of the HEC-RAS (U.S. Army Corps of Engineers Hydrologic Engineering Center River Analysis System) modeling program or other approved water surface profile modeling program shall be required. The "n" value(s) used for channels shall be based on the individual channel characteristics. When submitting calculations, include the source for the "n" value.
- 5.4.3. Constructed Channel Geometry. The minimum bottom width shall be 4 feet with side slopes of not steeper than 3 to 1 horizontal to vertical for sodded sections and a minimum bottom width of 4 feet with side slopes of not steeper than 1 to 1 for paved or rock-lined sections. Care must be exercised by the engineer to provide a safe design in relation to public areas.
- 5.4.4. Flow Velocities in Channels. Velocities shall not exceed 4 fps for sections in grass channels. Velocities in concrete lined or paved sections shall not exceed 15 fps. The dissipation of energy shall be required at the confluence of improved channels with natural channels through the use of dissipaters, stilling basins and etc.
- 5.4.5. Trickle Channels. All channels altered or improved from the natural state will require a paved trickle channel. Sodding, or other methods of erosion control shall be required adjacent to the trickle channel.
- 5.4.6. Concrete Flumes. Concrete flumes in lieu of enclosed pipe shall be allowed as overflow protection for storm sewer systems, and to drain areas not exceeding five (5) acres in size. All concrete flumes shall extend to the rear of adjacent lots and shall discharge into a

dedicated drainage area or channel.

- 5.4.7. Bar ditches (often referred to as "drainage ditches") are an acceptable method to convey stormwater runoff along unimproved section line roads. All bar ditches and driveway culverts shall be designed by the engineer to convey the 100-year storm event. The minimum acceptable driveway culvert diameter is 15" along roadways.
- 5.4.8. Reinforced concrete box (RCB) structures shall have an apron reinforced with rebar tied to the box structure with rebar and shall have a toe wall. Adequately sized riprap shall be provided to protect the end of the apron and toe wall. Energy dissipaters also shall be used where riprap alone is inadequate to reduce discharge velocities. The RCB structure shall be designed to have a minimum freeboard at its inlet from the 100-year storm event water surface elevation to its low chord equal to 1 foot. The use of Manning's Equation for sizing reinforced concrete box structures at street crossings shall not be acceptable. Engineering programs such as HY-8, HEC-RAS, and others utilizing the energy equation and approved nomographs will be considered acceptable.

SECTION 6.0

DEVELOPMENT GRADING

6.1.PURPOSE

The purpose of this section is to require proper planning and execution of good grading layouts to ensure that the street grades, floor elevations and lot grades are in proper relation to each other and to existing topography, considering property protection, appeal and use.

6.2.IN GENERAL

In general, all development involving a change in surface elevations, contours or drainage patterns shall include submittal of a Grading Plan to the City of Chickasha.

6.3.DESIGN CONSIDERATIONS

6.3.1. Non-Residential (Including multi-family)

All roofs, paved areas, yards, courts and courtyards shall drain into a storm sewer system or to an approved place of disposal not generally including existing streets.

Site plans detailing the layout and design of the storm water run-off system shall be submitted prior to site plan review by the Planning Commission or City Council or the issuance of a building permit and/or work order. All design submittals shall detail the location and features of a proposed drainage system. The submittals shall include, but not be limited to, grading plans, drainage plans, utility plans and erosion control plans.

6.3.2. Residential (One-Family or Two-Family Structures)

6.3.2.1. In single family residential, duplex or mobile home developments, storm water run-off from each dwelling lot may be discharged onto flat areas such as streets or lawns if drainage is provided so that the storm water will flow away from the building.

It shall remain the responsibility of the Builder /Developer to ensure proper and prudent lot grading. The Builder /Developer shall follow the grading plan established for that lot, or in the absence of such a plan the Builder /Developer shall grade the lot following the existing, natural drainage patterns for the area, in no case shall a Builder /Developer direct, redirect or change the historic patterns of the storm water run-off.

6.3.2.2. Development Grading Plans

The submittal of a Master Development Grading Plan may be required as part of the Preliminary Plat submittal. Specific site conditions may dictate a more intensive review, as determined by the City Engineer or Community Development Director. The Master Development Grading Plan shall incorporate but not be limited to the following:

- 6.3.2.2.1. Determine the type (front to rear, side to rear, rear to front, etc.) of grading for each block, lot or portion of a development and indicate the grading type for each area by identifying letter or drainage arrows.
- 6.3.2.2.2. Determine the necessity for easements and other provisions needed for satisfactory drainage and erosion control.
- 6.3.2.2.3. Determine general grading limitations for local conditions, such as minimum gradients for grass slopes and swales.
- 6.3.2.2.4. For each area, determine the necessity for specific grading limitations along a typical grading control line from street to the house and determine the minimum street-to- floor rise (if applicable).
- 6.3.2.2.5. For each development, determine reference elevations for key points giving due consideration to street elevations, and existing topography.

6.3.3. The Owner/Developer shall provide a Builder/Developer with the approved grading plan. The Builder/Developer shall comply with the grading plan and the provisions of all ordinances regarding stormwater runoff and erosion control.

SECTION 7.0

STORM WATER STORAGE

7.1.GENERAL:

The purpose of stormwater storage is to not cause damage to adjacent or downstream property not owned by a developer who is changing the flow rate, location of discharge points or duration of flooding of stormwater leaving his property by limiting stormwater runoff rates after development to their historic value.

Detention basins can be used in an attempt to replicate the characteristics of natural infiltration, storage, and the attenuation of flow that is lost through urbanization. The objectives are to provide a volume of storage to compensate for that lost by development of the land, and to control the detention basin discharge so that the peak flow after urbanization remains below the pre-urban peak for a given year.

7.2.The terms, detention, retention, and sedimentation basin shall have the meanings used below:

- 7.2.1. DETENTION FACILITY - A surface water runoff storage facility that is normally dry but is designed to hold (detain) surface water temporarily during and immediately after a runoff event.
- 7.2.2. RETENTION FACILITY - A surface water runoff storage facility that normally contains (retains) a substantial volume of water to serve recreational, aesthetic, water supply, or other function. Surface water runoff is temporarily stored above the normal stage during and immediately after runoff events.
- 7.2.3. SEDIMENTATION BASIN - A surface water runoff storage facility intended to trap suspended solids, suspended and buoyant debris, and reduce potential pollutants which are carried by surface water runoff. The basin may be part of an overall multipurpose stormwater drainage system.

7.3.LOCATION CONSIDERATIONS FOR STORM WATER STORAGE:

- 7.3.1. Design of storm water storage facilities shall include an analysis of the downstream effects on peak flows based upon the following drainage area criteria:
 - 7.3.1.1.Residential developments including duplex and mobile home developments of 20 acres and larger shall submit a model of the storm water storage outflow hydrograph.
 - 7.3.1.2.Non-residential and all other developments not included in No.1 above, of 10

acres and larger shall submit a model of the storm water storage outflow hydrograph.

- 7.3.2. Modeling of and routing of outflow hydrographs downstream shall be required under criteria above and will be accomplished through the use of HEC-RAS and HEC-HMS computer programs, or other programs acceptable to the City Engineer.
- 7.3.3. The length of a stream reach requiring modeling shall be either (1) to a point where no increase in peak flow is demonstrated or (2) to a point where an increase in peak flow does not increase the depth of flooding.
- 7.3.4. The storm events to be modeled shall be the 10, 25, 50 and 100 year storm events.
- 7.3.5. The City shall make available all existing data on storm water flows in its possession such as Master Storm Water studies or Flood Insurance Studies (FIS).
- 7.3.6. In the event peak flow studies indicate a development cannot comply with the criteria stated in 'C' above then alternative methods of storm water runoff control may be allowed, if the developer pays a fee in-lieu of detention. Alternative methods may include but not be limited to; release of larger peak flows, decrease of peak flows released, release of all or some certain storm events in lieu of detention, and/or provide channel improvements in lieu of detention.

7.4.DESIGN CONSIDERATIONS FOR STORM WATER STORAGE:

Retention and detention are two general terms relating to types of storm water runoff storage that can be utilized to reduce the likelihood of additional flooding due to development and the subsequent change in storm water runoff characteristics.

Storage may be accomplished by the detention or retention of water reservoirs, parks, side channels, or ponds either on or off site.

Storm water storage shall be required where proposed development will be changing the historic characteristic of the drainage area and subsequent storm water runoff.

However, in the event a complete drainage study by a licensed professional engineer demonstrates that no additional protection from flooding would be provided or that an increase in downstream flooding would occur, the requirement for storm water storage may be waived by the City Council, providing that a fee in-lieu of detention may be required.

7.4.1. Possible conditions where storm water storage may not be required could be as follows:

7.4.1.1. The lower reaches of a drainage basin where a well-defined floodplain or major water body provides potential storm water storage needs.

7.4.1.2. Areas where channel improvements are existing which provide the capacity and flooding protection required for basin development.

7.4.1.3. Areas where the confluence of two or more tributaries of a drainage channel might produce unfavorable increases in flooding depths.

7.4.1.4. Changes in existing timing patterns such that peak lows are cumulative and might produce increases in flooding depths downstream.

7.4.2. The above examples should not be considered the only cases where storm water storage might be waived nor should the above be considered only those conditions requiring review. An engineer submitting a request to waive the storm water storage requirement will be required to produce a detailed drainage study containing any information necessary for the City to make a determination. No limits of the extent of a study should be assured by an engineer as none are provided.

7.4.2.1. The sizing of storage facilities shall be by an approved method such as APWA Unit Hydrograph, SCS, HEC-HMS, etc. All storm water storage facilities shall be analyzed by routing an inflow hydrograph through the storage outlet structure(s). All data, calculations and assumptions shall be provided in report form.

7.4.2.2. The detention facility shall be designed based upon the maximum allowable release rates. The release rates will be established based upon historic runoff characteristics from the development site. A continuous probability or recurrence interval criterion shall be used in designing the outlet control structure. As a minimum the outlet control structure shall be designed for the 10, 25, 50 and 100 year recurrence intervals. A single stage outlet control structure will not be considered acceptable.

7.4.2.3. Rooftop storage, if used, shall be designed into the original building plans and not added to existing structures as an afterthought due to possible structural failure as well as water damage to the building contents through leakage. Such plans shall bear the seal of a registered architect or engineer. The roof should drain within twelve (12) hours. Temporary roof dams of loose gravel shall not be allowed.

7.4.2.4. When a combination of storage facilities is used to control runoff, the system as a whole shall be designed with discharge rates in accordance with B above.

- 7.4.2.5. All facilities shall be provided with an emergency spillway with scour protection. Earth embankments shall have side slopes not steeper than 4:1. Proper materials shall be specified with the corresponding optimum compaction to provide stability and minimum seepage.
- 7.4.2.6. The outlet of a detention pond should extend to the storm sewer, creek or other suitable location contained within a public right-of-way or easement.
- 7.4.2.7. The storage volume of a storage facility shall be oversized 10% to allow for sedimentation.
- 7.4.2.8. All storage ponds shall be provided with a concrete paved trickle channel from the inlet to the outlet structure to transmit low flows unless the flowline of the storage facility is entirely on rock.
- 7.4.2.9. Erosion control for storage and/or detention facilities shall be in accordance with Section VIII Erosion and Sedimentation.
- 7.4.2.10. At a minimum a gravel access road shall be provided to all storage areas for maintenance purposes, for those owned and maintained by the City. The access road shall be dedicated as part of the storage area.
- 7.4.2.11. Earth dams or other earth embankments shall be designed by a licensed professional engineer in accordance with accepted engineering practices to assure that dam or embankment failure will not occur. Design criteria used by the Natural Resources Conservation Service (NRCS) in the selection of materials and construction procedures will be acceptable.
- 7.4.2.12. Property line swale ponding and small on-site ponds, if used, shall be examined for possible adverse effects on building foundations due to saturation of the subsoil.
- 7.4.2.13. Parking lot storage shall be considered the last alternative of providing required detention. The use of parking lots for storage shall be well designed to minimize the potential damage and/or threat to pedestrians and parked vehicles. In no case shall the depth of ponding in a parking lot exceed six inches (6") during a 10-year storm.
- 7.4.2.14. Public safety of the detention pond and outlet works, both in a passive

condition and when functioning shall be addressed in design.

- 7.4.2.15. The detention facility shall be designed as a visual amenity consistent with the existing topography and proposed development and should be designed with multi- use potentials related to recreation taken into consideration.

The use of large unnatural depressions which disrupt the continuity of the landscape shall be avoided. Length to width ratios should be investigated in relation to depth of the proposed facility to improve the aesthetic appearance of storage facilities. The geometric layout of detention facilities shall be such that multi-purpose use is available.

All storage facilities shall be provided with landscaping to improve aesthetics and stormwater quality.

Outlet control facilities shall include headwalls, slopewalls, energy dissipaters and any additional outlet erosion and scour control measures approved by the City Engineer. The outlet facilities, as a visible part of any storage facility, shall include landscape plantings to improve aesthetics and provide a more pleasant and appealing appearance.

Detention facilities which are planned for dedication to the City shall be reviewed by the City Engineer for proper recreational layout and design. Landscaping of all facilities including access roads and parking areas (storage facilities 3 acres and larger) shall be of sufficient size and number to provide a park like setting.

SECTION 8.0

EROSION AND SEDIMENTATION

8.1.PURPOSE

The purpose of this section is to provide guidance in the design of effective management of erosion and sedimentation and to protect water quality and the general health, safety and welfare of the residents of the City of Chickasha.

8.2.GENERAL REQUIREMENTS

- 8.2.1. Development activity shall not be conducted unless appropriate erosion and sedimentation facilities are designed, installed and maintained throughout the life of the development.
- 8.2.2. All erosion and sediment control methods shall be indicated on the final construction and/or building permit plans.
- 8.2.3. All earth slopes and earth areas, new or existing, subject to erosion, such as, adjacent to trickle channels, inlet structures, and outlet structures, within any area designated for detention or drainage; shall be slab sodded with Bermuda sod or other approved perennial vegetation. All vegetation areas shall be fertilized, watered, and in an established growing condition prior to completion or acceptance of any storm water drainage facility, and/or development.

8.3.DESIGN CONSIDERATIONS

- 8.3.1. General Design Principals. Practical combinations of the following principles shall be utilized, as a minimum, in planning measures to be installed for any land disturbing activity.
 - 8.3.1.1.The land disturbing activity shall conform to existing topography and soil type so as to create the lowest practicable erosion potential.
 - 8.3.1.2.The disturbed area and the duration of exposure of bare earth to erosive elements shall be kept to a practicable minimum through construction scheduling and management.
 - 8.3.1.3.Cut and fill operations should be kept to a minimum.
 - 8.3.1.4.Disturbed soil shall be stabilized as quickly as practicable.

8.3.1.5. Natural vegetation shall be retained, protected, and supplemented whenever feasible.

8.3.1.6. Temporary vegetation or mulching shall be employed to protect exposed critical areas during development.

8.3.1.7. Permanent vegetation and structural erosion control measures shall be installed prior to final acceptance of developments, or as soon as seasonal planting restrictions allow.

8.3.2. General Practice: Soil and water conservation measures include but are not necessarily restricted to vegetation, sediment basins, dikes, grade stabilization structures, sediment traps, land grading, diversions, waterways or outlets, and riprap.

Vegetative practices shall be applied to control erosion. The practice can be either temporary and/or permanent depending on the site specific needs.

8.4. EROSION AND SEDIMENT CONTROL CRITERIA

8.4.1. Long term permanent seeding, sprigging, or planting which produces vegetative cover including Bermuda grass, Kentucky 31 Tall Fescue and Weeping Love grass shall be used to control erosion on a permanent basis.

8.4.2. Short term seeding, producing temporary vegetative cover such as small grains like oats, rye and wheat, and sudans and sorghums shall be used to control immediate erosion. This practice effective for areas where soil is left exposed for a period of 6 to 12 months shall not be deemed permanent erosion control.

Straw Bale Dikes may be utilized where no other practice is feasible, a temporary barrier with a life expectancy of three months or less can be installed across or at the toe of a slope for the contributing drainage areas, in accordance with the adopted standards.

Hay and sod mulching, as a temporary measure, may be used for embankment stabilization in areas where surface runoff is to be directed down a slope.

Erosion matting shall be used for channel embankment and slope stabilization where a permanent erosion control cover has not been established prior to use. The specified material shall be installed as recommended by the manufacturer of the proposed material.

- 8.4.3. A stabilized construction entrance shall be built in accordance with the adopted standards to reduce or eliminate the tracking or flowing of sediment onto public right- of-way.
- 8.4.4. A concrete or stone outlet structure shall be constructed in areas where the entire drainage area to the structure is not stabilized or where there is a need to dispose runoff at a protected outlet or where concentrated flow for the duration of the period of construction needs to be diffused.
- 8.4.5. A grade stabilization structure in the form of a paved chute or flume shall be constructed to prevent erosion, where concentrated flow of surface runoff is to be conveyed down a slope of 3% or greater.
- 8.4.6. Storm water detention facilities may be used temporarily as sediment basins. A temporary outlet structure for the storm water detention facility to work as a sediment pond shall be constructed. At the end of the construction activity, the developer shall remove all collected sediment from the detention facility and outlet structure and return the facility to a previous condition and/or to the approved cross-sectional area.

END OF DOCUMENT

PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION

CITY OF CHICKASHA
CHICKASHA, OKLAHOMA
STANDARD DRAWINGS

CITY COUNCIL
MAYOR CHRIS MOSLEY
KEA GINN, WARD 1
BRIAN GERDES, WARD 1
NATE MCCALLA, WARD 2
GEORGIANNE HEBBLETHWAITE, WARD 2
R.P. ASHANTI-ALEXANDER, WARD 3
OSCAR NELSON, WARD 3
ZACHARY GRAYSON, VICE-MAYOR, WARD 4
KELLY BOYD, WARD 4

COMMUNITY DEVELOPMENT DIRECTOR
RACHEL BERNISH

CHIEF BUILDING OFFICIAL
DARREN MARTIN

PUBLIC WORKS DIRECTOR
JIM CROSBY

PLANNING COMMISSION

INDEX OF SHEETS

REVISION DATE

P1	P.C. CONCRETE STREET PAVING DETAILS	9/28/2022
P2	TYPICAL SECTIONS	9/28/2022
P3	DRIVEWAY DETAILS	9/28/2022
P4	SIDEWALK AND JOINT DETAILS	9/28/2022
SSM1	SANITARY SEWER MAIN DETAILS	9/28/2022
SSM2	SANITARY SEWER MAIN DETAILS	9/28/2022
SSM3	CAST-IN-PLACE MANHOLE DETAILS	9/28/2022
SSM4	PRECAST MANHOLE DETAILS	9/28/2022
WM1	WATER MAIN DETAILS	9/28/2022
WM2	WATER MAIN DETAILS	9/28/2022
WM3	WATER MAIN DETAILS	9/28/2022
WM4	WATER MAIN DETAILS	9/28/2022
WM5	WATER MAIN DETAILS	9/28/2022

APPROVED AND ADOPTED BY THE PLANNING
COMMISSION THIS ____DAY OF____202__.

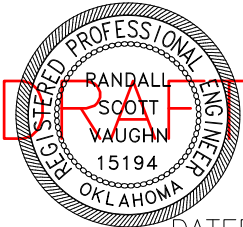
PLANNING COMMISSION CHAIRMAN

APPROVED AND ADOPTED BY THE CITY COUNCIL
THIS ____DAY OF____202__.

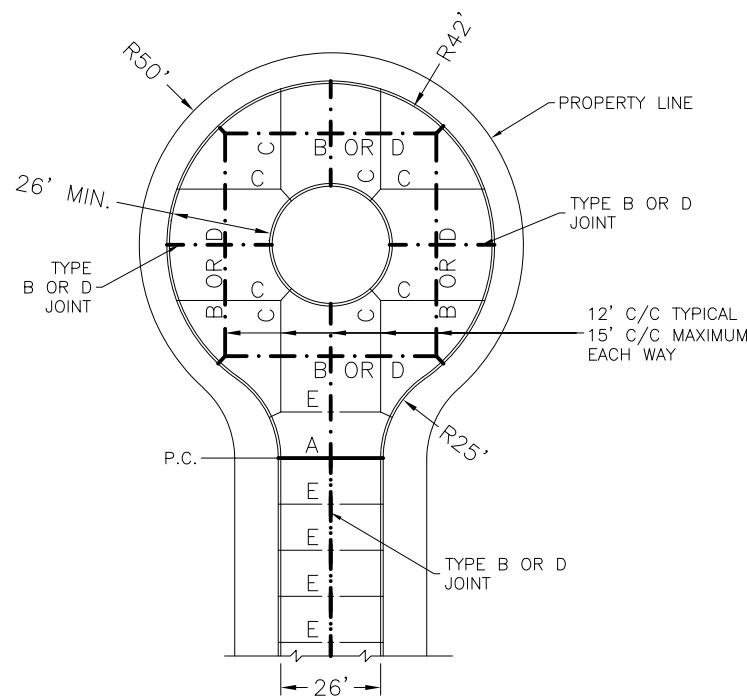
MAYOR

ATTEST: CITY CLERK

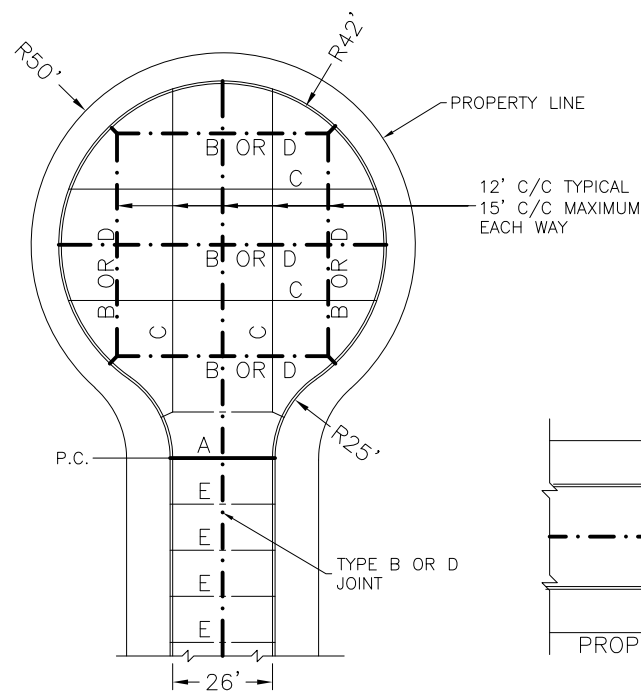
PREPARED BY:
CHISHOLM TRAIL CONSULTING, LLC
2124 SCOTT LANE
DUNCAN, OKLAHOMA 73533
CA OK7771
RANDALL SCOTT VAUGHN, P.E. 15194



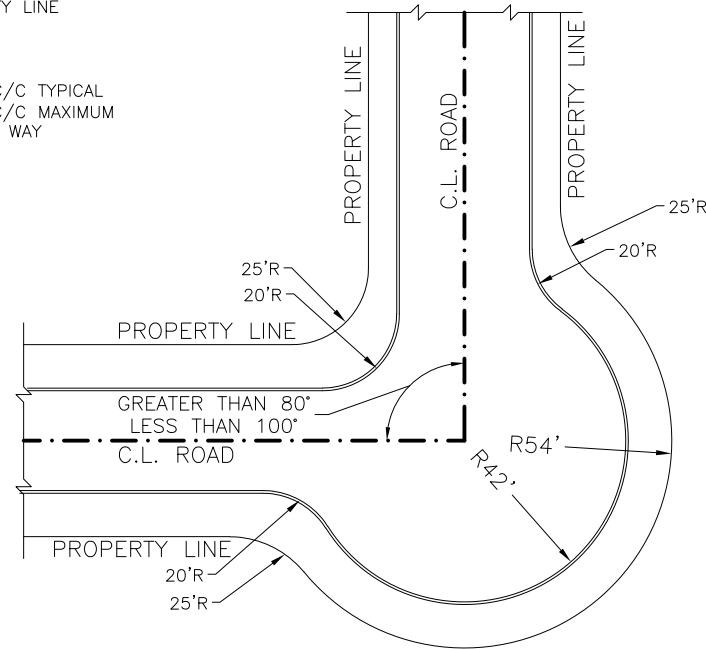
DATED 9/28/2022



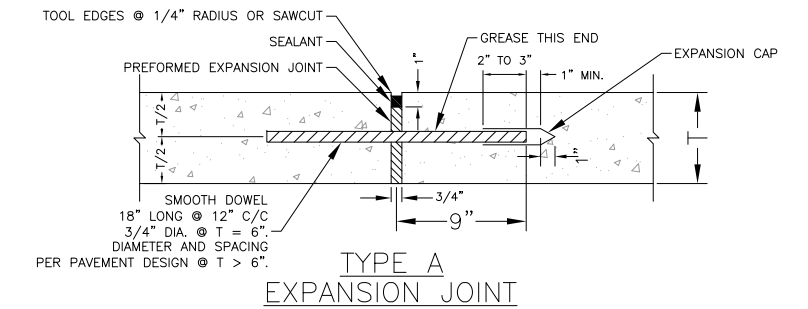
STANDARD CUL-DE-SAC
WITH CENTER ISLAND
(NOT TO SCALE)



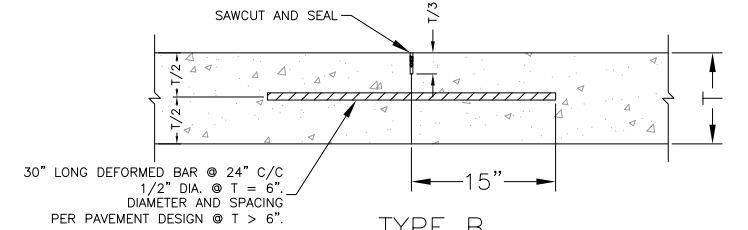
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FULL SECTION PAVED
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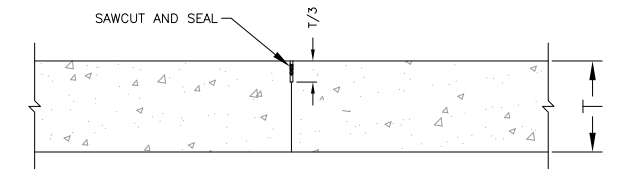
KNUCKLE DIMENSIONS
(NOT TO SCALE)



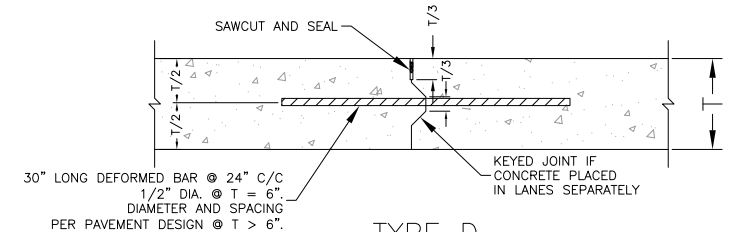
TYPE A
EXPANSION JOINT



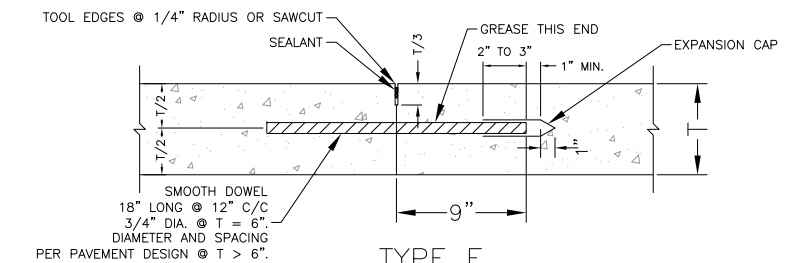
TYPE B
TIED JOINT



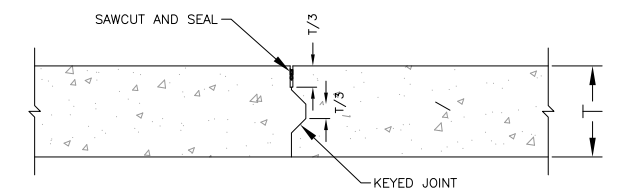
TYPE C
SAWCUT CONTRACTION JOINT



TYPE D
TIED CONSTRUCTION JOINT



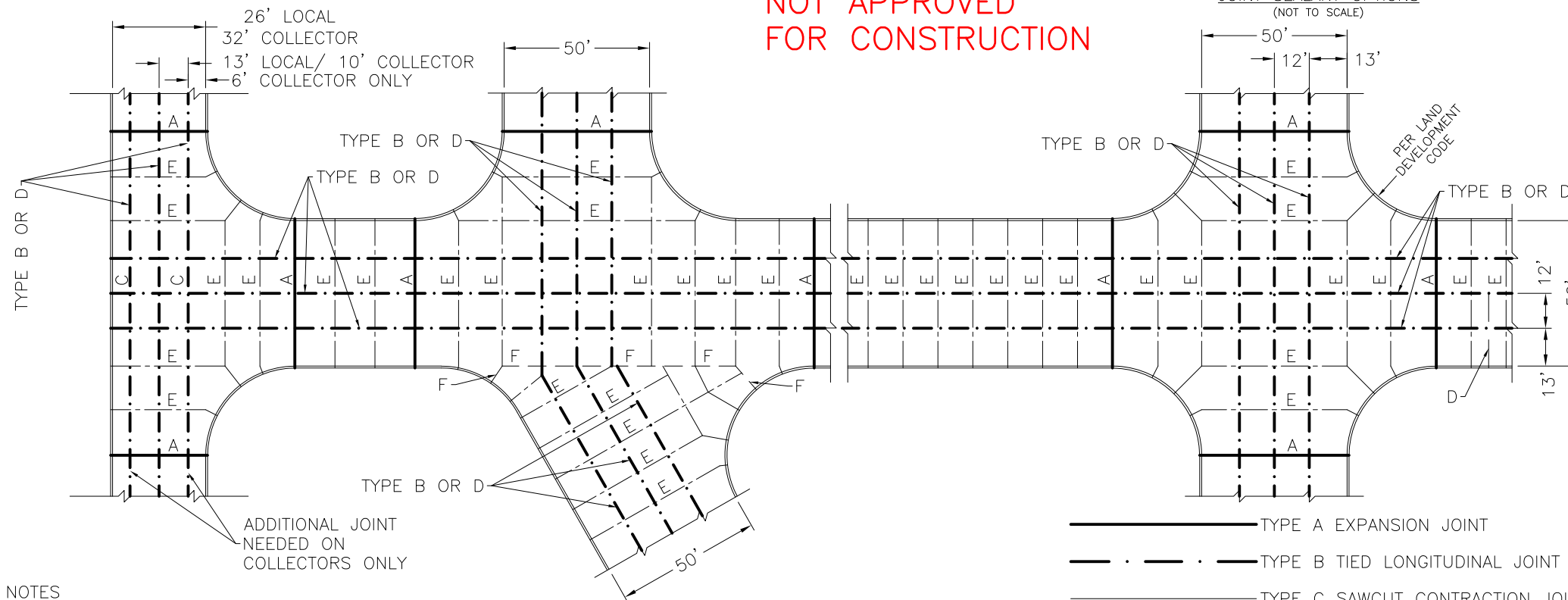
TYPE E
DOWELED TRANSVERSE JOINT



TYPE F
NON-DOWELED EXPANSION JOINT

PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION

JOINT SEALANT OPTIONS
(NOT TO SCALE)

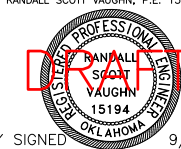


TYPICAL JOINT LAYOUT
(NOT TO SCALE)

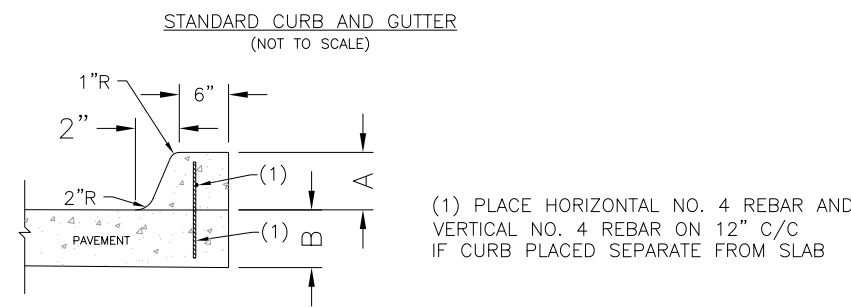
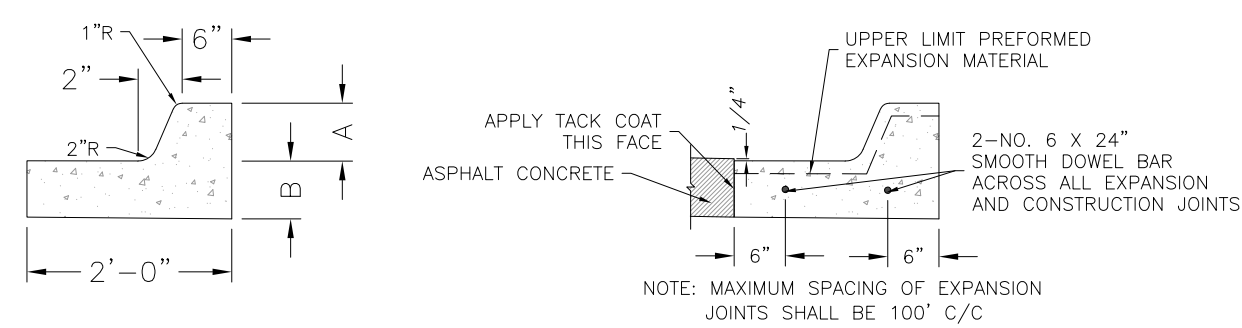
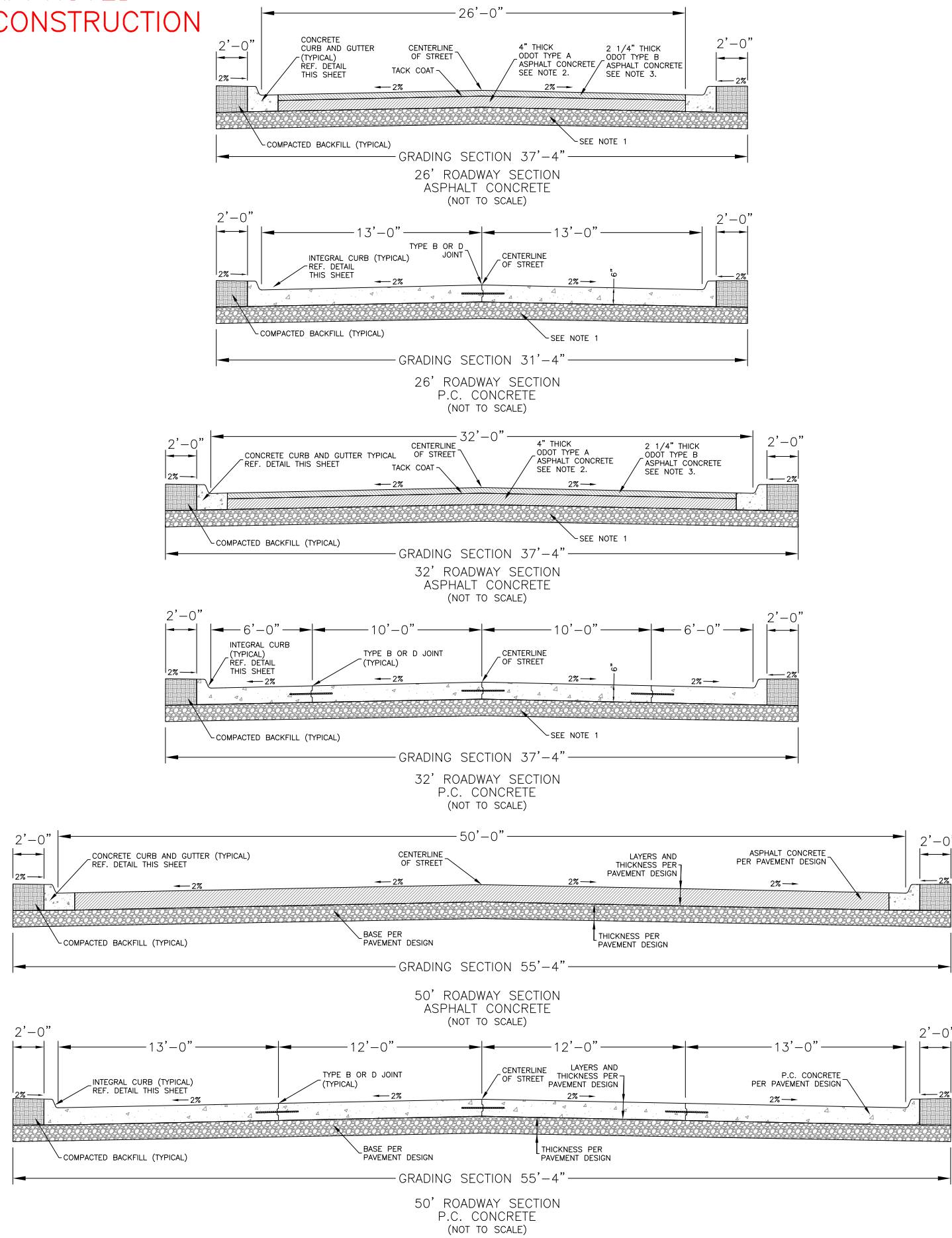
- NOTES
1. TYPICAL TRANSVERSE JOINT SPACING = 12'
 2. MAXIMUM SPACING B/W EXPANSION JOINTS = 100'
 3. PLACE TYPE A, TYPE D OR TYPE E JOINT, AS APPROPRIATE, AT THE END OF DAYS' PLACEMENT OR WHEN PLACEMENT OPERATIONS ARE DELAYED MORE THAN 30 MINUTES.

- TYPE A EXPANSION JOINT
- TYPE B TIED LONGITUDINAL JOINT
- TYPE C SAWCUT CONTRACTION JOINT
- TYPE D TIED CONSTRUCTION JOINT
- TYPE E DOWELED TRANSVERSE JOINT
- TYPE F NON-DOWELED EXPANSION JOINT

PREPARED BY: CHISHOLM TRAIL CONSULTING, LLC 2124 SCOTT LANE DUNCAN, OKLAHOMA 73533 CA OK7771 RANDALL SCOTT VAUGHN, P.E. 15194	CITY OF CHICKASHA, OKLAHOMA STANDARD PAVING DETAILS APPROVED AND ADOPTED BY THE CITY COUNCIL THIS ____ DAY OF ____ 202___. MAYOR _____ ATTEST: CITY CLERK _____ P.C. CONCRETE STREET PAVING DETAILS DO NOT SCALE
--	--

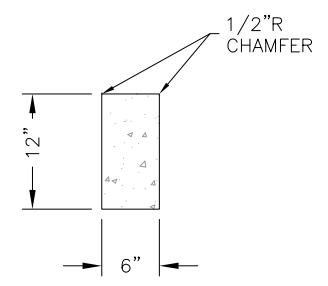
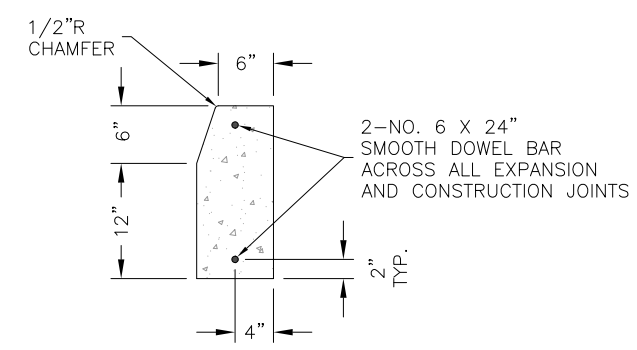


PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION



INTEGRAL CURB (NOT TO SCALE)

CURB HEIGHTS AND PAVEMENT THICKNESSES		
	LOCAL STREETS & COLLECTORS	ALL STREET WIDER THAN 32'
A	6 INCHES	8 INCHES
B	6 INCHES	PER PAVEMENT DESIGN



- NOTES:
1. MINIMUM 6-INCH THICK LAYER OF ODOT TYPE A AGGREGATE BASE. OTHER BASE MATERIALS AND THICKNESSES MAY BE CONSIDERED BY THE CITY ENGINEER IF GEOTECHNICAL INVESTIGATION AND RECOMMENDATION IS PROVIDED.
 2. SUBSTITUTION WITH 4-INCH THICK LAYER OF ODOT TYPE S3 SUPERPAVE MAY BE CONSIDERED BY THE CITY ENGINEER.
 3. SUBSTITUTION WITH 2 1/2" THICK LAYER OF ODOT TYPE S4 SUPERPAVE MAY BE CONSIDERED BY THE CITY ENGINEER.

PREPARED BY:
CHISHOLM TRAIL CONSULTING, LLC
2124 SCOTT LANE
DUNCAN, OKLAHOMA 73533
CA OK7771
RANDALL SCOTT VAUGHN, P.E. 15194

CITY OF CHICKASHA, OKLAHOMA
STANDARD PAVING DETAILS

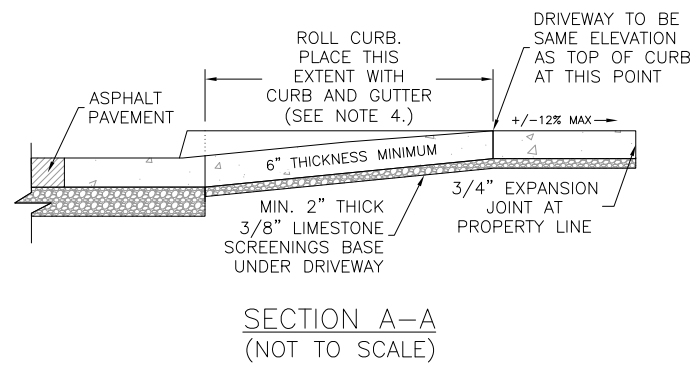
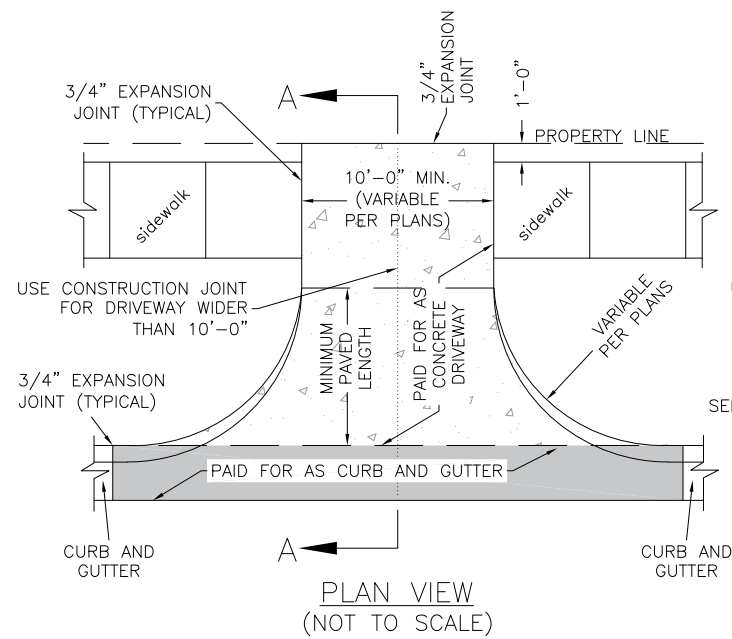
APPROVED AND ADOPTED BY THE CITY COUNCIL
THIS ____ DAY OF _____, 202__.

MAYOR _____ ATTEST: CITY CLERK _____

TYPICAL SECTIONS
DO NOT SCALE

DIGITALLY SIGNED 9/28/2022

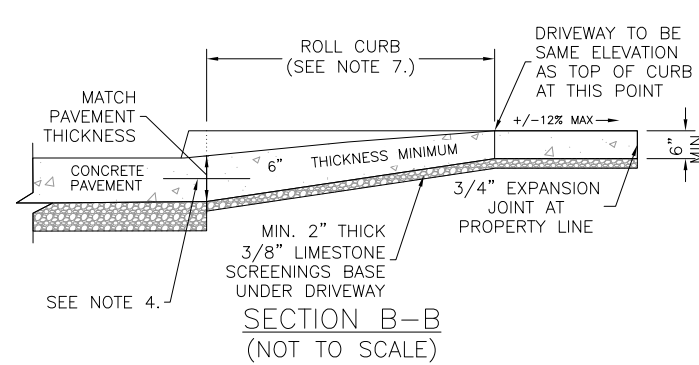
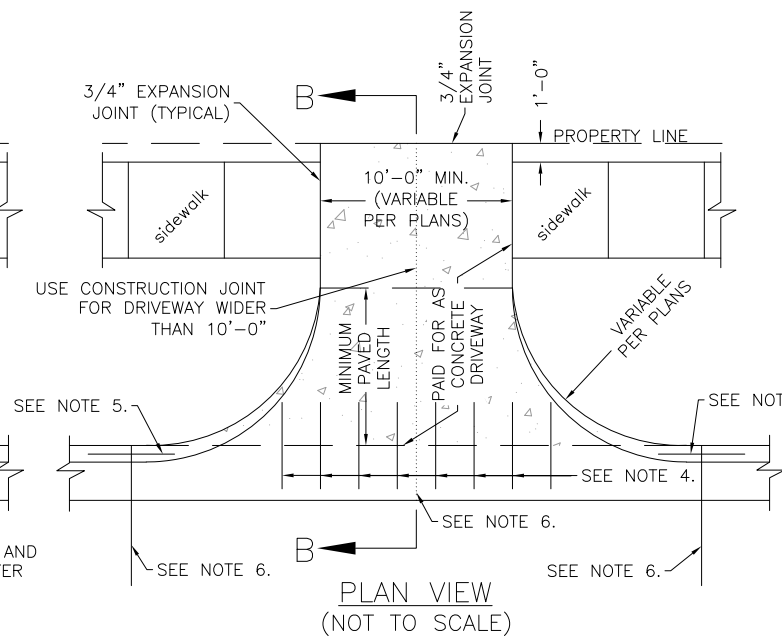
Sheet P2



NOTES:

- REFER TO CHAPTER 46 OF CHICKASHA CITY ORDINANCES (LAND DEVELOPMENT CODE) FOR DETAILS NOT PROVIDED HEREIN.
- IF DETAILS ARE SPECIFIED IN THE APPROVED PLANS THAT DIFFER FROM THE DETAILS SHOWN HEREIN, THE PLANS SHALL GOVERN.
- BLOCKOUT OR REMOVE AND REPLACE CURB AND GUTTER WITHIN LIMITS OF DRIVEWAY.
- DRIVEWAYS FOR OTHER THAN ONE & TWO FAMILY DWELLINGS MAY HAVE FULL SECTION CURB THROUGHOUT CURB RETURN.
- ALTERNATE MATERIALS MAY BE APPROVED (e.g., ASPHALT, BRICK, ETC.), BUT ALL DRIVEWAYS MUST BE HARD-SURFACED AND MUST MEET STANDARD DIMENSION REQUIREMENTS. THINNER PAVING SURFACES MAY REQUIRE THICKER BASES, AS DETERMINED BY THE BUILDING OFFICIAL.

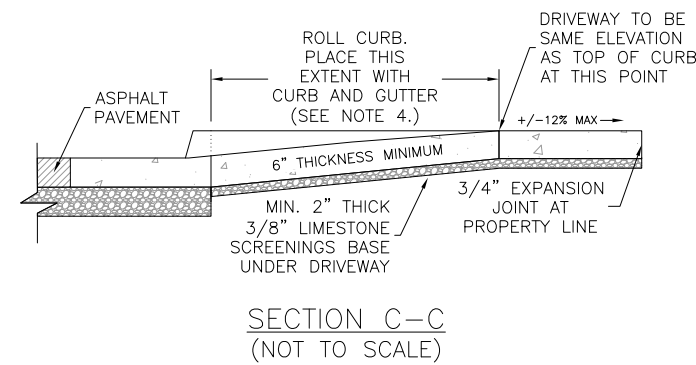
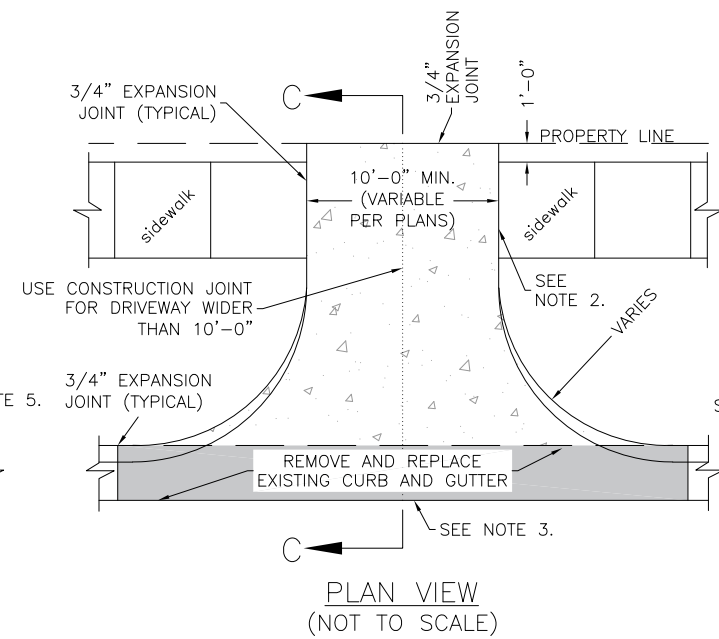
DRIVEWAY DETAILS FOR ASPHALT STREET
(BUILT WITH NEW STREET CONSTRUCTION)



NOTES:

- REFER TO CHAPTER 46 OF CHICKASHA CITY ORDINANCES (LAND DEVELOPMENT CODE) FOR DETAILS NOT PROVIDED HEREIN.
- IF DETAILS ARE SPECIFIED IN THE APPROVED PLANS THAT DIFFER FROM THE DETAILS SHOWN HEREIN, THE PLANS SHALL GOVERN.
- SAWCUT AND REMOVE INTEGRAL CURB TO NEAT LINES. DO NOT BLOCK OUT STREET PAVEMENT.
- IF DRIVEWAY IS NOT PLACED MONOLITHICALLY WITH STREET PAVEMENT, INSTALL NO. 4 X 18" LONG DEFORMED BARS AT 24" C/C (TYPICAL) WHERE SLAB WIDTH ALLOWS. MAINTAIN MINIMUM 2-INCH CLEARANCE BETWEEN END OF REBAR AND EDGE OF SLAB.
- IF DRIVEWAY IS NOT PLACED MONOLITHICALLY WITH STREET PAVEMENT, INSTALL 1 - NO. 4 X 18" DEFORMED BAR AT CENTER OF CURB.
- PLACE JOINTS IN CURB AND DRIVEWAY AT SAME LOCATION AS STREET TRANSVERSE JOINTS.
- DRIVEWAYS FOR OTHER THAN ONE & TWO FAMILY DWELLINGS MAY HAVE FULL SECTION CURB THROUGHOUT CURB RETURN.
- ALTERNATE MATERIALS MAY BE APPROVED (e.g., ASPHALT, BRICK, ETC.), BUT ALL DRIVEWAYS MUST BE HARD-SURFACED AND MUST MEET STANDARD DIMENSION REQUIREMENTS. THINNER PAVING SURFACES MAY REQUIRE THICKER BASES, AS DETERMINED BY THE BUILDING OFFICIAL.

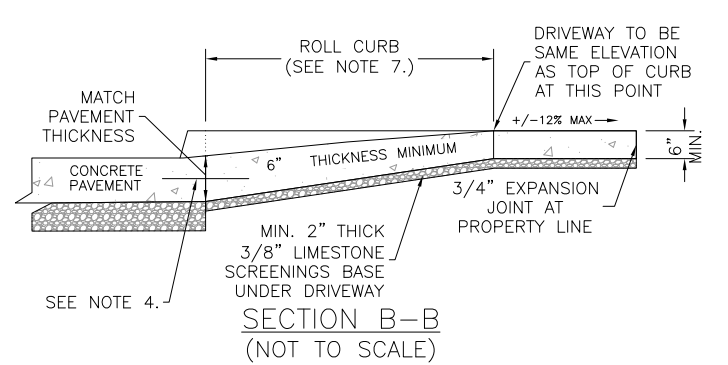
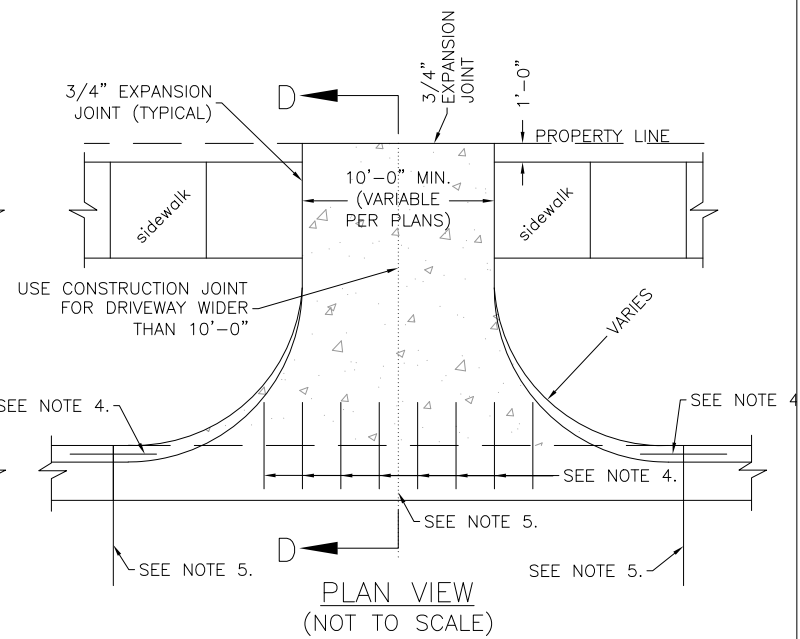
DRIVEWAY DETAILS FOR CONCRETE STREET
(BUILT WITH NEW STREET CONSTRUCTION)



NOTES:

- REFER TO CHAPTER 46 OF CHICKASHA CITY ORDINANCES (LAND DEVELOPMENT CODE) FOR DETAILS NOT PROVIDED HEREIN.
- SAWCUT FULL DEPTH AND REMOVE SIDEWALK FROM WITHIN LIMITS OF DRIVEWAY.
- SAWCUT FULL DEPTH AND REMOVE AND REPLACE CURB AND GUTTER WITHIN LIMITS OF DRIVEWAY.
- DRIVEWAYS FOR OTHER THAN ONE & TWO FAMILY DWELLINGS MAY HAVE FULL SECTION CURB THROUGHOUT CURB RETURN. IF WATER STANDS IN THE EXISTING GUTTER THE CONTRACTOR SHALL NOTIFY THE BUILDING OFFICIAL OF SUCH BEFORE STARTING WORK. NEW WORK WILL NOT BE ALLOWED THAT RESULTS IN STANDING WATER WITHIN LIMITS OF DRIVEWAY OR EITHER SIDE OF DRIVEWAY.
- ALTERNATE MATERIALS MAY BE APPROVED (e.g., ASPHALT, BRICK, ETC.), BUT ALL DRIVEWAYS MUST BE HARD-SURFACED AND MUST MEET STANDARD DIMENSION REQUIREMENTS. THINNER PAVING SURFACES MAY REQUIRE THICKER BASES, AS DETERMINED BY THE BUILDING OFFICIAL.

DRIVEWAY DETAILS FOR ASPHALT STREET
(BUILT ON EXISTING STREET)



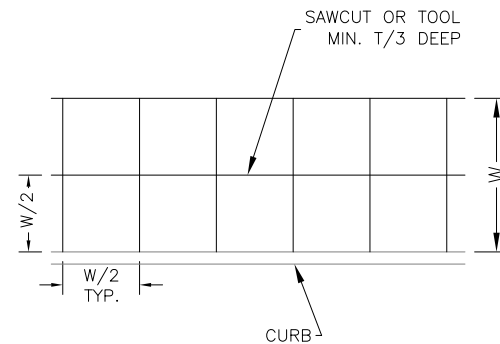
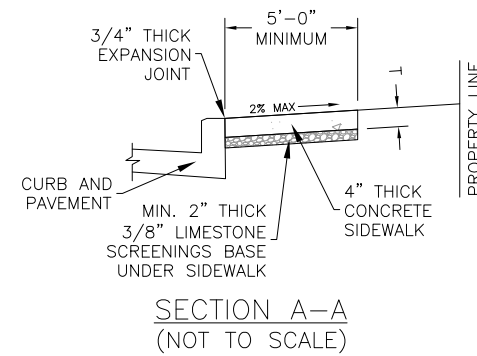
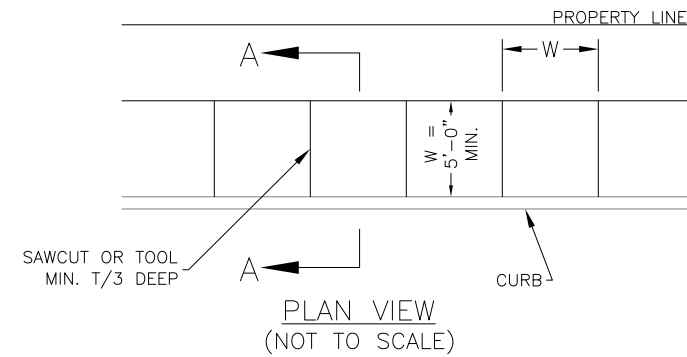
NOTES:

- REFER TO CHAPTER 46 OF CHICKASHA CITY ORDINANCES (LAND DEVELOPMENT CODE) FOR DETAILS NOT PROVIDED HEREIN.
- SAWCUT AND REMOVE INTEGRAL CURB TO NEAT LINES. DO NOT SAWCUT STREET PAVEMENT.
- INSTALL NO. 4 X 18" LONG DEFORMED BARS AT 24" C/C WHERE SLAB WIDTH ALLOWS. MAINTAIN MINIMUM 2-INCH CLEARANCE BETWEEN END OF REBAR AND EDGE OF SLAB.
- INSTALL 1 - NO. 4 X 18" DEFORMED BAR AT CENTER OF CURB.
- PLACE JOINTS IN CURB AND DRIVEWAY AT SAME LOCATION AS STREET TRANSVERSE JOINTS.
- DRIVEWAYS FOR OTHER THAN ONE & TWO FAMILY DWELLINGS MAY HAVE FULL SECTION CURB THROUGHOUT CURB RETURN.
- ALTERNATE MATERIALS MAY BE APPROVED (e.g., ASPHALT, BRICK, ETC.), BUT ALL DRIVEWAYS MUST BE HARD-SURFACED AND MUST MEET STANDARD DIMENSION REQUIREMENTS. THINNER PAVING SURFACES MAY REQUIRE THICKER BASES, AS DETERMINED BY THE BUILDING OFFICIAL.

DRIVEWAY DETAILS FOR CONCRETE STREET
(BUILT ON EXISTING STREET)

PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION

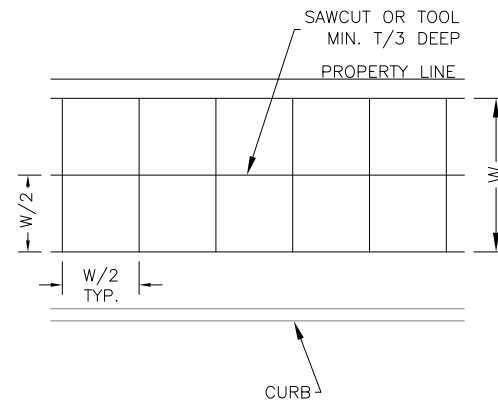
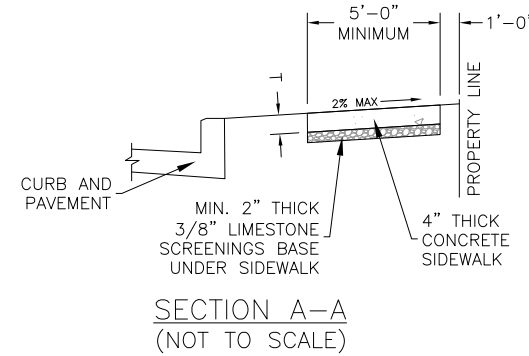
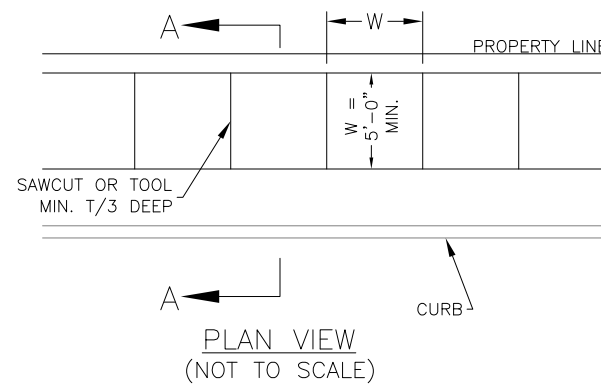
PREPARED BY: CHISHOLM TRAIL CONSULTING, LLC 2124 SCOTT LANE DUNCAN, OKLAHOMA 73533 CA OK7771 RANDALL SCOTT VAUGHN, P.E. 15194	CITY OF CHICKASHA, OKLAHOMA STANDARD PAVING DETAILS APPROVED AND ADOPTED BY THE CITY COUNCIL THIS ____ DAY OF ____ 202__. MAYOR _____ ATTEST: CITY CLERK _____ DRIVEWAY DETAILS DO NOT SCALE
DIGITALLY SIGNED 9/28/2022	Sheet P3



NOTES:

1. REFER TO CHAPTER 46 OF CHICKASHA CITY ORDINANCES (LAND DEVELOPMENT CODE) FOR DETAILS NOT PROVIDED HEREIN.
2. PLACE 3/4" THICK X 4" WIDE EXPANSION JOINT MATERIAL BETWEEN SIDEWALK AND ALL CURBS, OTHER PAVEMENTS OR STRUCTURES.
3. PLACE 3/4" THICK X 4" WIDE TRANSVERSE EXPANSION JOINTS AT A MAXIMUM SPACING OF 100 FEET.

DETAILS FOR CONCRETE SIDEWALK
(LOCATED ADJACENT TO CURB)
(NOT TO SCALE)

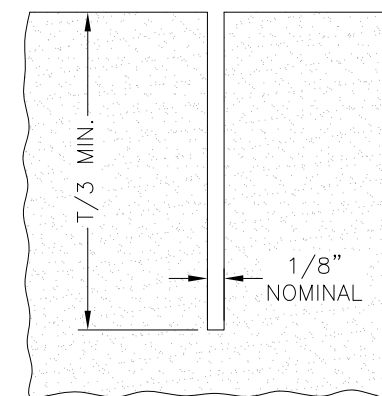
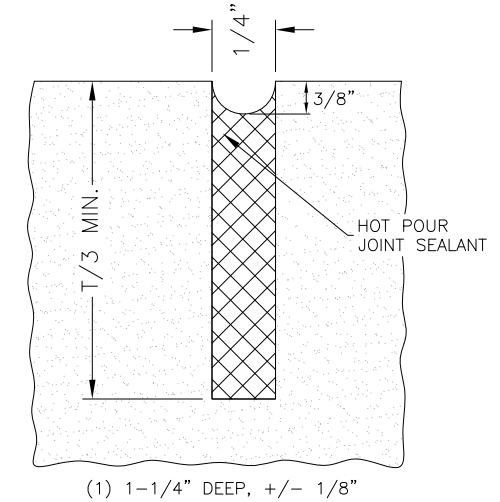
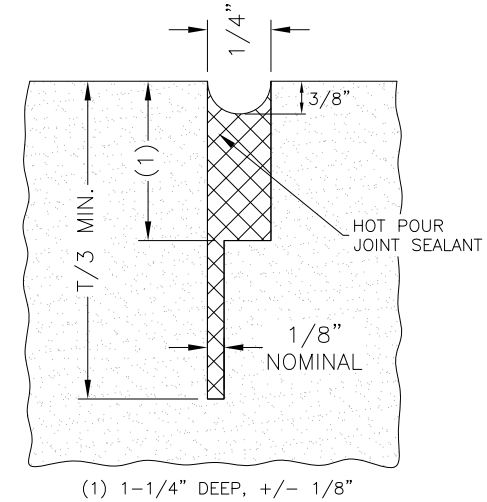
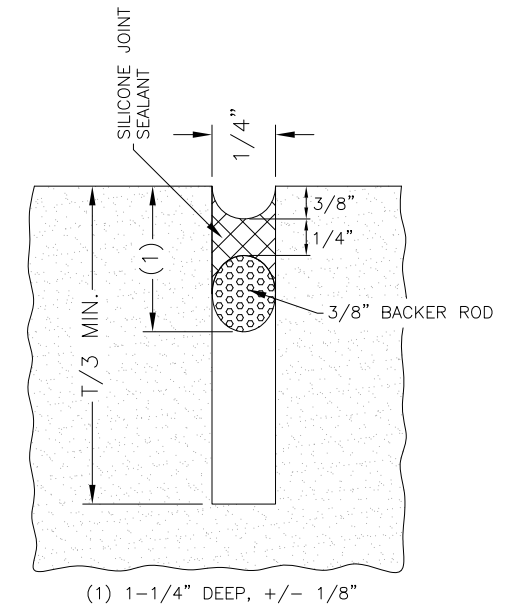
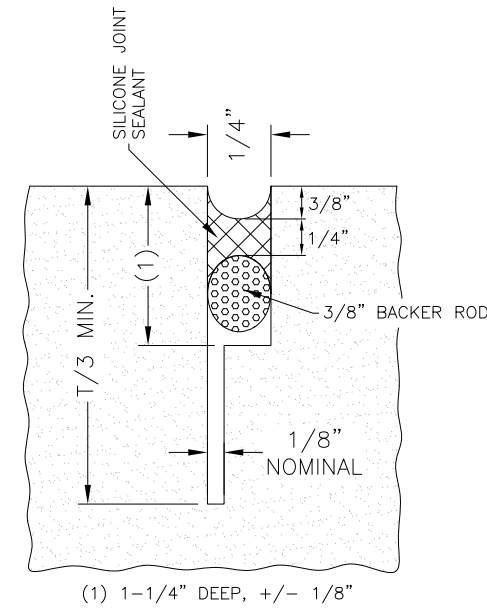


NOTES:

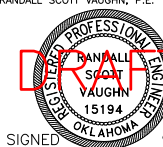
1. REFER TO CHAPTER 46 OF CHICKASHA CITY ORDINANCES (LAND DEVELOPMENT CODE) FOR DETAILS NOT PROVIDED HEREIN.
2. PLACE 3/4" THICK X 4" WIDE EXPANSION JOINT MATERIAL BETWEEN SIDEWALK AND ALL CURBS, OTHER PAVEMENTS OR STRUCTURES.
3. PLACE 3/4" THICK X 4" WIDE TRANSVERSE EXPANSION JOINTS AT A MAXIMUM SPACING OF 100 FEET.

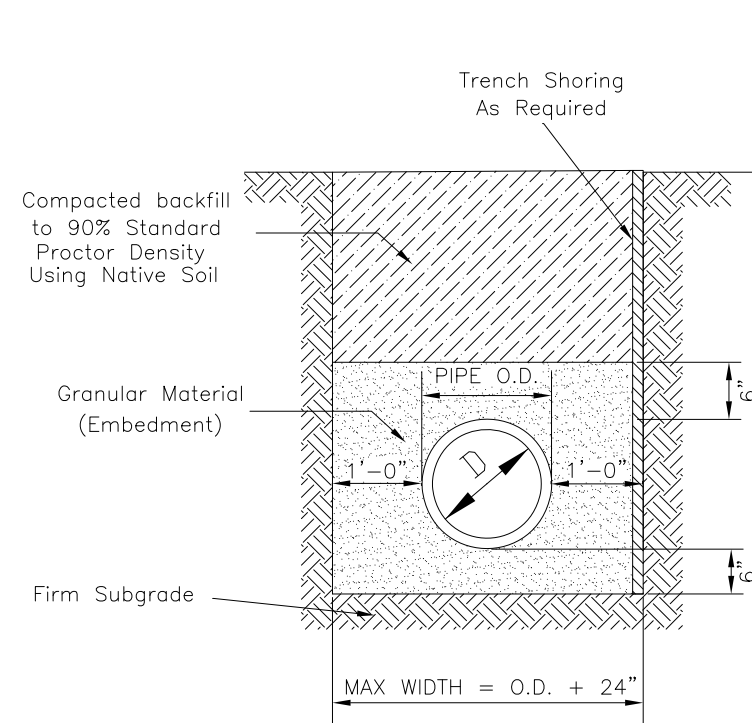
DETAILS FOR CONCRETE SIDEWALK
(LOCATED NEAR PROPERTY LINE)
(NOT TO SCALE)

PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION

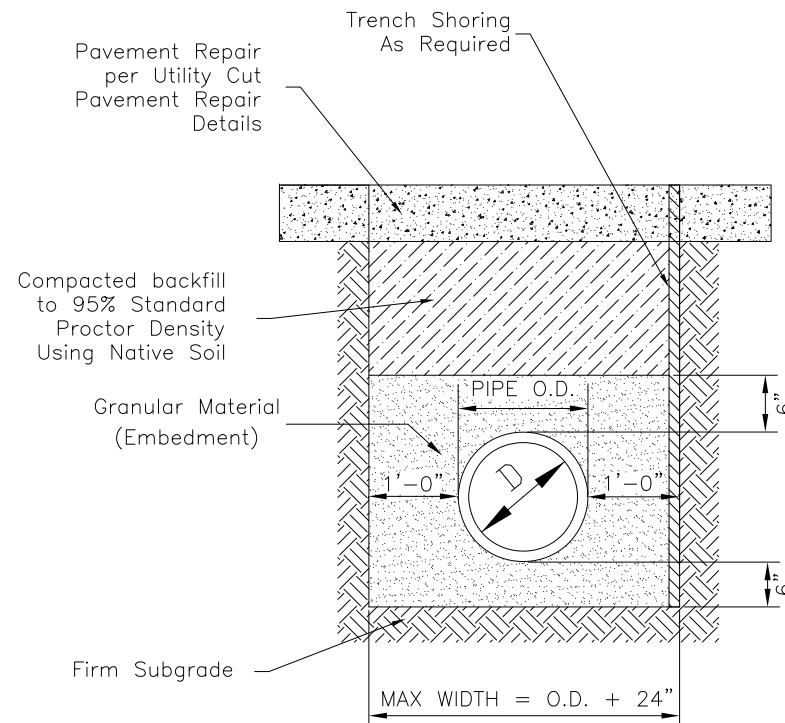


PREPARED BY: CHISHOLM TRAIL CONSULTING, LLC 2124 SCOTT LANE DUNCAN, OKLAHOMA 73533 CA OK7771 RANDALL SCOTT VAUGHN, P.E. 15194	CITY OF CHICKASHA, OKLAHOMA STANDARD PAVING DETAILS APPROVED AND ADOPTED BY THE CITY COUNCIL THIS ____ DAY OF _____, 202___. MAYOR _____ ATTEST: CITY CLERK _____ SIDEWALK AND JOINT DETAILS DO NOT SCALE
--	---

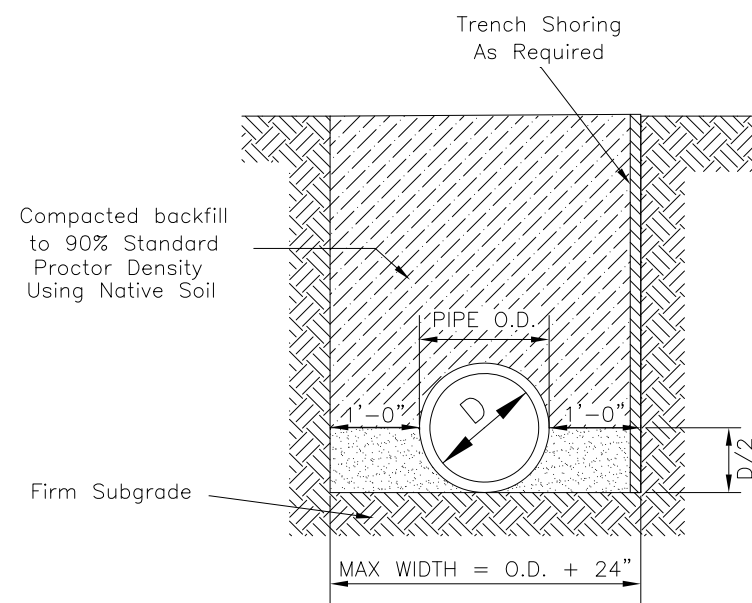




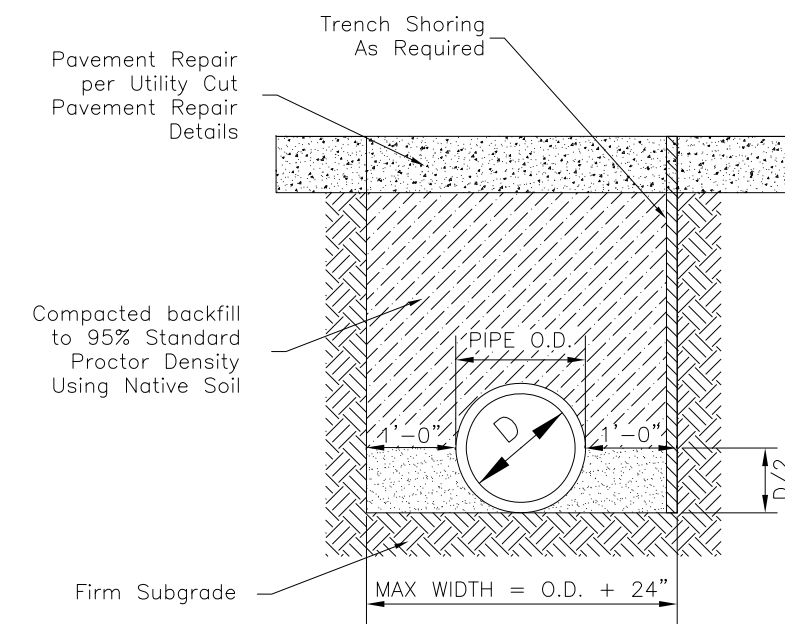
FLEXIBLE PIPE TYPICAL



FLEXIBLE PIPE UNDER PAVEMENTS



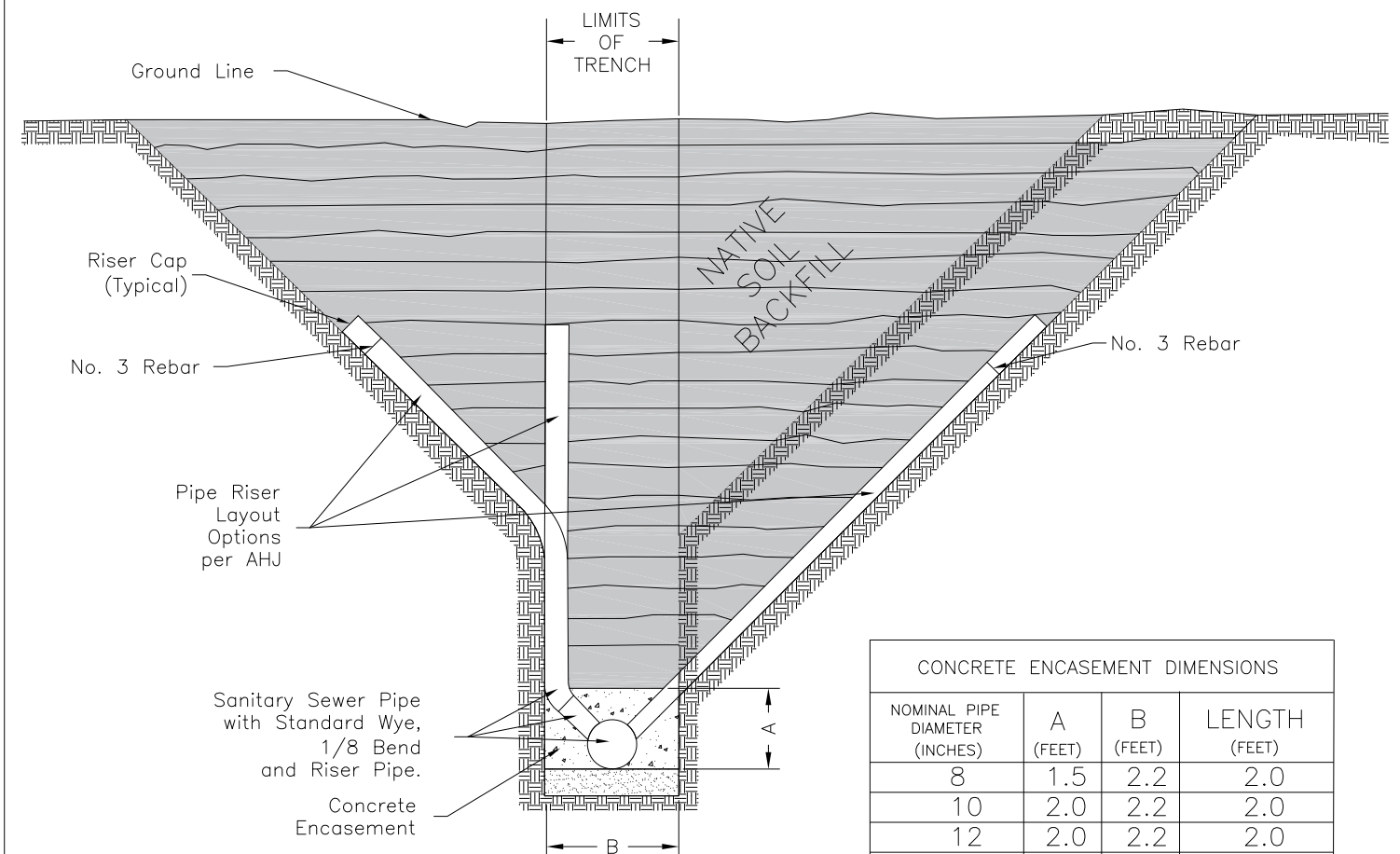
RIGID PIPE TYPICAL



RIGID PIPE UNDER PAVEMENTS

TRENCH WIDTHS		
NOMINAL PIPE DIAMETER (INCHES)	MINIMUM TRENCH WIDTH (INCHES)	MAXIMUM TRENCH WIDTH (INCHES)
8	22	34
10	24	38
12	28	40
15	34	42

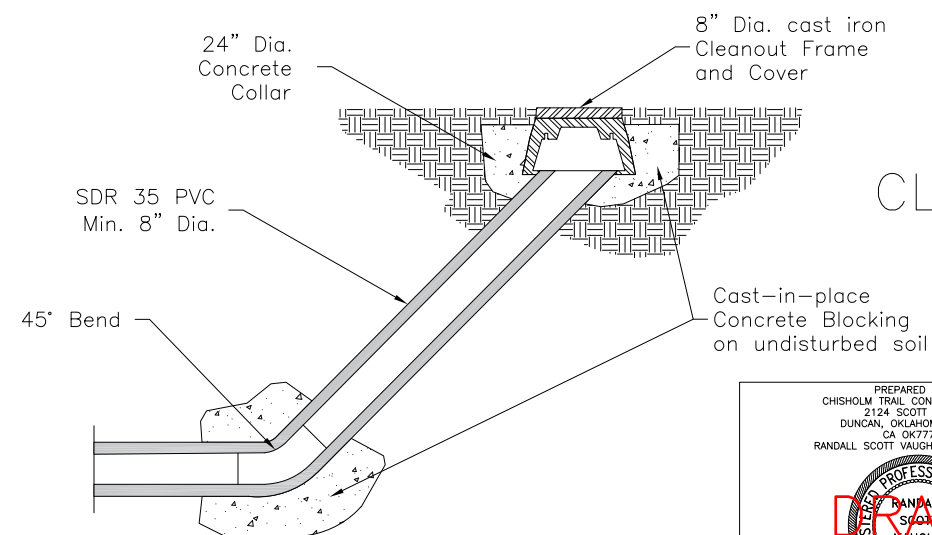
TRENCH TYPICALS



RISER PIPE OPTIONS

RISER PIPE ORPTIONS – TO BE APPROVED BY THE AUTHORITY HAVING JURISDICTION (AHJ)

1. Riser Pipe constructed in a vertical trench with No. 3 Rebar supports as required, backfilled with suitable native soil in compliance with the specifications.
2. Riser Pipe constructed in a vertical trench with 1/8 bend on a 1:1 slope, supported by No. 3 Rebar as required, backfilled with suitable native soil in compliance with the specifications.
3. Riser Pipe constructed on a 1:1 slope connected to a Wye with No. 3 Rebar supports as required, backfilled with suitable native soil in compliance with the specifications.
4. When tapping existing sanitary sewer main, using a Wye saddle and clamp in accordance with AHJ requirements.



CLEANOUT DETAILS

**PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION**

PREPARED BY:
CHISHOLM TRAIL CONSULTING, LLC
2124 SCOTT LANE
DUNCAN, OKLAHOMA 73533
CA 0K7771
RANDALL SCOTT VAUGHN, P.E. 15194

RANDALL SCOTT VAUGHN
REGISTERED PROFESSIONAL ENGINEER
OKLAHOMA
15194

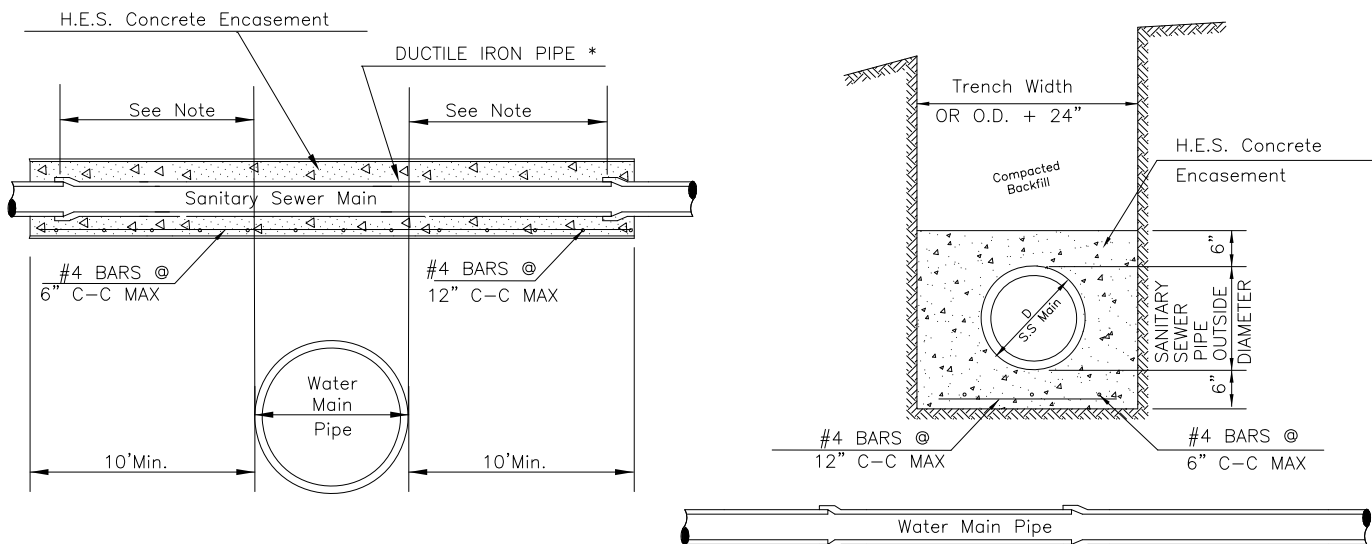
DIGITALLY SIGNED 9/28/2022

CITY OF CHICKASHA, OKLAHOMA
STANDARD DRAWINGS

APPROVED AND ADOPTED BY THE CITY COUNCIL
THIS ____ DAY OF ____ 202__.

MAYOR _____ ATTEST: CITY CLERK _____

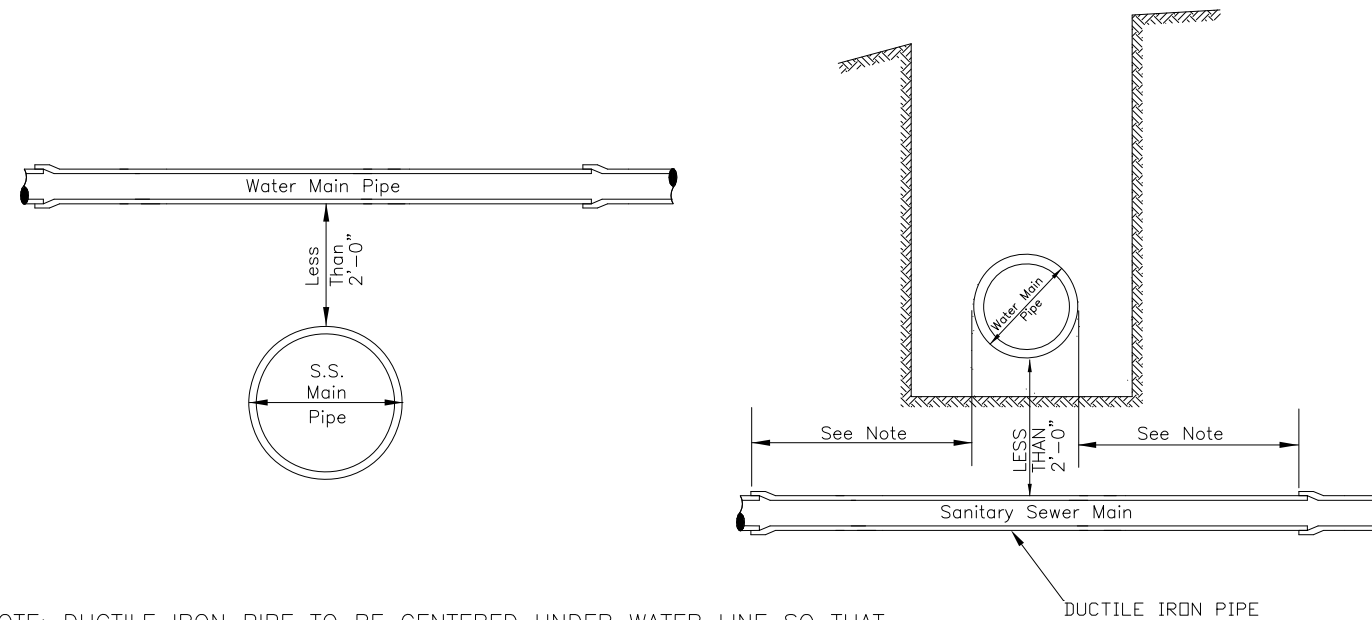
SANITARY SEWER MAIN DETAILS
DO NOT SCALE



NOTE: CONCRETE ENCASEMENT IS TO EXTEND 4-INCHES PAST THE NEAREST JOINT AT OR BEYOND THE 10-FOOT MINIMUM SHOWN. REINFORCEMENT STEEL SHALL HAVE TWO INCHES OF CONCRETE COVER. THE ENGINEER MAY APPROVE OTHER MEANS OF STRUCTURAL SUPPORT OF THE SANITARY SEWER MAIN.

*NOTE: IF CLEARANCE BETWEEN WATER MAIN AND SS MAIN IS LESS THAN 2 FEET DUCTILE IRON PIPE TO BE CENTERED OVER WATER LINE SO THAT JOINTS ARE PLACED EQUAL DISTANCE FROM CROSSING AS SHOWN.

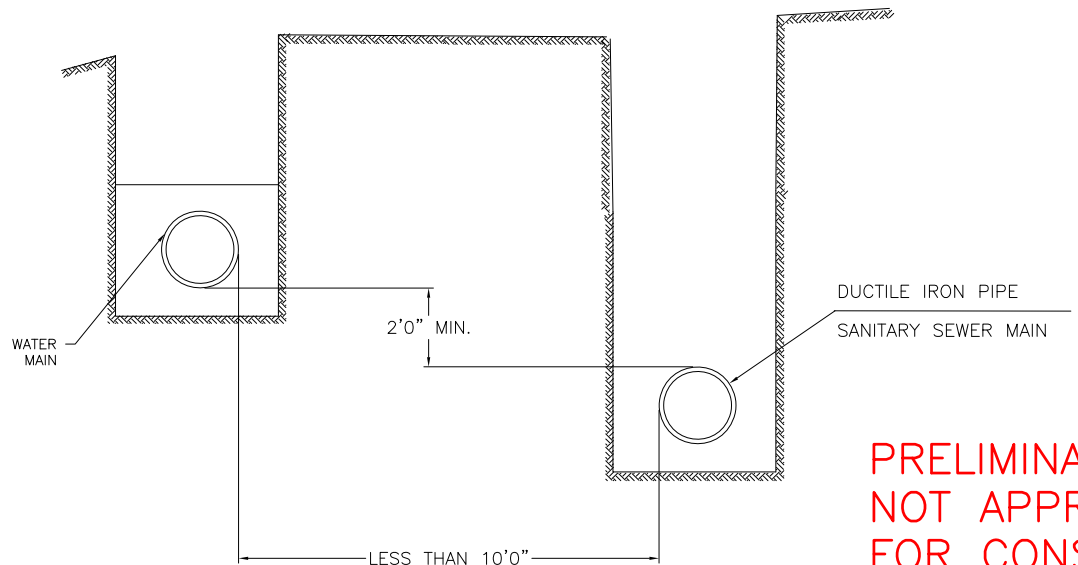
TYPICAL SECTIONS FOR WATER MAIN BELOW SEWER MAIN



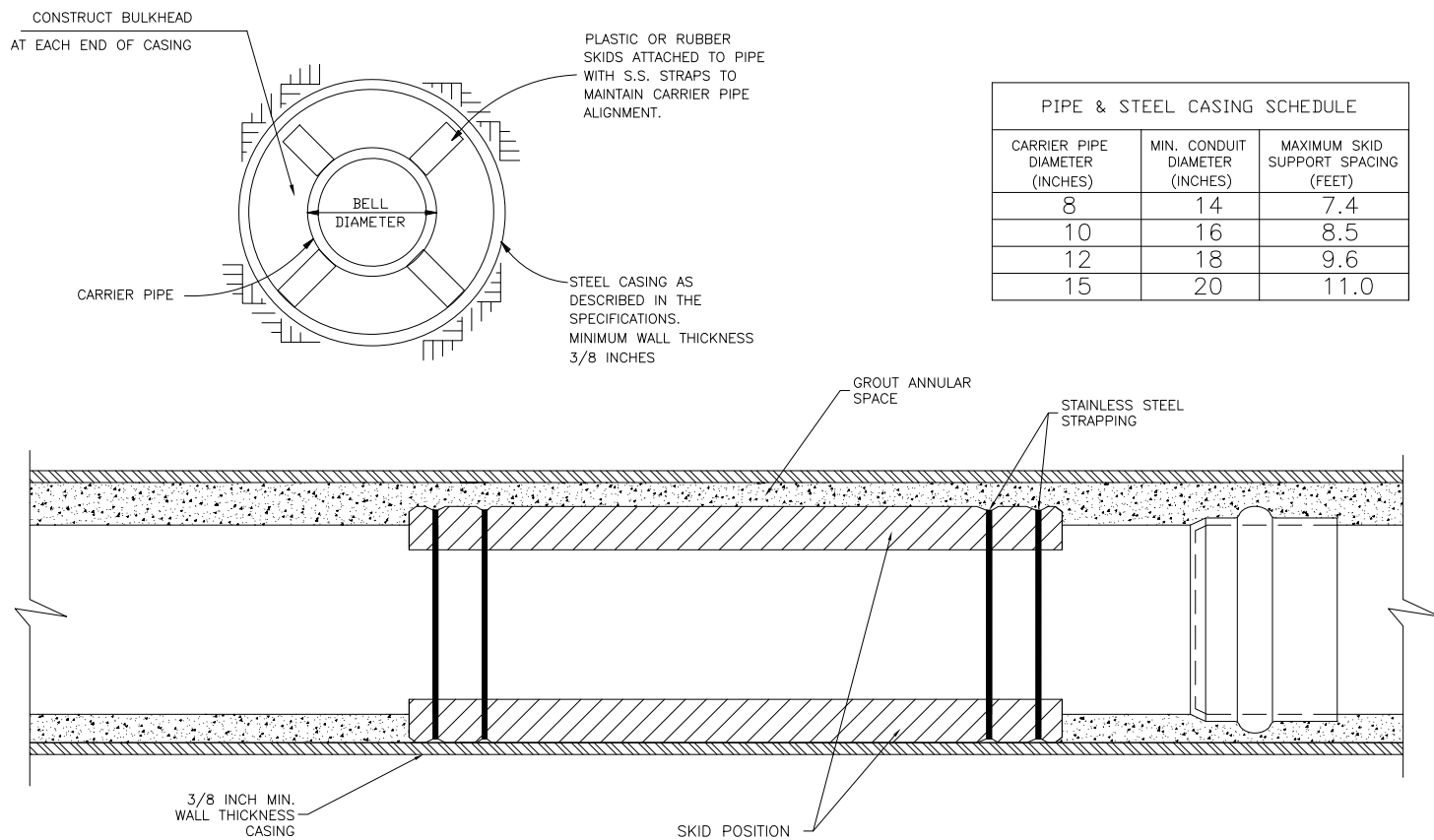
NOTE: DUCTILE IRON PIPE TO BE CENTERED UNDER WATER LINE SO THAT JOINTS ARE PLACED EQUAL DISTANCE FROM CROSSING AS SHOWN.

TYPICAL SECTIONS FOR WATER MAIN LESS THAN 2-FOOT ABOVE SEWER MAIN

WATER LINE AND SEWER CROSSINGS



WATER AND SEWER LINES WITH HORIZONTAL CLEARANCE OF LESS THAN TEN FEET



PIPE & STEEL CASING SCHEDULE		
CARRIER PIPE DIAMETER (INCHES)	MIN. CONDUIT DIAMETER (INCHES)	MAXIMUM SKID SUPPORT SPACING (FEET)
8	14	7.4
10	16	8.5
12	18	9.6
15	20	11.0

PREPARED BY:
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DUNCAN, OKLAHOMA 73533
CA 0K7771
RANDALL SCOTT VAUGHN, P.E. 15194



DIGITALLY SIGNED 9/28/2022

CITY OF CHICKASHA, OKLAHOMA
STANDARD DRAWINGS
APPROVED AND ADOPTED BY THE CITY COUNCIL
THIS ____ DAY OF _____, 202__.

MAYOR ATTEST: CITY CLERK

SANITARY SEWER MAIN DETAILS

DO NOT SCALE

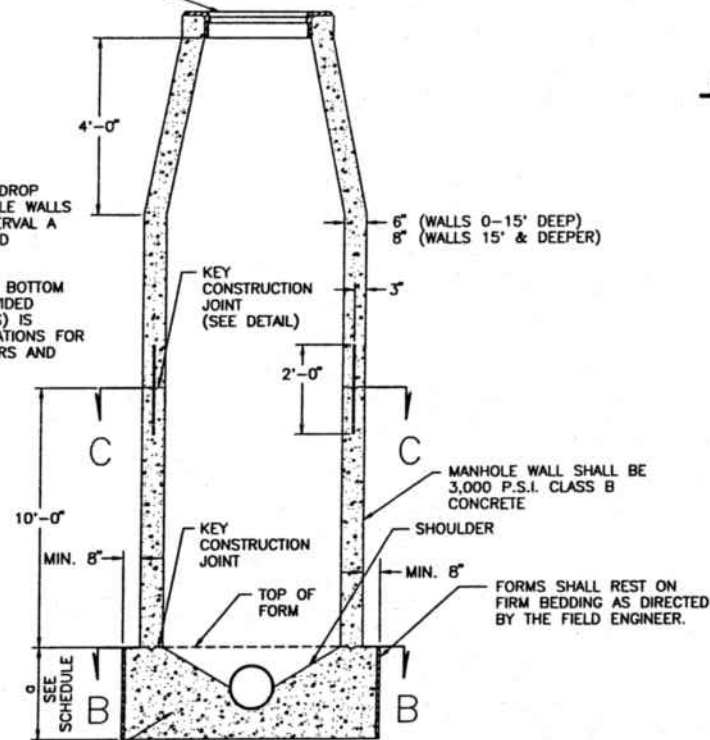
STANDARD POURED-IN-PLACE MANHOLE

TYPE "B" FRAME IS TYPICAL

CONCRETE POURS (ACTUAL VERTICAL DROP OF CONCRETE) FOR HEIGHT OF MANHOLE WALLS SHALL NOT EXCEED 10'. AT THIS INTERVAL A CONSTRUCTION JOINT WILL BE REQUIRED CONFORMING TO THE DETAILS SHOWN.

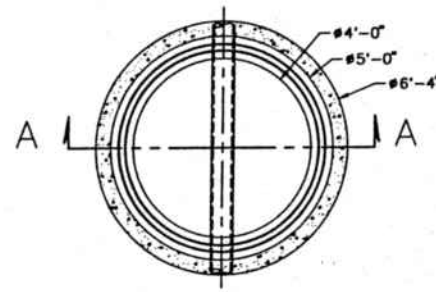
MONOLITHIC POURS OF THE MANHOLE BOTTOM AND WALLS SHALL BE PERMITTED PROVIDED THAT ALL CONCRETE (BOTTOM & WALLS) IS VIBRATED ACCORDING TO THE SPECIFICATIONS FOR THE CONSTRUCTION OF SANITARY SEWERS AND APPURTENANCES.

SCHEDULE OF THICKNESS	
PIPE DIAMETER	a
8"	1'-8"
10"	1'-10"
12"	2'-1"
15"	2'-4"
18"	2'-8"
21"	3'-0"
24"	3'-3"

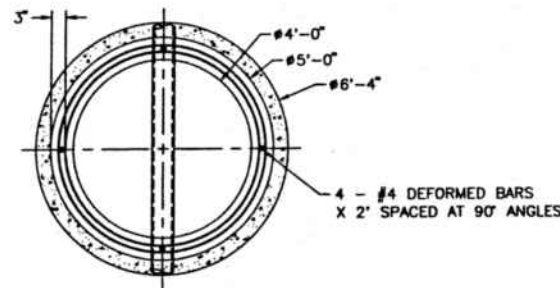


3500 P.S.I. CLASS A CONCRETE

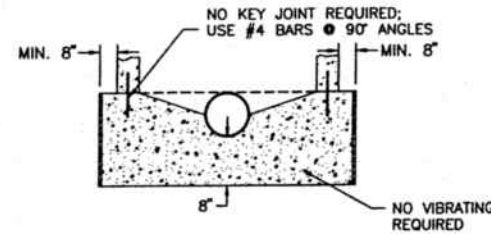
SECTION A-A



SECTION B-B

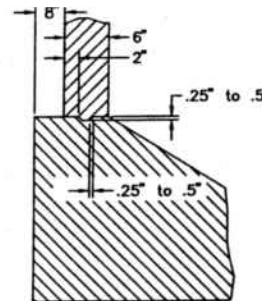


SECTION C-C



ALTERNATE JOINT

PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION



KEY CONSTRUCTION JOINT
DETAIL
FOR BOTTOM & WALLS

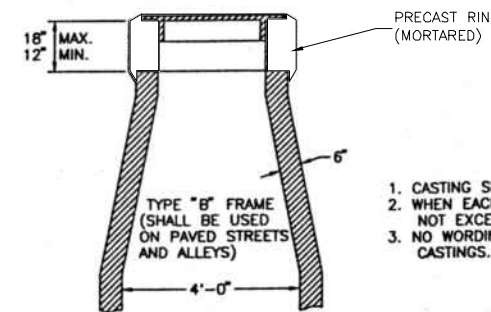
SCALE = 2X

THIS MANHOLE IS STANDARD ONLY FOR SEWERS 36" IN DIAMETER OR LESS, PROVIDED THAT AT JUNCTION POINTS, SPECIAL MANHOLES MAY BE REQUIRED FOR SEWERS SMALLER THAN 36" IN DIAMETER.

INTERIOR SURFACES OF ALL MANHOLE WALLS SHALL RECEIVE TWO (2) COATS OF INERTOL (BLACK SEWER TYPE) PAINT. A MINIMUM INTERVAL OF 24 HOURS SHALL ELAPSE BETWEEN APPLICATIONS OF COATINGS.

FORMS SHALL BE PROVIDED FOR THE SHAPING & FINISHING OF THE MANHOLE BOTTOMS. A MINIMUM OF 24 HOURS SHALL ELAPSE PRIOR TO POURING OF MANHOLE WALLS. CONSTRUCTION OF MANHOLE BOTTOM SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF SANITARY SEWERS AND APPURTENANCES.

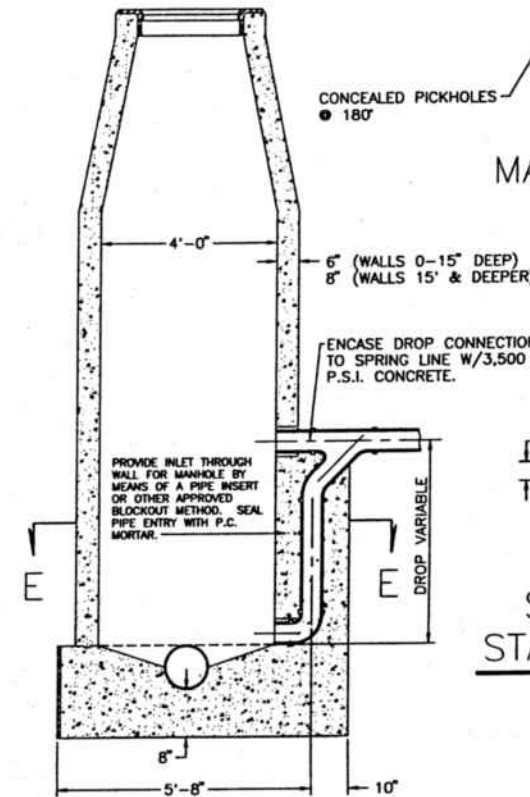
MORTAR FOR FINISHING AND SEALING SHALL BE CLASS "C". ANY HONEYCOMBING OF CONCRETE LESS THAN 2" DEEP IN 6" MANHOLE WALLS MAY BE REPAIRED USING CLASS "D" MORTAR.



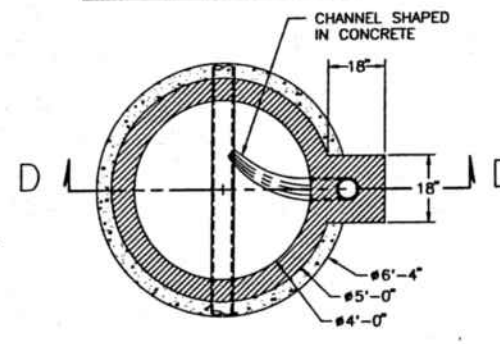
TYPICAL SECTION

TO BE USED ON EXISTING AND FUTURE PAVING

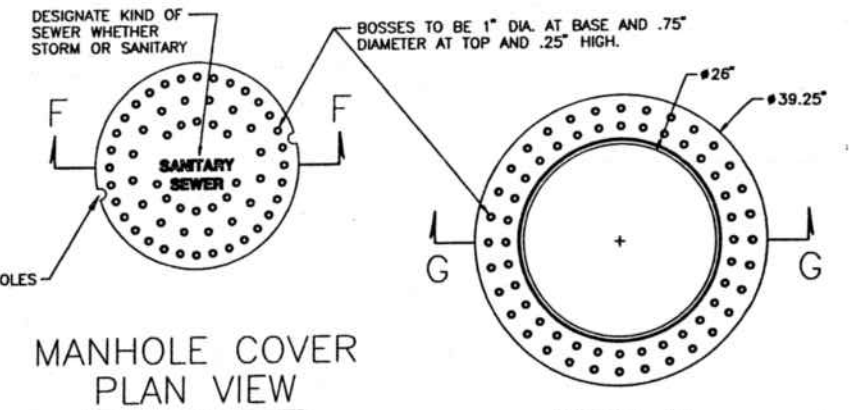
STANDARD POURED-IN-PLACE DROP MANHOLE



SECTION D-D



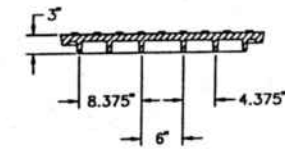
SECTION E-E



MANHOLE COVER
PLAN VIEW

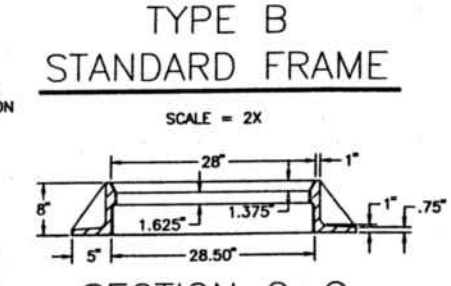
SCALE = 2X

NOTE: TYPE "B" FRAMES SHALL BE USED ON PAVED STREETS AND ALLEYS.



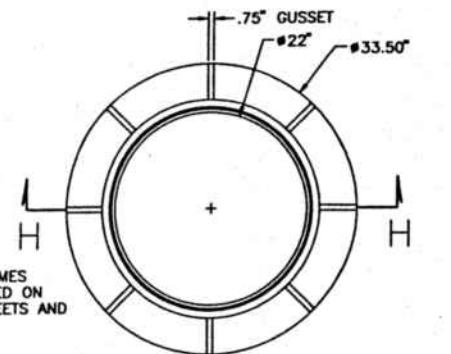
SECTION F-F
STANDARD COVER

SCALE = 2X



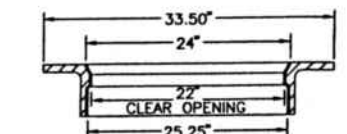
SECTION G-G

SCALE = 2X



TYPE A
STANDARD FRAME
PLAN VIEW

SCALE = 2X



SECTION H-H

SCALE = 2X

GENERAL NOTES

- CASTING SHALL CONFORM TO THE A.S.T.M. SPECIFICATIONS FOR GRAY-IRON CASTINGS, SERIAL DESIGNATION A 48-74.
- WHEN EACH COVER IS PLACED IN ANY POSITION IN ITS ASSOCIATED FRAME, THE SIDE PLAY IN ANY DIRECTION SHALL NOT EXCEED ONE-EIGHTH (1/8) INCH.
- NO WORDING OR MARKINGS OF ANY KIND, OTHER THAN THOSE SHOWN ON THE PLAN, WILL BE PERMITTED ON THESE CASTINGS.

SCALE



PREPARED BY:
CHISHOLM TRAIL CONSULTING, LLC
2124 SCOTT LANE
DUNCAN, OKLAHOMA 73533
C# 047771
RANDALL SCOTT VAUGHN, P.E. 15194



DIGITALLY SIGNED 9/28/2022

CITY OF CHICKASHA, OKLAHOMA
STANDARD DRAWINGS

APPROVED AND ADOPTED BY THE CITY COUNCIL
THIS ____ DAY OF _____, 202__.

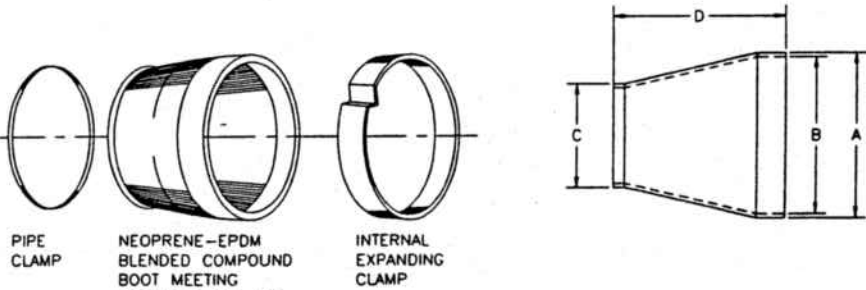
MAYOR ATTEST: CITY CLERK

CAST-IN-PLACE MANHOLE DETAILS

DO NOT SCALE Sheet SSM3

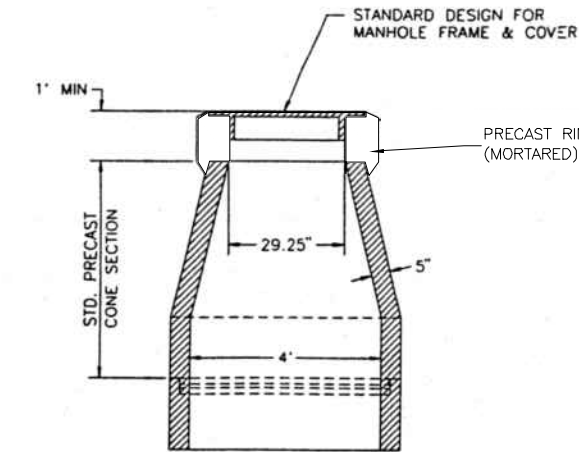
GENERAL NOTES

- 1. ALL PRECAST COMPONENTS SHALL BE REINFORCED WITH THE RESPECTIVE A.S.T.M. SPECIFICATIONS. (C-478-72)
- 2. REINFORCED CONCRETE WALL THICKNESS SHALL BE GOVERNED BY A.S.T.M. SPECIFICATIONS.
- 3. ALL JOINTS SHALL HAVE APPROVED RUBBER RINGS.
- 4. ALL LIFTING HOLES SHALL BE REPAIRED WITH A MIXTURE OF CEMENT AND SAND GROUT FIRMLY PACKED.
- 5. THE INTERIOR SURFACES OF MANHOLE AND CONE SECTIONS SHALL BE COATED WITH TWO COATS OF INERTOL OR APPROVED EQUAL.
- 6. ALL MASONRY FOR HANDWORK SHALL CONFORM TO STANDARD SPECIFICATIONS.
- 7. ALL CASTINGS SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS.
- 8. THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE IN MANHOLE AND CONE SECTIONS SHALL BE 4,000 P.S.I.

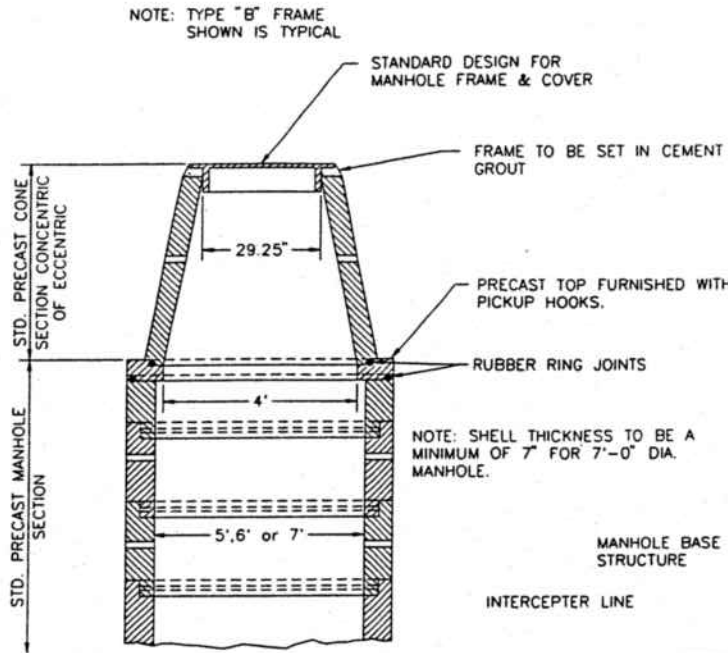


SUGGESTED PIPE O.D. RANGE	HOLE & BOOT DIAMETER DIMENSIONS			
	A	B	C	D
3.5" - 4.5"	7"	6.125"	4.25"	6"
5.375" - 7.0"	12"	10.875"	6.5"	8"
7.0" - 8.5"	12"	10.875"	8"	8"
8.1875" - 9.75"	12"	10.875"	9.25"	8"
9.25" - 11.0"	16"	14.875"	10.5"	8"
10.75" - 12.5"	16"	14.875"	12"	8"
12.0" - 12.75"	16"	14.875"	13.25"	8"
14.5" - 16.25"	20"	18.875"	15.75"	8"
15.75" - 17.5"	20"	18.875"	17"	8"
19.5" - 21.25"	24"	22.875"	20.75"	8"

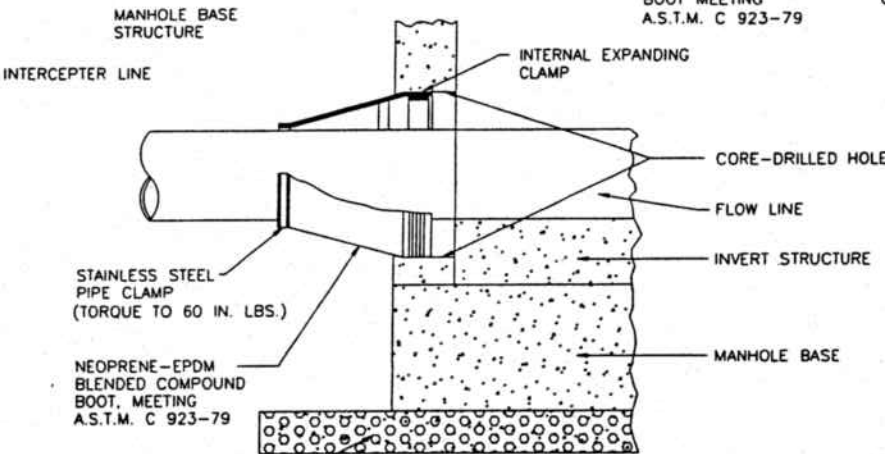
NOTE: ALL CLAMPS SHALL BE STAINLESS STEEL.



4'-0" DIAMETER MANHOLE
(Concentric Cone)

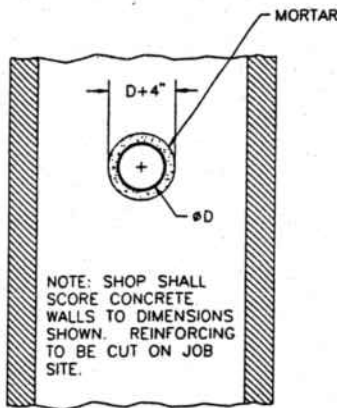


5'-0", 6'-0", 7'-0"
DIAMETER MANHOLE

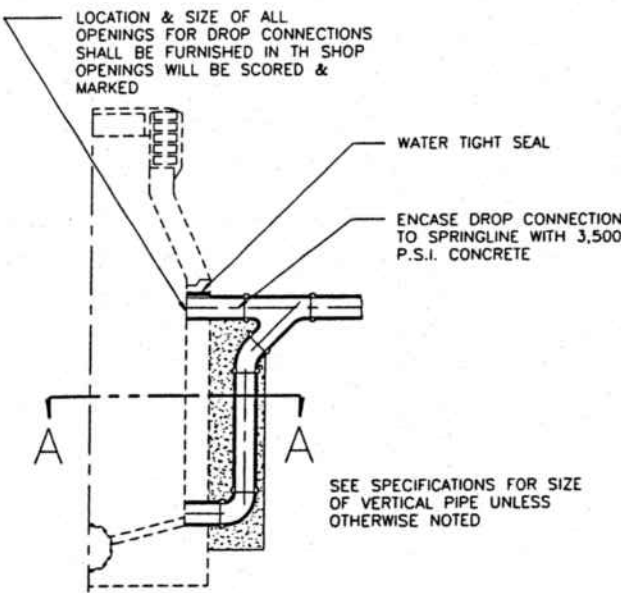


PIPE INSTALLATION DETAIL

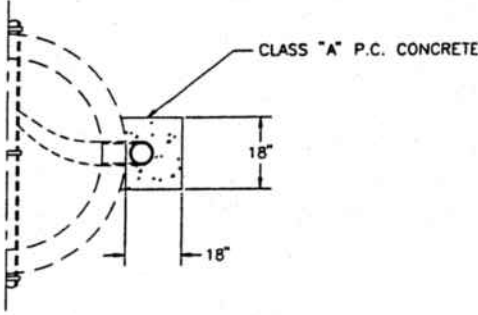
NOT TO SCALE



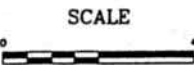
PIPE CONNECTION
DETAILS



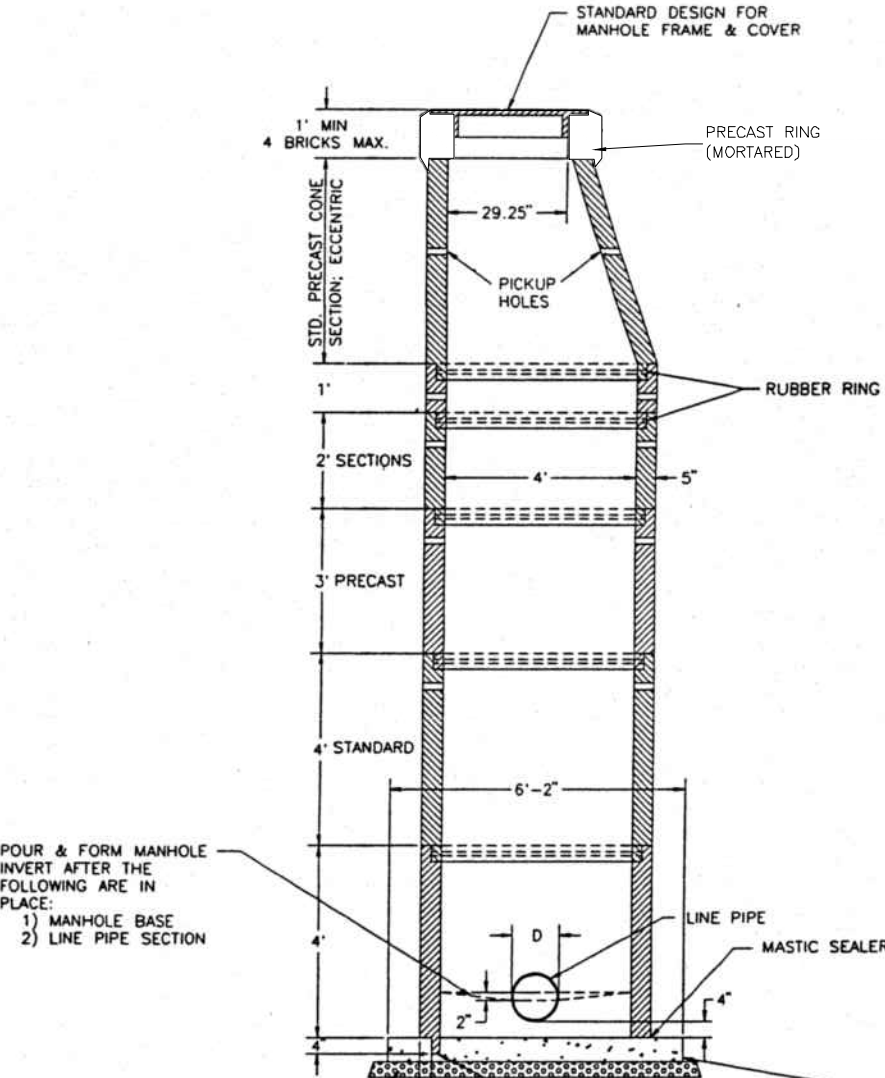
DROP MANHOLE
CONNECTION



SECTION A-A



PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION



TYPICAL BASE DETAILS
4'-0" DIAMETER MANHOLE
(Eccentric Cone)

PREPARED BY:
CHISHOLM TRAIL CONSULTING, LLC
2124 SCOTT LANE
DUNCAN, OKLAHOMA 73533
OK 047771
RANDALL SCOTT VAUGHN, P.E. 15194

DRAFT

DIGITALLY SIGNED 9/28/2022

CITY OF CHICKASHA, OKLAHOMA
STANDARD DRAWINGS

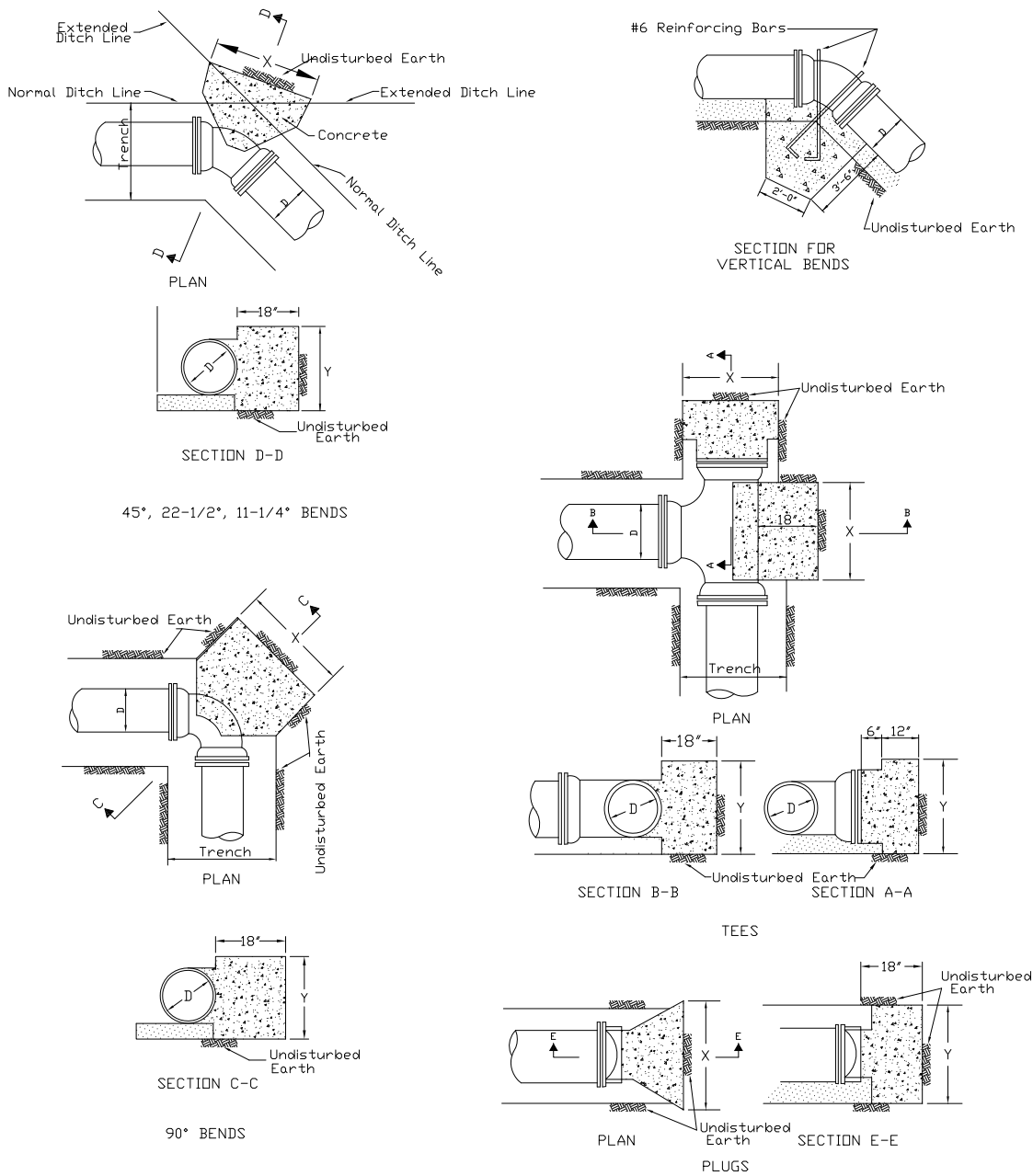
APPROVED AND ADOPTED BY THE CITY COUNCIL
THIS ____ DAY OF ____ 202__.

MAYOR _____ ATTEST: CITY CLERK _____

PRECAST MANHOLE DETAILS
DO NOT SCALE

Sheet: SSM4

TRENCH DETAILS



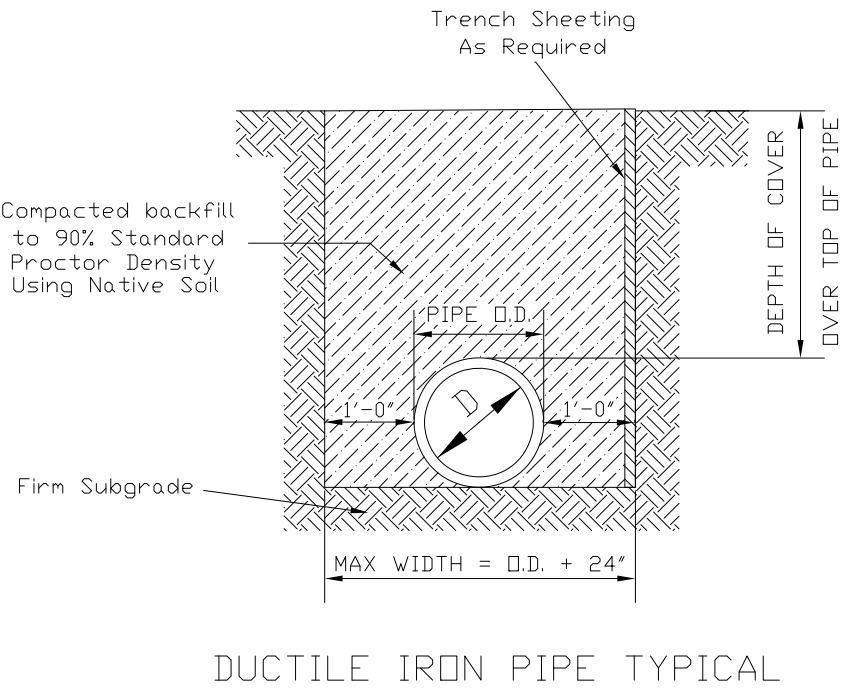
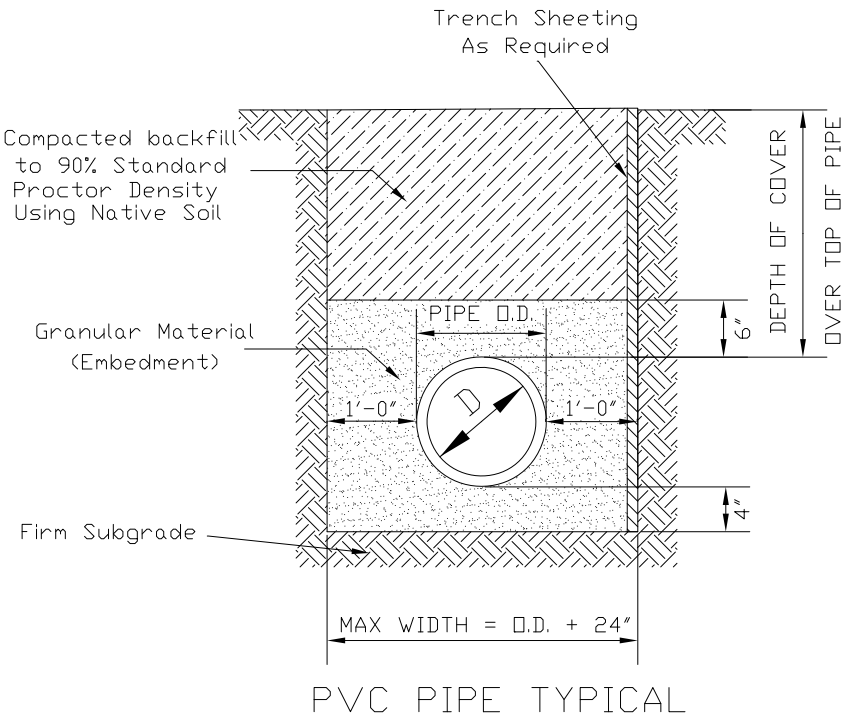
Pipe Size (inches)	Trench Width (inches)	DIMENSIONS FOR CONCRETE THRUST BLOCKS (feet)											
		TEE, FH or PLUG		PLUG/BLOWOFF		90° Bends		45° Bends		22 1/2° Bends		11 1/4° Bends	
		X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
6	20	2.0	1.5	2.5	1.5	3.0	1.5	1.5	1.5	1.0	1.5	1.0	1.5
8	22	2.5	2.0	3.0	2.0	3.5	2.0	2.0	2.0	1.0	2.0	1.0	2.0
10	24	4.0	2.0	4.5	2.0	5.5	2.0	3.0	2.0	1.5	2.0	1.0	2.0
12	28	4.0	3.0	4.5	3.0	5.0	3.0	3.0	3.0	1.5	3.0	1.0	3.0

CONCRETE THRUST BLOCKS SHALL BE CAST IN PLACE CONCRETE WITH 3,500 PSI COMPRESSIVE STRENGTH AT 3 DAYS.

PLACE MINIMUM 8 MIL VISQUEEN BETWEEN THRUST BLOCK AND PIPE OR FITTING

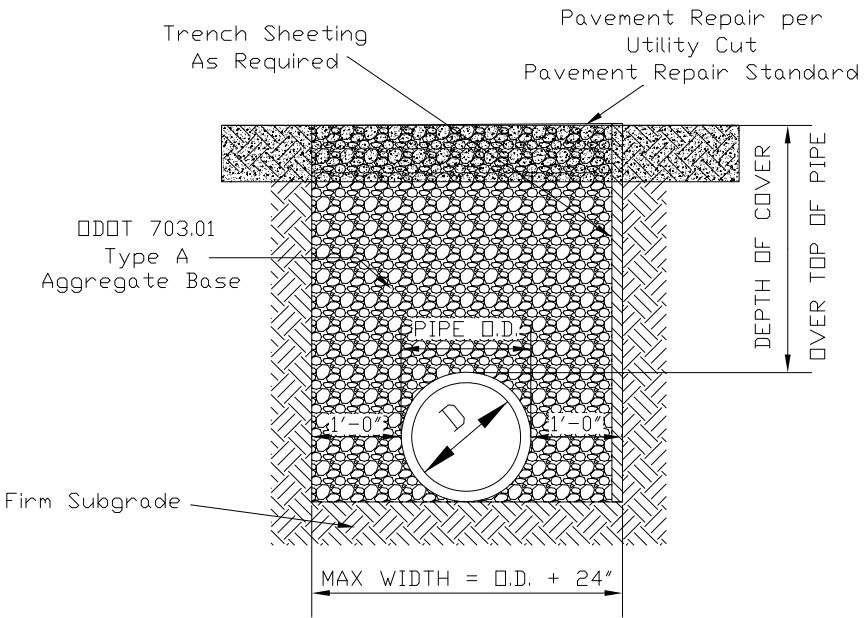
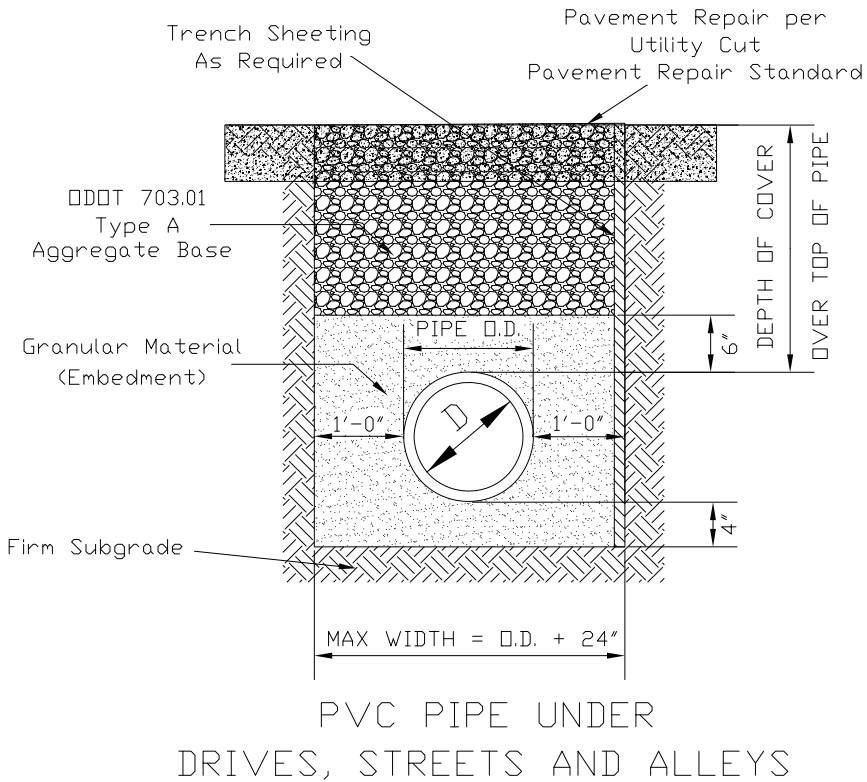
ALL THRUST BLOCKS SHALL BE FORMED USING LUMBER OR SIMILAR SUITABLE MATERIAL

CONCRETE THRUST BLOCK DETAILS



TRENCH WIDTHS		
NOMINAL PIPE DIAMETER (INCHES)	MINIMUM TRENCH WIDTH (INCHES)	MAXIMUM TRENCH WIDTH (INCHES)
6	20	31
8	22	36
10	24	38
12	28	40

PRELIMINARY
NOT APPROVED
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PREPARED BY:
CHISHOLM TRAIL CONSULTING, LLC
2124 SCOTT LANE
DUNCAN, OKLAHOMA 73533
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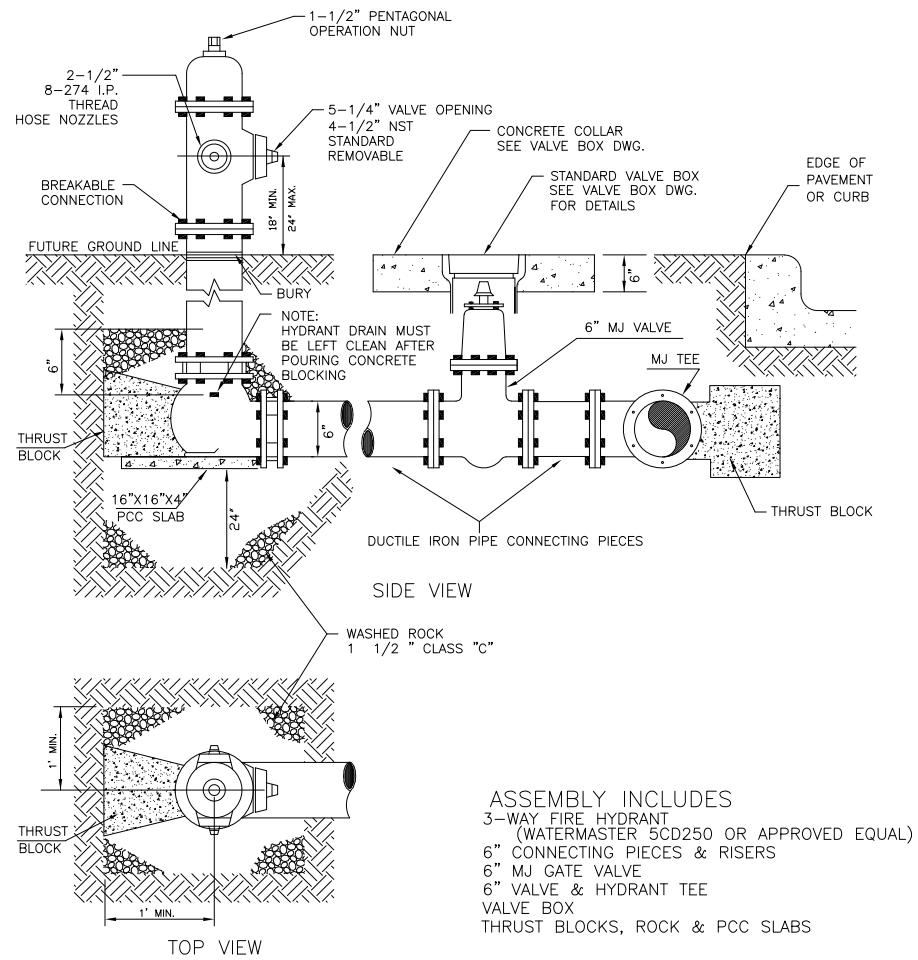
DIGITALLY SIGNED
9/28/2022

CITY OF CHICKASHA, OKLAHOMA
STANDARD DRAWINGS

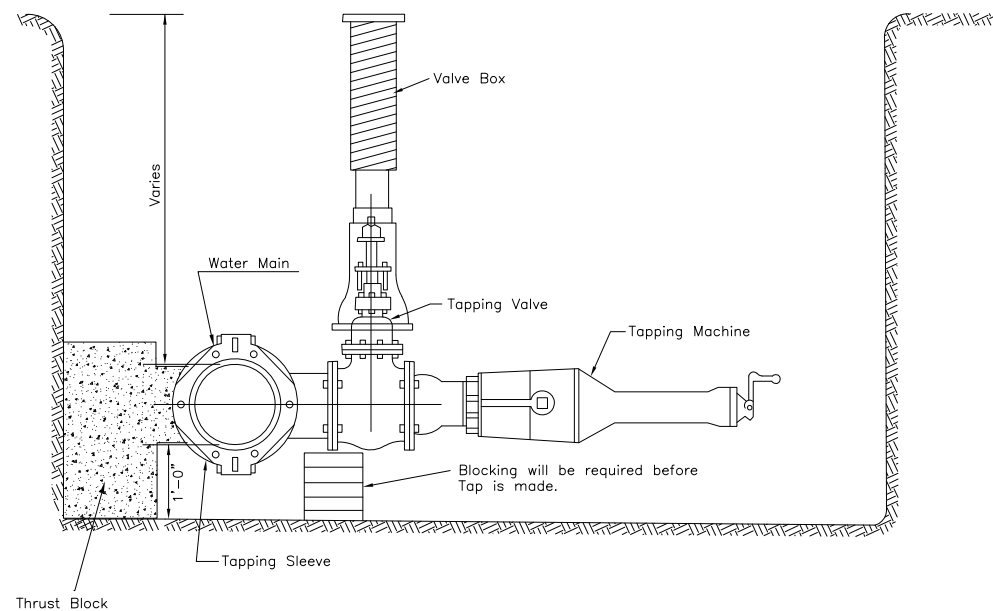
APPROVED AND ADOPTED BY THE CITY COUNCIL
THIS ____ DAY OF _____, 202__.

MAYOR _____ ATTEST: CITY CLERK _____

WATER MAIN DETAILS
DO NOT SCALE

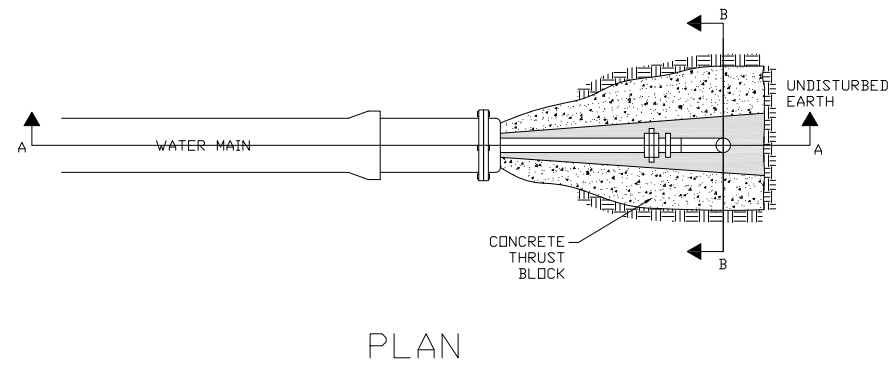


FIRE HYDRANT ASSEMBLY

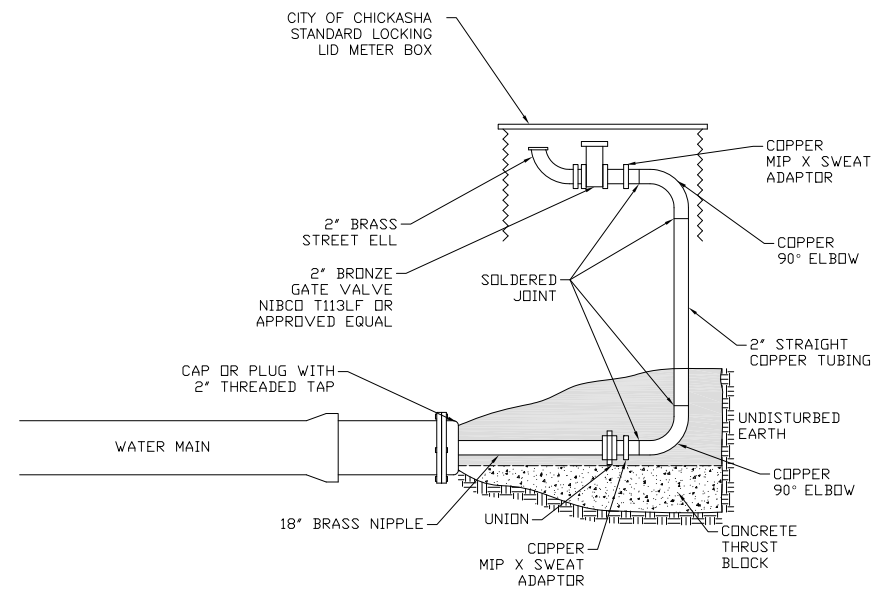


BLOCKING FOR TAPPING VALVE

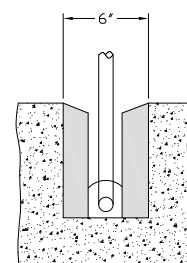
2" BLOWOFF FOR DEAD END WATERLINE



PLAN

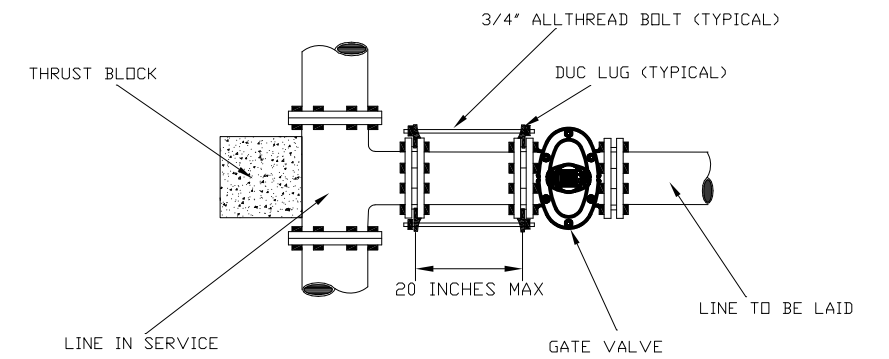


SECTION A-A

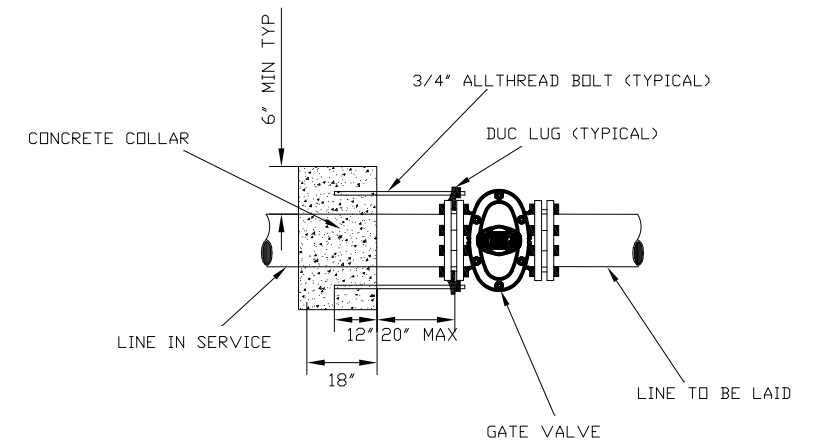


SECTION B-B

PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION



NOTE: USE NUMBER OF BOLTS W/ DUC LUGS ACCORDING TO THE SCHEDULE BELOW, EQUALLY SPACED.



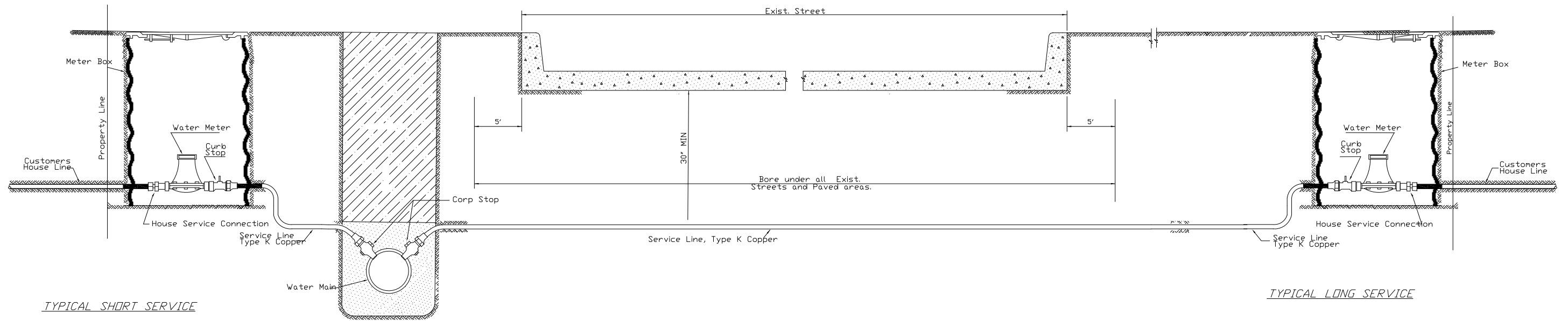
NOTE: USE NUMBER OF BOLTS W/ DUC LUGS ACCORDING TO THE SCHEDULE BELOW, EQUALLY SPACED.

PIPE SIZE	MINIMUM NUMBER OF BOLTS
6"	2
8"	3
10"	4
12"	4

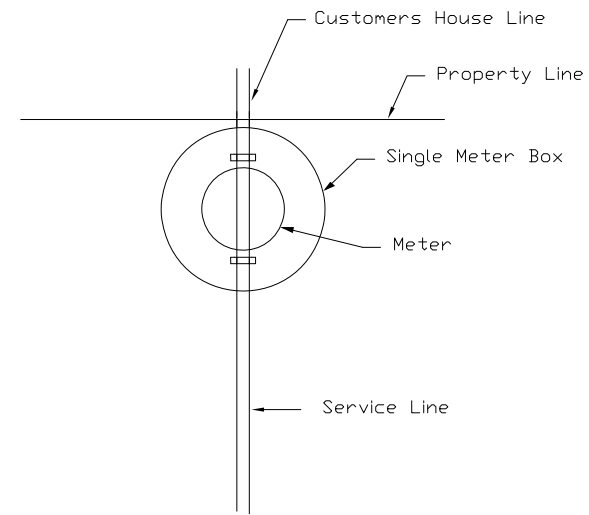
TYPICAL MECHANICAL JOINT RESTRAINTS
USING 3/4-INCH ALL-THREAD BOLTS AND DUC LUGS

PREPARED BY: CHISHOLM TRAIL CONSULTING, LLC 2124 SCOTT LANE DUNCAN, OKLAHOMA 73533 CA 0K7771 RANDALL SCOTT VAUGHN, P.E. 15194	CITY OF CHICKASHA, OKLAHOMA STANDARD DRAWINGS	
	APPROVED AND ADOPTED BY THE CITY COUNCIL THIS ____ DAY OF _____, 202__.	
	MAYOR _____	ATTEST: CITY CLERK _____
	WATER MAIN DETAILS DO NOT SCALE	

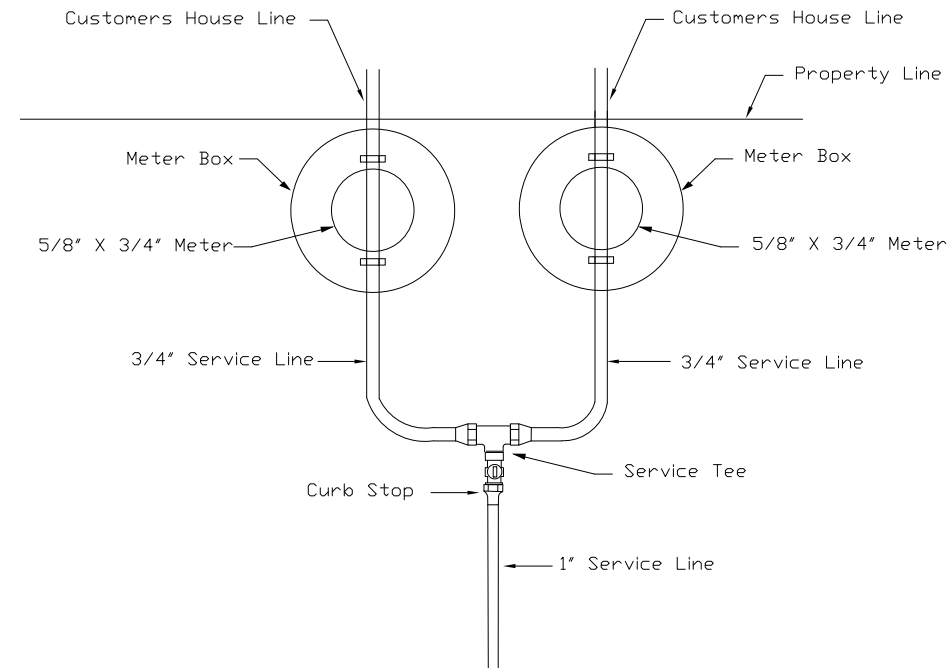
DIGITALLY SIGNED 9/28/2022



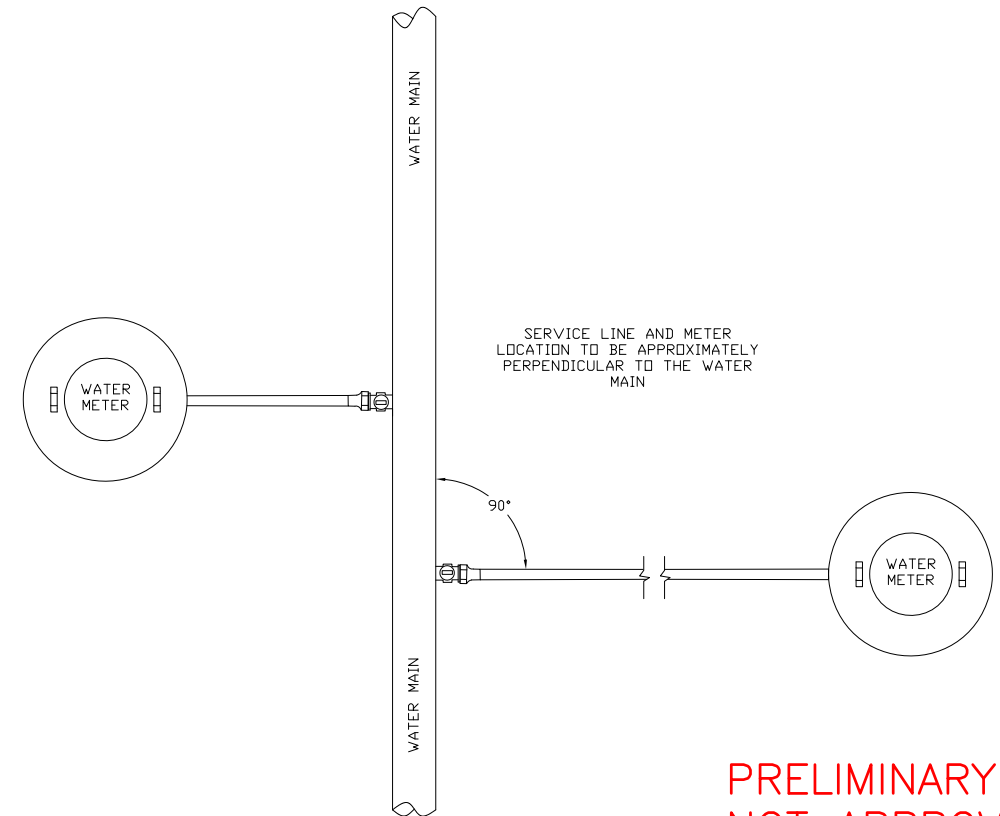
TYPICAL METER AND SERVICE INSTALLATION



TYPICAL SINGLE METER SETTING



TYPICAL DOUBLE METER SETTING

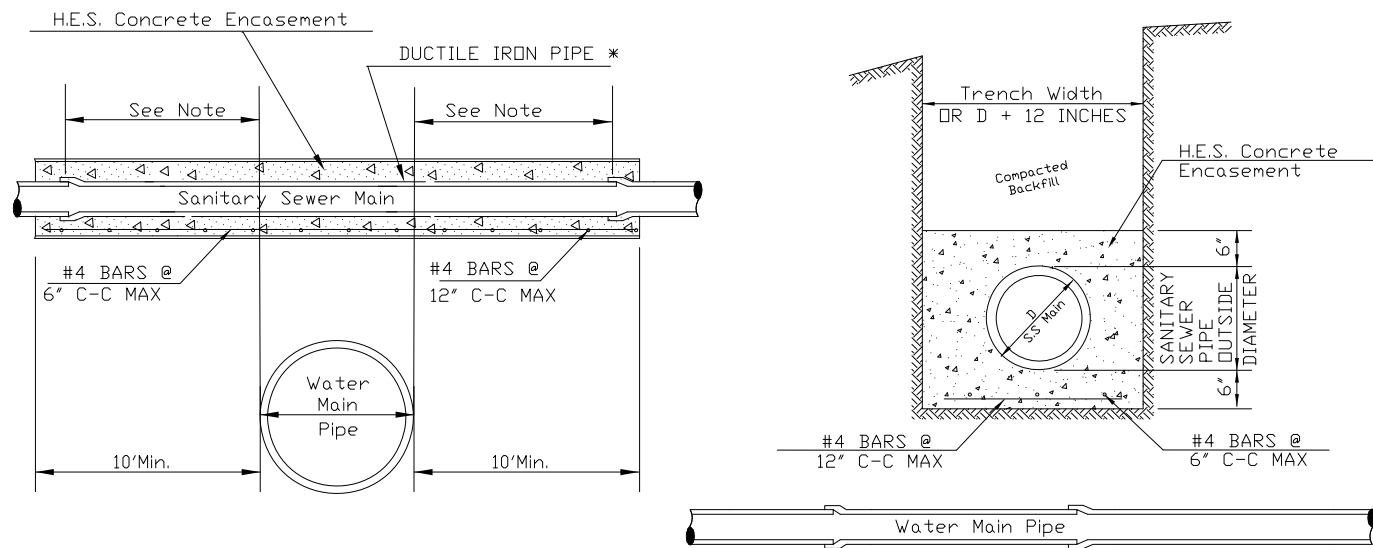


PRELIMINARY
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FOR CONSTRUCTION

ALL FITTINGS SHALL BE MUELLER OR APPROVED EQUAL
CORP STOP: MUELLER H-15000
CURB STOP: MUELLER H-15275
SERVICE TEE: MUELLER H-15386

NOTE: DOUBLE METER SETTINGS ARE ONLY PERMITTED WHEN SERVING TWO 5/8" X 3/4" METERS FROM A ONE INCH SERVICE LINE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

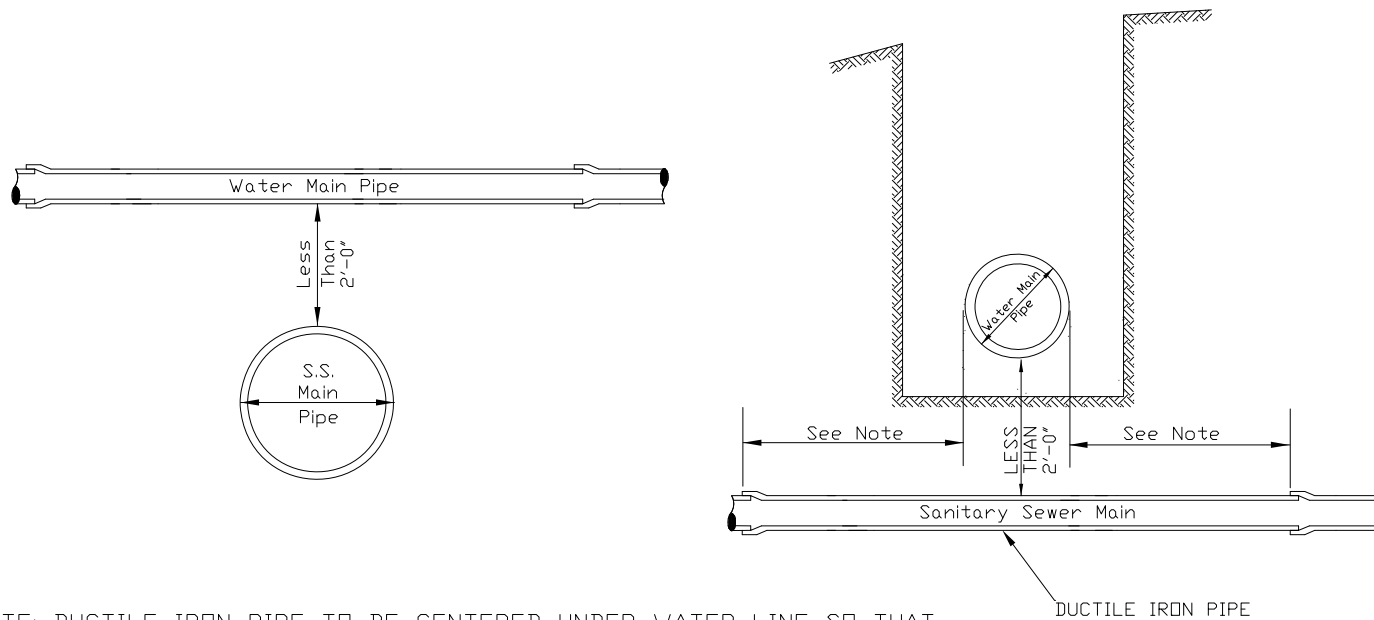
PREPARED BY: CHISHOLM TRAIL CONSULTING, LLC 2124 SCOTT LANE DUNCAN, OKLAHOMA 73533 CA 0K7771 RANDALL SCOTT VAUGHN, P.E. 15194  DIGITALLY SIGNED 9/28/2022	CITY OF CHICKASHA, OKLAHOMA STANDARD DRAWINGS APPROVED AND ADOPTED BY THE CITY COUNCIL THIS ____ DAY OF _____, 202___.
	MAYOR _____ ATTEST: CITY CLERK _____
	WATER MAIN DETAILS
	DO NOT SCALE Page 155 of 157



NOTE: CONCRETE ENCASUREMENT IS TO EXTEND 4-INCHES PAST THE NEAREST JOINT AT OR BEYOND THE 10-FOOT MINIMUM SHOWN. REINFORCEMENT STEEL TO HAVE TWO INCHES OF CONCRETE COVER. THE ENGINEER MAY APPROVE OTHER MEANS OF STRUCTURAL SUPPORT OF THE SANITARY SEWER MAIN.

*NOTE: IF CLEARANCE BETWEEN WATER MAIN AND SS MAIN IS LESS THAN 2 FEET DUCTILE IRON PIPE TO BE CENTERED OVER WATER LINE SO THAT JOINTS ARE PLACED EQUAL DISTANCE FROM CROSSING AS SHOWN.

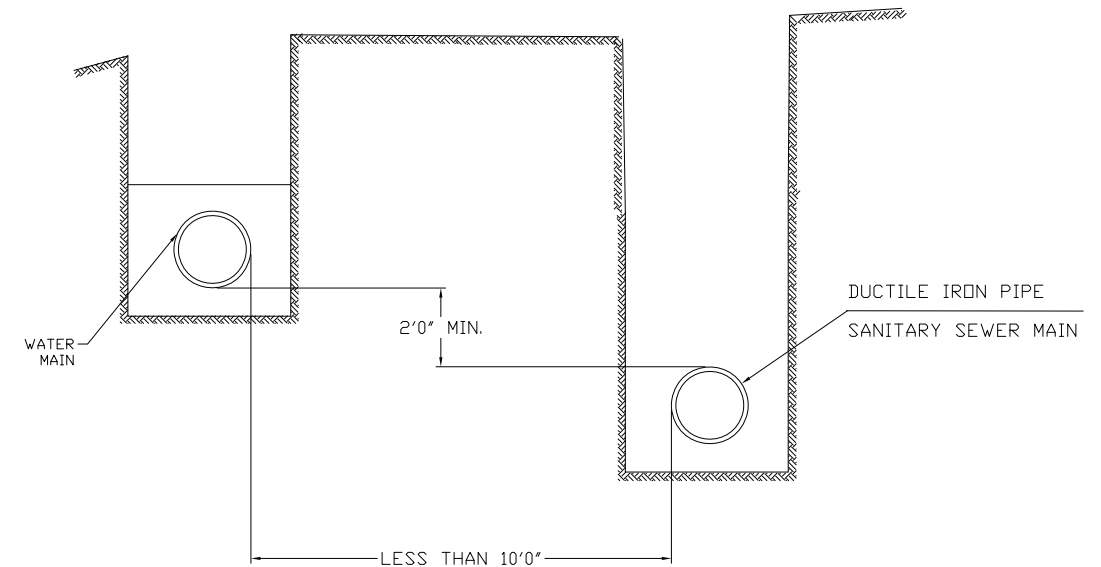
TYPICAL SECTIONS FOR WATER MAIN BELOW SEWER MAIN



NOTE: DUCTILE IRON PIPE TO BE CENTERED UNDER WATER LINE SO THAT JOINTS ARE PLACED EQUAL DISTANCE FROM CROSSING AS SHOWN.

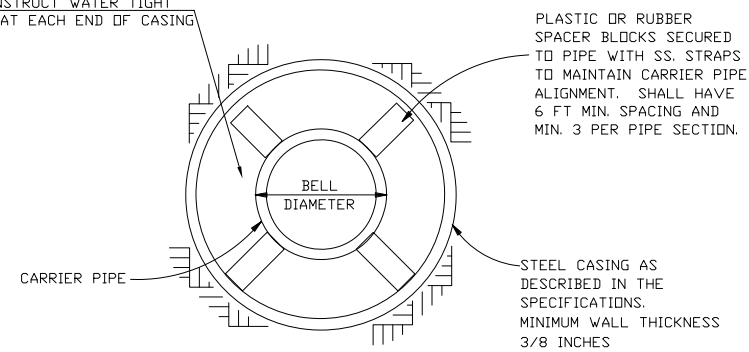
TYPICAL SECTIONS FOR WATER MAIN LESS THAN 2-FOOT ABOVE SEWER MAIN

WATER LINE AND SEWER CROSSINGS



WATER AND SEWER LINES WITH HORIZONTAL CLEARANCE OF LESS THAN TEN FEET

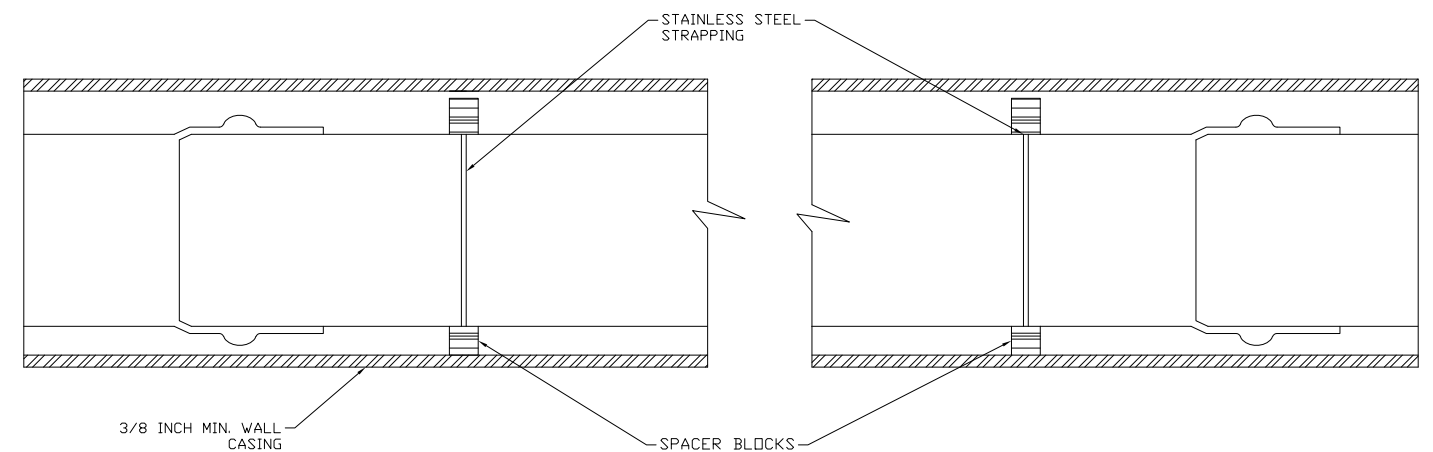
CONSTRUCT WATER TIGHT PLUG AT EACH END OF CASING



PLASTIC OR RUBBER SPACER BLOCKS SECURED TO PIPE WITH SS. STRAPS TO MAINTAIN CARRIER PIPE ALIGNMENT. SHALL HAVE 6 FT. MIN. SPACING AND MIN. 3 PER PIPE SECTION.

STEEL CASING AS DESCRIBED IN THE SPECIFICATIONS. MINIMUM WALL THICKNESS 3/8 INCHES

PIPE & STEEL CASING SCHEDULE	
CARRIER PIPE DIAMETER (INCHES)	MIN. CONDUIT DIAMETER (INCHES)
6	10
8	12
10	16
12	20



BORING AND CASING

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FOR CONSTRUCTION

PREPARED BY:
CHISHOLM TRAIL CONSULTING, LLC
2124 SCOTT LANE
DUNCAN, OKLAHOMA 73533
CA 0K7771
RANDALL SCOTT VAUGHN, P.E. 15194

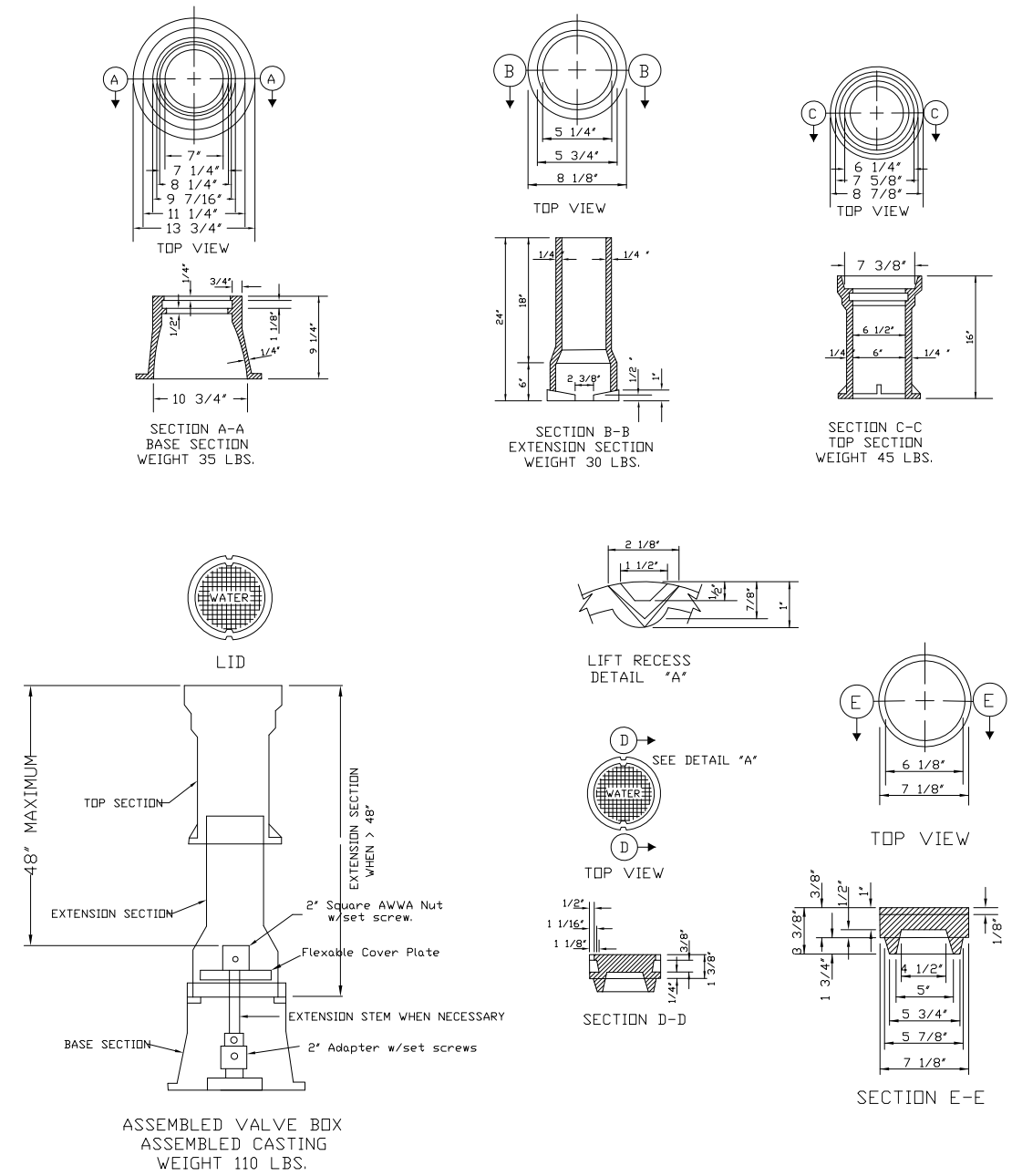
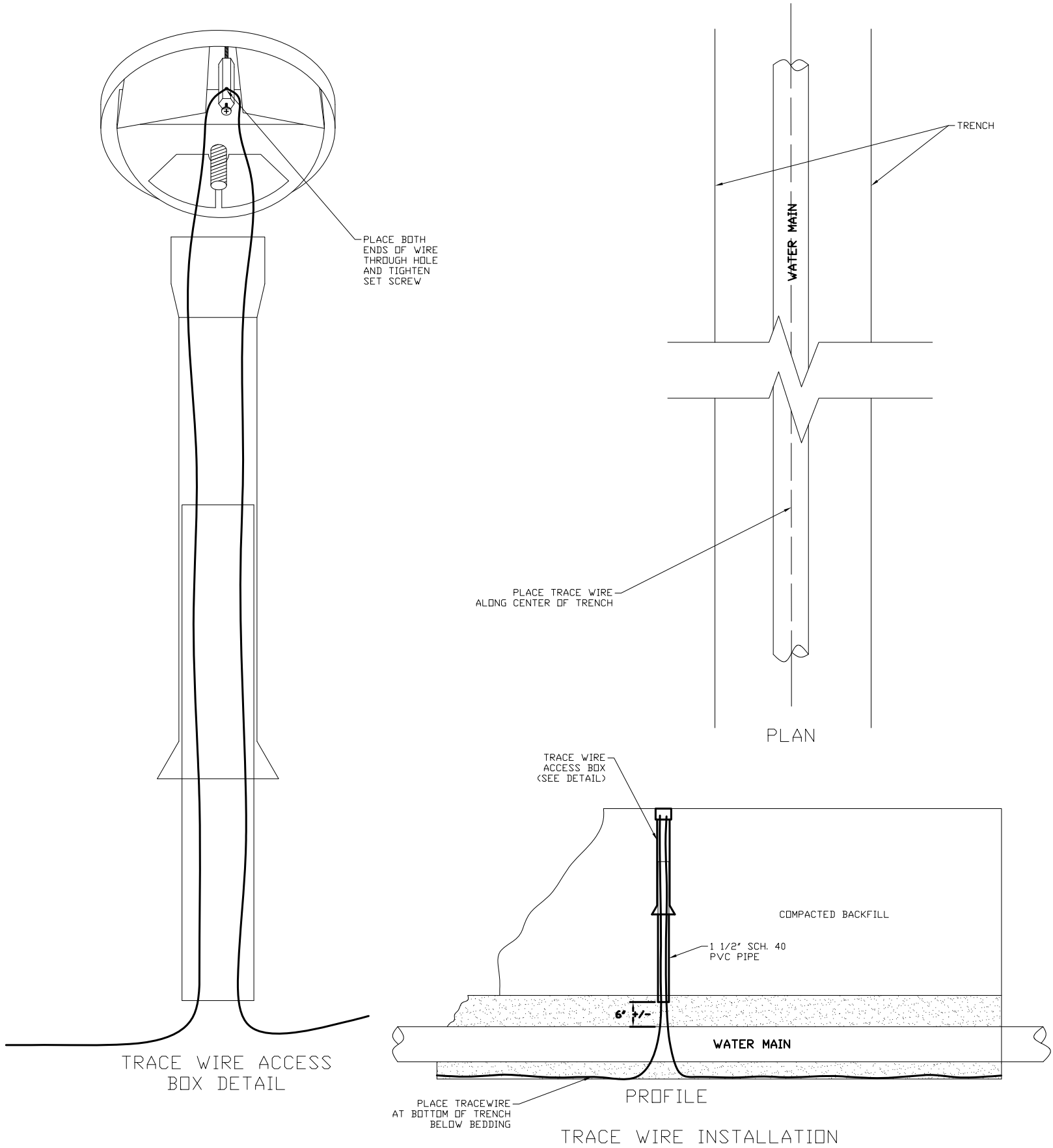
DIGITALLY SIGNED 9/28/2022

CITY OF CHICKASHA, OKLAHOMA
STANDARD DRAWINGS

APPROVED AND ADOPTED BY THE CITY COUNCIL
THIS ____ DAY OF ____ 202__.

MAYOR ATTEST: CITY CLERK

WATER MAIN DETAILS
DO NOT SCALE



- NOTES:
1. WATER LINE CONTRACTOR SHALL PLACE TWO FOOT (2') SQUARE CONCRETE COLLAR SIX INCHES (6") THICK AROUND EACH WATER VALVE BOX TOP AFTER FINAL GRADING HAS BEEN COMPLETED AND TRENCHES HAVE SETTLED. ALL COST OF COLLAR TO BE INCLUDED IN THE COST OF THE VALVE BOX.
 2. VALVE BOXES REQUIRING OVER TWO ADDITIONAL BOTTOM SECTIONS SHALL BE EXTENDED USING CAST OR DUCTILE IRON PIPE WITH A BOTTOM AND TOP SECTION PLACED ON TOP OF THE CAST OR DUCTILE IRON PIPE.

CAST IRON VALVE BOX AND LID

PRELIMINARY
NOT APPROVED
FOR CONSTRUCTION

PREPARED BY: CHISHOLM TRAIL CONSULTING, LLC 2124 SCOTT LANE DUNCAN, OKLAHOMA 73533 CA 0K7771 RANDALL SCOTT VAUGHN, P.E. 15194 DIGITALLY SIGNED 9/28/2022	CITY OF CHICKASHA, OKLAHOMA STANDARD DRAWINGS APPROVED AND ADOPTED BY THE CITY COUNCIL THIS ____ DAY OF ____ 202__. MAYOR _____ ATTEST: CITY CLERK _____ WATER MAIN DETAILS DO NOT SCALE
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