

ORDINANCE NO. 2020-04

**AN ORDINANCE ADOPTING REVISED WASTEWATER SYSTEM
STANDARD TECHNICAL SPECIFICATIONS FOR THE CITY OF ELM
SPRINGS, ARKANSAS; DECLARING AN EMERGENCY AND FOR OTHER
PURPOSES.**

WHEREAS, the City of Elm Springs, Arkansas has been working through Plymouth Engineering, PLLC for establishment of updated Wastewater System Standard Technical Specifications; and

WHEREAS, by correspondence dated March 31, 2020, the Arkansas Department of Health issued its letter of approval for the updated City of Elm Springs, Arkansas Wastewater System Standard Technical Specifications, dated March 9, 2020 (the "Specifications"); and

WHEREAS, the Arkansas Department of Health has directed that there be no deviation from the Specifications unless revised specifications have been first submitted for review and written consent given.

NOW, therefore, be it ordained by the City Council of the City of Elm Springs, Arkansas:

SECTION 1. Wastewater System Standard Technical Specifications Adopted. The City of Elm Springs, Arkansas hereby adopts as its Wastewater System Standard Technical Specifications, the Specifications dated March 9, 2020, as attached hereto at Exhibit "A" and incorporated herein.

SECTION 2. Emergency. Certain factors, including the Arkansas Department of Health mandate that the Specifications be followed, make the implementation of this Ordinance an urgent matter. Accordingly, the immediate effectiveness of the provisions of this Ordinance is necessary and proper for the preservation of the peace, health, safety, and welfare of the residents of Elm Springs, Arkansas; and, therefore, an emergency is declared to exist, and this Ordinance shall be in full force and effect from and after its passage and approval.

PASSED AND APPROVED THIS 23rd day of April, 2020.


Harold Douthit, Mayor

Attest:


Twila Taylor, Clerk



Arkansas Department of Health

4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone (501) 661-2000

Governor Asa Hutchinson

Nathaniel Smith, MD, MPH, Secretary of Health

Engineering Section, Slot 37 Ph (501) 661-2623 Fax (501) 661-2032
www.healthy.arkansas.gov/eng After Hours Emergency (501) 661-2136

March 31, 2020

Plymouth Engineering, PLLC
5714 Walden Street
Lowell, AR 72745

RE: Elm Springs Standard Sewer Specifications Update
City of Elm Springs – Benton County
Project 108896

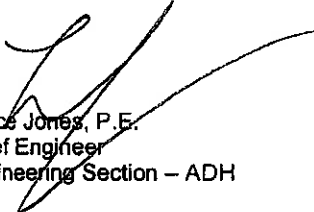
Attn: David A. Gilbert, P.E.

The *Wastewater system Standard Technical Specifications* for the City of Elm Springs, sealed on March 9, 2020, have been reviewed and are hereby approved with the following conditions:

1. The Engineering Section relied upon the statements and representations made in the specifications. In case any statement or representation in the aforementioned document is found to be incorrect, this Approval may be revoked.
2. There shall be no deviation from the specifications unless revised specifications have been first submitted for review and written consent given.
3. These standard specifications will supersede any specifications provided by the engineer when ADH reviews wastewater projects for the City of Elm Springs.
4. Please provide the ADH Engineering Section with amendments for approval whenever they are made to the specifications. The ADH Engineering Section strongly recommends that the standard utility specifications are thoroughly reviewed at least every 5 years to ensure conformance with current industry standards, regulations, etc.

One set of the specifications is being retained for our files and two sets are being returned. When submitting correspondence pertaining to this project, please include our reference number 108896.

Sincerely,


Lance Jones, P.E.
Chief Engineer
Engineering Section – ADH

LAJ;RT:AP:ap

Cc: City of Elm Springs

CITY OF ELM SPRINGS, ARKANSAS

CITY HALL

P.O. BOX 74

289 JAYROE AVE.

ELM SPRINGS, AR 72764

WASTEWATER SYSTEM

STANDARD TECHNICAL SPECIFICATIONS

MARCH 9, 2020

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SECTION 100 – GENERAL REQUIREMENTS

100.1 General. The Contractor shall furnish all labor, materials, and equipment necessary or required to complete the work in all respects as shown on the Drawings, and in conformance with the requirements of the City's Standard Technical Specifications. If there is a conflict between requirements of the Drawings or project-specific specifications and the City's Standard Technical Specifications, then the City's Standard Technical Specifications shall govern. The Contractor shall be comply with all sections of these specifications, including but not limited to those covering watering, cleanup, removal of surfaces, maintenance of surfaces, restoration of surfaces, maintenance of traffic, bracing and support of the adjoining ground or structures where necessary, drainage or ground water, barricades, guards and warning lights, testing, backfilling and consolidation of the trenches and pits, and removing surplus excavated material and supplies.

The Contractor shall also furnish all equipment, tools, labor and materials required to rearrange branch connections to main sewers, or to rearrange sewers, conduits, ducts, pipes or other structures in accordance with the approved drawings and stipulations included therein.

100.2 Examination of the Site. The Contractor shall examine the site before starting the Work his proposal and shall inform himself regarding existing facilities and conditions affecting the proposed work. Failure to make such inspection shall in no way relieve the Contractor of any of the obligations or conditions of these Specifications.

100.3 Warranty and Bonds. The Developer's contract with the Contractor shall include a requirement that the Contractor post payment, performance, and warranty bonds for all wastewater system improvements. The CONTRACTOR shall guarantee all work for a period of one year from the date of completion and acceptance by the City.

Any defective portions of such work, whether materials or workmanship, shall be replaced by the Contractor at no cost to the City during the warranty period. The bonds shall be approved by the City prior to the commencement of construction.

100.4 Construction Staking. The Developer's Engineer shall provide at least two horizontal and vertical control monuments on-site base. It shall be the Contractor's responsibility to protect these monuments during the course of the contract. All other stake-out on-site shall be by the Contractor or the Developer's Engineer.

The Contractor or the Developer's Engineer shall furnish, at no cost to the City, competent personnel and such tools, stakes and other materials for setting horizontal

and vertical control monuments and in making measurements and surveys and in establishing temporary or permanent reference marks in connection with said Work.

100.5 Interfering Structures and Utilities Responsibility. The Contractor shall exercise all possible caution to prevent damage to existing structures and utilities, whether above ground or underground. The Drawings shall show these structures and utilities based on information compiled from the best available sources, and shall contain a statement regarding the completeness and accuracy of the information shown on the Drawings. The Contractor shall notify all utility offices concerned at least 48 hours in advance of construction operations in which a utility agency's facilities may be involved. This shall include, but not be limited to, sewer, water, natural gas, telephone and electric lines. Any and all changes to, location and/or relocation of, or reconnections to public utility facilities encountered or interrupted during prosecution of the work, shall be accomplished at no expense to the City. The Contractor shall be responsible for locating, maintaining and reconnecting all service lines affected by this project. The Contractor shall contract with and pay public utility agencies for work required in connection with all utility interferences and handle all necessary notifications, scheduling, coordination and details. Public utility interferences and/or changes shall be resolved and/or accomplished at no expense to the City.

It shall be the responsibility of the Contractor to locate and expose all existing underground structures and utilities in such a manner as to prevent damage to same. Any structure or utilities damaged by the work shall be repaired or replaced in a condition equal to or better than the condition prior to the damage. Such repair or replacement shall be accomplished at no expense to the City.

The Contractor shall remove and replace such small, miscellaneous structures as culverts at no expense to the City. The Contractor shall replace these structures in a condition as good as or better than their original conditions as agreed to by the owner of the structure.

At points where the Contractor's operations are adjacent to or across properties of telegraph, telephone, sewer, irrigation, power, natural gas, or water; or adjacent to other property (damage to which might result in considerable expense, loss, and inconvenience); no work shall be started until all arrangements necessary for the protection thereof have been made.

The Contractor shall be solely and directly responsible to the Owners and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of an injury or damage which may result from the carrying out of the work.

In the event of interruption to either domestic or irrigation water or to other utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority. The Contractor shall cooperate with the said authority in restoration of service as soon as possible and shall bear all cost of repair.

100.6 Construction Permits. The Contractor shall secure and maintain any and all Federal, state, and local permits necessary for compliance of any and all governing laws corresponding with the construction activities of the Contractor and all

Subcontractors. These permits may include, but are not limited to, building permits, utility easement permits, revocable right-of-way permits, water rights, air emission permits, and storm water permits for construction activities. The permits shall be secured and verification presented to the City prior to the commencement of any on-site activities governed by a permitting authority. Obtaining and maintaining required permits shall be at no expense to the City.

100.7 Construction Sequence. It is the intention of these contract documents that the progress of the project shall proceed in a systematic and expeditious manner so a minimum of inconvenience will result to the public in the course of construction. The Contractor, therefore, shall submit prior to any construction activity a written proposed schedule of work for the complete project which is acceptable to the City and shall, during the course of construction, strictly adhere to the schedule. The construction schedule shall be designed such that each phase of the construction process can immediately follow the preceding phase in an efficient and orderly manner. Violation of the schedule shall be cause for suspending work at no expense to the City. The Contractor shall update the schedule in writing whenever requested by the City, but not more frequently than once every seven (7) calendar days. Preparing and updating the construction schedule shall be at no expense to the City.

100.8 Land Monuments. The Contractor shall preserve existing Town, County, State, and Federal land monuments wherever possible. When these monuments cannot be preserved, the Contractor shall notify the City and the Developer prior to initiation of any construction in order that the Developer will have ample opportunity to reference these monuments for later replacement. The Contractor shall be responsible for all monument replacement to an existing or better than condition, as determined by the City, at no expense to the City.

100.9 Public Safety and Convenience. The Contractor shall comply with rules and regulations of City, County, and State authorities regarding public safety and convenience. No road shall be closed by the Contractor except by express permission of the appropriate agency (City, County, or State) governing the roadway.

Sites from which the public is excluded shall be marked and guarded in a manner appropriate for the hazard.

All obstructions within the traveled roadways shall be protected by approved visual warning devices such as signs, barricades, and lights where necessary or as ordered by the agency governing the roadway for safety and convenience. Such devices shall conform to the requirements of the Occupational Safety and Health Administration and any other governing agency of authority. Redirection of traffic, including but not limited to, traffic control, rerouting of lanes as required by authorities and all safety measures involved with the same, shall be provided at no expense to the City.

The Contractor shall be responsible for the safety and convenience on that right-of-way wherein the Contractor shall perform construction according to the contract agreement. Failure of the City to notify the Contractor of deficiencies in providing for safety and convenience shall not relieve the Contractor from his responsibility. The Contractor shall use every reasonable precaution to safeguard persons and property, both public and private. All barricades and obstructions shall be protected at night and kept lighted from sunset to sunrise.

Any damage to public or private property shall be the responsibility of the Contractor. Before the Improvements will be accepted by the City, the Contractor shall obtain from the permit or easement grantors a release indicating the work of restoration has been satisfactorily completed in accordance with the terms of the permit or easement.

The Contractor shall conduct his work in a fashion that will minimize inconvenience to operations of the facility. The Contractor shall control airborne debris that originates in the construction right-of-way. Airborne fine particles, dust, sand, smoke, trash and debris shall be controlled on a regular basis by the use of a dust settling spray and the disposal of paper trash and other debris.

With respect to trench and excavation safety, the current edition of Occupational Safety and Health Administration Standard for Excavation and Trenches Safety System, 29 CFR 1926, Subpart P is specifically incorporated into this document by reference.

100.10 NOT USED

100.11 Final Acceptance. After the Contractor has completed to the best of his knowledge all the work governed by these Specifications, including all testing and cleanup, the Contractor shall then inform the City by written memorandum, submitted to the Office of the Mayor, that the work has been completed and request

a final inspection by the City. If items are found by the City to be incomplete or not in compliance with these Specifications, the City will inform the Contractor of such items. After the Contractor has completed these items, the procedure shall then be the same as specified above for the Contractor's statement of completion and request for final inspection.

100.12 Reference Standards

Any reference to a standard specification contained within this document shall be construed to refer to the most recently-adopted version of that standard specification.

The following standards are referenced within this document:

American Association of State Highway and Transportation Officials (AASHTO)

- M198, Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
- M304, Standard Specification for Poly(Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter
- M306, Drainage, Sewer, Utility, and Related Castings

American National Standards Institute (ANSI)

- B16.1, Cast Iron Pipe Flanges and Flanged Fittings

American Society for Testing and Materials (ASTM)

- A74, Standard Specification for Cast Iron Soil Pipe and Fittings
- A121, Standard Specification for Metallic-Coated Carbon Steel Barbed Wire
- A126, Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings
- A351, Standard Specification for Castings, Austenitic, for Pressure-Containing Parts
- A536, Standard Specification for Ductile Iron Castings
- A615, Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
- A746, Standard Specification for Ductile Iron Gravity Sewer Pipe
- B62, Standard Specification for Composition Bronze or Ounce Metal Castings
- B584, Standard Specification for Copper Alloy Sand Castings for General Applications
- C150, Standard Specification for Portland Cement
- ASTM C1244, Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill
- D448, Standard Classification for Sizes of Aggregate for Road and Bridge Construction

- D698, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort
- D1557, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
- D1784, Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds
- D1785, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120
- D2000, Standard Classification System for Rubber Products in Automotive Applications
- D2152, Standard Test Method for Adequacy of Fusion of Extruded Poly(Vinyl Chloride) (PVC) Pipe and Molded Fittings by Acetone Immersion
- D2241, Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)
- D2321, Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity Flow Applications
- D2412, Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading
- D2444, Standard Practice for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)
- D2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
- D2737, Standard Specification for Polyethylene (PE) Plastic Tubing
- D3030, Standard Test Method for Volatile Matter (Including Water) of Vinyl Chloride Resins
- D3034, Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings
- D3212, Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
- D6938, Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
- F441, Standard Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80
- F477, Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
- F1417, Installation Acceptance of Plastic Gravity Sewer Lines Using Low-Pressure Air

American Water Works Association (AWWA)

- C104, Cement-Mortar Lining for Ductile-Iron Pipe and Fittings

- C110, Ductile-Iron and Gray-Iron Fittings
- C111, Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
- C115, Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges
- C150, Thickness Design of Ductile-Iron Pipe
- C151, Ductile-Iron Pipe, Centrifugally Cast
- C153, Ductile-Iron Compact Fittings for Water Service
- C509, Resilient Seated Gate Valves For Water Supply Service
- C517, Standard for Resilient-Seated Cast-Iron Eccentric Plug Valve
- C600, Installation of Ductile-Iron Mains and Their Appurtenances
- C800, Underground Service Line Valves and Fittings
- C900, Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. Through 60 In.

Arkansas State Board of Health / Arkansas Department of Health

- Arkansas Plumbing Code

Arkansas State Highway and Transportation Department / Arkansas Department of Transportation (AHTD / ArDOT)

- Standard Specifications for Highway Construction

Council of American Building Officials (CABO)

- Report #NRB-168; 6/81

Federal Specification

- SS-S-210A, Sealing Compound, Preformed Plastic, for Expansion Joints and Pipe Joints

National Electrical Manufacturers Association

- 250, Enclosures for Electrical Equipment (1000 Volts Maximum)

National Fire Protection Association (NFPA)

- 495, Explosive Materials Code

US Department of the Interior, Bureau of Mines

- R18507, Structure Response and Damage Produced by Ground Vibration from Surface Mine Blasting

US Environmental Protection Agency

- Alternative Wastewater Collection Systems

US Occupational Safety and Health Administration

- Standard for Excavation and Trenches Safety System, 29 CFR 1926, Subpart P

SECTION 101 – CLEARING AND GRUBBING

101.01 As part of the Work, the Contractor shall complete clearing, grubbing and removing all vegetation, debris and deleterious material within the easement, unless otherwise directed by the City, with the exception of items indicated on the approved Drawings to remain.

SECTION 102 – CONNECTION TO EXISTING LINES

Where connections to existing lines are to be made, such fittings as are shown on the approved Drawings shall be installed. If fittings are not specified, then such fittings as are necessary to make the proper connections shall be installed. Wherever crosses or tees are installed for future connections, the section of the fitting not being used shall be plugged with a restrained iron plug.

Wherever it is necessary to connect existing lines in use, the Contractor shall notify the Superintendent of the utility and the Developer's Engineer at least 48 hours prior to the time he is ready to make the connection. An agreed time shall be set for such connection to be made. If service is to be interrupted, the time for making the connection shall be at the discretion of the Superintendent and Engineer, and the Contractor shall make such connections at the time specified.

When making connections to lines in service, it is of the utmost importance that the Contractor shall make such connections as quickly as possible and service shall not be cut off until the Contractor has everything in readiness to the satisfaction of the utility owner and the Engineer. No valves or flush hydrants in service shall be opened or closed by anyone other than the persons authorized by the owner of the valve or hydrant.

Where connections other than service taps are to be made under pressure to lines in service, standard cutting-in sleeves and valves shall be used. The sleeves shall be of the type which use mechanical joints. They shall be placed according to the recommendation of the manufacturer. Once all necessary equipment has been set in position, the cut shall be made in the presence of the Developer's Engineer and the Superintendent of the utility owner so that any difficulties which may occur may be remedied as quickly as possible.

Where tees, valves, crosses or other fittings are to be installed in existing lines, a section of sufficient length of the existing line shall be removed to allow for the installation of the fittings, a short section of pipe, and a connection sleeve. The use of so-called cutting-in valves, tees or crosses will not be permitted. In all cases, sufficient room to allow joints as herein specified shall be provided.

SECTION 201 – RESPONSIBILITY FOR MATERIAL

Responsibility for material shall be as follows:

201.1 Responsibility When Furnished by Contractor. The Contractor shall be responsible for all materials furnished by him and shall replace at his own expense all such material found defective in manufacture or damaged in handling after delivery by the manufacturer. This shall include the furnishing of all material and labor required for the replacement of installed materials discovered defective prior to the final acceptance of the work or during the warranty period.

201.2 Responsibility When Furnished by Others. The Contractor's responsibility for material furnished by others shall begin at the point of delivery thereof to said Contractor. Materials already on the site shall become the Contractor's responsibility on the day of the awarding of the Contract. The Contractor shall examine all material furnished by others at the time and place of delivery and shall reject all defective material. Any material furnished by others and installed by the Contractor without discovery of such defects shall, if found defective prior to final acceptance of the work or during the warranty period, be replaced with sound material by the Contractor at no expense to the City. The Contractor shall, at no expense to the City, furnish all supplies, labor, equipment, and facilities necessary to remove said defective material and install the sound material in a manner satisfactory to the City.

201.3 Responsibility for Safe Storage. The Contractor shall be responsible for the safe storage of material furnished by or to him and accepted by him, and intended for the work, until it has been incorporated in the completed project. The interior of all pipe, fittings and other accessories shall be kept in a manner that will protect them from damage from exposure to sunlight or weather, including freezing.

201.4 Replacement of Damaged Materials. Any material that becomes damaged after acceptance by the Contractor shall be replaced by the Contractor at no expense to the City. Damaged materials shall not be used in the Work.

SECTION 202 – HANDLING OF MATERIALS

All materials shall be handled as outlined herein.

202.1 Hauling. All materials furnished by the Contractor shall be delivered and distributed at the site by the Contractor. Materials furnished by others shall be picked up by the Contractor at points designated and hauled to and distributed at the site.

Pipe fittings, valves, hydrants and accessories shall be loaded and unloaded by lifting with hoists or skids so as to avoid shock or damage. Under no circumstances shall such

materials be dropped. Pipe handled on skidways shall not be skidded or rolled against pipe already on the ground. In distributing the material at the site of the work, each piece shall be unloaded opposite or near the place where it is to be laid in the trench.

202.2 Care of Pipe Coating and Lining. Pipe shall be so handled that the coating and lining will not be damaged. If, however, any part of the coating or lining is damaged, the repair shall be made by the Contractor at no expense to the City in a manner satisfactory to the City.

SECTION 301 – DEMOLITION, DISPOSAL AND ABANDONMENT

301.1 NOT USED

301.2 Remove the existing surfacings, foundations, footings, and slabs, fencing, and any other ancillary site structures. Concrete rubble shall not be used for backfilling operations at the site. All products of demolition shall be properly disposed of at an approved offsite location at no expense to the City.

301.3 Sewer mains to be plugged shall be fitted with ETCO Specialty Products "T" Cone Expandable Stoppers, or City-approved equal. All plugs shall be of the "barrel" type and compatible with the pipe's material of construction.

301.4 Manholes or tanks to be abandoned shall be terminated at least 2 feet below final grade or completely removed from the site. Manhole and/or tank portions remaining shall be filled with crushed stone conforming to the requirements of ASTM D448, #67 from the base to within two (2) feet of final grade. Native soil shall be utilized for final backfill within the remaining two (2) feet to final grade. If approved by the City, flowable fill may be utilized in lieu of 67 stone. Such substitution shall occur at no expense to the City. Manhole lids shall be salvaged and delivered to the owner of the structure. All portions of the structures which are not to remain in place shall be properly disposed of by the Contractor at an approved offsite location, at no expense to the City.

SECTION 302 – REMOVAL, RESTORATION, AND MAINTENANCE OF SURFACE

302.1 Allowable Removal of Pavement. The Contractor shall remove pavement and road surfaces as a part of the trench excavation. The removed will depend on the width of trench specified for the installation of the pipe and the width and length of the pavement area required to be removed for the installation of gate valves, specials, manholes or other structures. The width of pavement removed along the

normal trench for the installation of the pipe shall be 18 inches on each side of the trench. The width and lengths of the pavement removed for the installation of gate valves, specials, manholes or other structures shall be approximately 18 beyond the maximum linear dimensions of such structures. Wherever, in the opinion of the City, existing conditions make it necessary or advisable to remove additional pavement, the Contractor shall remove it as directed at no expense to the City. The Contractor shall sawcut any pavement to be removed, so as to assure the breaking of the pavement along straight lines. The surface of the remaining pavement shall be approximately vertical.

if the Contractor removes or damages pavement or surfaces beyond the limits specified above, such pavement and surfaces shall be replaced or repaired at no expense to the City.

302.2 Restoration of Damaged Surfaces and Property. Where any pavement, trees, shrubbery, fences, poles or other property and surface structures have been damaged, removed or disturbed by the Contractor, whether deliberately or through failure to carry out the requirements of the contract documents, State laws, municipal ordinances or the specified direction of the Engineer, or through failure to employ usual and reasonable safeguards, such property and surface structures shall be replaced or repaired at no expense to the City.

302.3 Replacement of Pavement and Structures by the Contractor. The Contractor shall restore, unless otherwise stipulated, all pavement, sidewalks, curbing, gutters, shrubbery, fences, poles or other property and surface structures removed or disturbed as a part of the work to a condition equal to that before the work began, furnishing all labor and materials incidental thereto. In restoring pavement, sound granite blocks, sound brick or asphalt paving blocks may be restored unless and until, in the opinion of the City, the conditions of the backfill is such as to properly support the pavement.

302.4 Cleaning Up. All surplus sanitary sewer materials and all tools and temporary structures shall be removed from the site by the Contractor. The Contractor shall dispose of all dirt, rubbish and excess earth from the excavation site in a lawful manner and the construction site shall be left clean to the satisfaction of the Engineer and the City.

SECTION 401 – RESTORATION OF CONSTRUCTION SITE

401.01 Throughout the period of construction, the Contractor shall keep the work site clean and free of all rubbish and debris; and shall promptly remove from any portion

of the site, or from property adjacent to the site of the work, all unused materials, surplus earth and debris, excepting select material which may be required for refilling or grading.

Upon completion of the work and prior to final acceptance of the project, the Contractor shall remove from the vicinity of the completed work all surplus materials and equipment belonging to him or used under his direction during construction.

On all project areas, the Contractor shall do the following special cleaning for all trades at completion of the work: dress up earthwork areas around pipelines, structures, and other facilities, fine grade rough areas to final grade, remove boulders and unsightly areas, feather cut and fill into existing terrain, perform re-seeding as required to establish vegetative cover, plant shrubs and trees (as indicated on the approved Drawings or otherwise approved by the City), and do other cleanup work required to restore the site to its pre-existing condition as requested by the City. Restoration of the construction site shall be completed at no expense to the City.

SECTION 501 – FENCES AND GATES

501.01 This section covers the work required for reconstructing the existing fences and gates, complete, in order to facilitate construction and restore site conditions.

Barbed Wire. Barbed wire shall meet the requirements of ASTM A 121, including a Class I zinc coating. Barbed wire shall be made of 0.099-inch diameter wire with 0.080-inch diameter wire four-point barbs on five-inch centers.

All fences not specified in this section, shall be restored with new materials of equivalent design as the original, and as approved by the City and the owner of the fence, at no expense to the City.

SECTION 601 – WATERING

601.1 Description. Watering shall consist of supplying water, furnishing equipment for, and applying water for wetting and prewetting of embankment or bedding materials, dust control, construction traffic areas, pressure and leakage testing.

601.2 Materials. The Contractor shall make necessary arrangements for obtaining water and shall provide the water required for construction. The Contractor shall provide the necessary water transport, storage, and application equipment. The Contractor shall be responsible for the provisions of all non-construction water needs

of his employees including, but not limited to, drinking water, wash water and facilities, and portable restrooms.

601.3 Construction Requirements. Water, when required to meet the requirements of this Section, shall be applied at the locations in the amounts and at any hour of the day or night and on any day of the week that the City may determine as necessary to maintain the requirements of the sections referenced. The water may be hauled in tanks or applied by a pipeline system. Water added during finishing operations shall be uniformly applied.

The Contractor shall provide at all times during construction any necessary drinking, wash, or toilet water required by employees of the Contractor or any subcontractors under direction of the Contractor. The Contractor shall also provide adequate portable toilet facilities at all times.

The Contractor shall provide complete road maintenance and dust control for all roads and traffic areas utilized by the contractor and any sub-contractors throughout the project. If at any time dust control is determined inadequate by the City, the contractor shall perform all necessary dust control actions immediately. All roads must be maintained to a condition of reasonable safe passage as determined by the City, at no expense to the City.

The Contractor shall provide water when required for compaction. The Contractor shall provide for transportation and application of water. Water required under this section shall be purchased, supplied, transported, and applied at no expense to the City.

601.4 Equipment. Mobile sprinkling equipment shall consist of watertight tanks. Equipment used for finishing operations of subgrade and surfaces shall be adequately powered and equipped with a pressure pump whenever such a pump is needed. Adjustable spray heads, front or rear, and spray bar shall provide uniform and controlled application of water without ponding or washing. Positive control of water from the driver's position is required.

An approved pressure pipeline hose nozzle or sprinkling system may be used for applying water in embankment construction or to moisten material before excavation.

The Contractor shall provide sufficient equipment to apply water as directed. Insufficient or inadequate watering equipment shall be cause for closing down those operations affected by such until the Contractor makes proper remedy of the deficiency.

The Contractor shall provide sufficient equipment to maintain roads and traffic areas. Water shall be used for dust suppression. Oil or other chemicals shall not be used for dust suppression.

SECTION 801 – PRESSURE SEWER PIPE MATERIALS

801.1 General.

All pipe shall be of the type, weight, class and/or designed working pressures shown on the approved Drawings and these Specifications. All STEP system force mains shall be sized according to the "Simplified Equation" on page 44 of the EPA MANUAL "Alternative Wastewater Collection Systems".

801.2 Ductile Iron Pipe.

Ductile iron pipe shall be of the class shown on the approved Drawings and as indicated in these Specifications.

Ductile iron pipe shall meet the requirements of AWWA C151 and AWWA C150. All ductile iron pipe used in sanitary sewer service shall have an interior ceramic epoxy lining suitable for sewer service (Protecto 401, or City-approved equal, 40 mil nominal dry film thickness.)

All DIP and DI fittings shall have an exterior coating as set forth below.

(a) Factory Primed Pipe: Unless otherwise shown on the Plans, all exposed pipe and fittings within the limits of structure walls or exposed pipe and fittings located aboveground shall be delivered to the job site factory-blasted, cleaned, and primed with one (1) coat of Tnemec Series N140 Pota-Pox Plus, or approved equal compatible paint system.

(b) Bituminous Coating: All pipe and fittings indicated for buried service shall have a petroleum asphaltic coating approximately one (1) mil thick factory-applied to the outside of all pipe and fittings. The finished coating shall be continuous, smooth, neither brittle when exposed to the cold nor sticky when exposed to the sun, and shall be strongly adherent to the pipe or fitting. The bituminous coating shall not be applied to the first six (6) inches of the exterior of the spigot ends.

All joints shall be push-on or mechanical, unless otherwise specified, and shall conform to the requirements of AWWA C111.

All flanged ductile iron pipes shall conform to AWWA C115.

801.3 Polyethylene Encasement.

Polyethylene Encasement shall be as specified in the Polyethylene Encasement Section of these Specifications.

801.4 PVC Pipe.

PVC pipe shall conform to the following specifications.

801.4.1 Four-inch and Smaller Diameter PVC Pipe:

- (a) The pipe and fittings shall be manufactured from NSF approved class 12454-A or class 12454-B PVC conforming to ASTM D1784 and shall be stamped with the NSF seal of approval and permanently marked.
- (b) The pipe shall have a pressure rating of at least 160 psi at 73°F and conform to the requirements of specifications ASTM D2241, SDR-26.
- (c) Provision shall be made for expansion and contraction at each joint by use of a gasket type joint and integral bell or equal.
- (d) The pipe manufacturer shall be a member of the Plastics Pipe Institute or American Water Works Association.

801.4.2 Six-Inch Through Sixty-Inch PVC Pipe.

- (a) The pipe shall be manufactured from NSF approved materials that conforms to ASTM D1784 PVC 1120 pressure pipe made from class 12454-A or 12454-B resins, and the pipe shall be stamped with the NSF seal of approval and permanently marked.
- (b) The pipe shall have a pressure rating of at least 200 psi at 73°F and conform to the requirements of specifications ASTM D2241 (SDR 21) or C-900 (DR 18). Pipe with extruded bells shall be furnished in not more than twenty (20) foot lengths.
- (c) Provision shall be made for expansion and contraction at each joint by use of a gasket type joint. Gaskets shall conform to the requirements of ASTM F477.
- (d) The pipe manufacturer shall be a member of the Plastics Pipe Institute or American Water Works Association, and shall have manufactured the pipe and joint proposed for use for not less than five (5) years.
- (e) The pipe shall be permanently marked by the manufacturer and coded for the date, batch and shift in which the pipe was made along with other required marking as set forth in ASTM standard specifications.
- (f) The pipe manufacturer shall furnish to the City certification that the pipe meets all requirements of ASTM D2241 or AWWA C900, as appropriate. The manufacturer

shall further certify that the plant, manufacturing process, testing, and quality control processes comply with all applicable requirements under these reference specifications.

(g) All PVC pipe shall be selected from the following table in accordance with the maximum pressure of the sewer system, static or dynamic, as determined by the Engineer and agreed to by the City.

Maximum Static Pressure (psi)	ASTM D2241 SDR	ASTM D2241 Pressure Rating	AWWA C900 DR	AWWA C900 Pressure Class
215	13.5	315	14	305
160	17	250	18	235
125	21	200		
95	26	160	25	165

(h) The use of solvent or chemically welded joints is prohibited. Joints shall be push-on, elastomeric gasket type conforming to ASTM D3212 and ASTM F-477.

Section 802 – STEP SERVICE LINE MATERIALS

802.1 General

Service lines shall comply with the Arkansas Plumbing Code. Polyethylene (PE) Tubing shall be installed with a minimum earth cover of thirty (30) inches over the top of the pipeline. Consideration for thermal contraction shall be given by "snaking" the pipeline in the trench. Tracer wire shall be installed on all polyethylene tubing from the corporation stop on the main to the interceptor tank or meter set, by either taping or wrapping the tracer wire around the PE tubing at least every six (6) feet. Where the tracer wire is tied to the corporation stop and to the branch piece on the meter setting, the tracer wire shall be stripped of its insulation.

802.2 NOT USED.

802.3 Service Lines.

Main line service connections shall be Class 200 polyethylene plastic pipe, in accordance with ASTM D2737 (SDR-9). The tubing shall be suitable for use with standard heavy-duty waterworks brass flare fittings. Service tubing shall have copper tube O.D. Three-quarter-inch (3/4") tubing shall be 0.875" nominal O.D. and one-inch (1") tubing shall be 1.125 nominal O.D. One-inch (1") tubing shall be required for all double meter sets.

ORDINANCE NO. 2021- 01

CITY OF ELM SPRINGS, WASHINGTON AND BENTON COUNTY, ARKANSAS

AN ORDINANCE REPEALING ORDINANCE NO. 2016-02
REGARDING SEWER CAPACITY CHARGE; DECLARING AN
EMERGENCY; AND FOR OTHER PURPOSES.

WHEREAS, the City enacted Ordinance 2016-02 by Ordinance dated April 21, 2016; and

WHEREAS, the City of Elm Springs, hereby determines that it is appropriate to repeal said Ordinance.

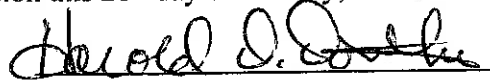
NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Elm Springs:

Section 1: Repeal of Ordinance 2016-02. The City Council of the City of Elm Springs, Arkansas hereby repeals Sewer Capacity Charge Ordinance 2016-02


Section 2. Conflicting Ordinances. All ordinances or resolutions of the City in conflict herewith are hereby repealed to the extent of such conflict.

Section 3: Emergency. In light of circumstances including rulings by the Circuit Court of Washington County, Arkansas regarding pending litigation involving the City of Elm Springs and said charge, the Council finds that this Ordinance is necessary for the immediate protection of the public peace, health and safety of the citizens of the City of Elm Springs, and shall take effect immediately on its passage and approval.

PASSED and APPROVED in regular session this 28th day of January, 2021.


Harold Douthit, Mayor

ATTEST:


Twila Taylor, Clerk

ORDINANCE NO. 2021 - 04

CITY OF ELM SPRINGS, WASHINGTON AND BENTON COUNTY, ARKANSAS

**AN ORDINANCE AMENDING THE ELM SPRINGS SEWER TAP FEE;
DECLARING AN EMERGENCY AND FOR OTHER PURPOSES.**

WHEREAS, the City of Elm Springs has experienced various increased costs related to its installation of sewer taps; and

WHEREAS, in order to cover the increased costs, it is necessary to implement an increase in the sewer tap fee.

NOW THEREFORE, BE IT ORDAINED:

Section 1: Sewer Tap Fees.


A. R-1 and R-1A residential tap fees are hereby amended to \$1,100.00 per tap.

B. All other tap fees, including commercial tap fees shall be no less than \$1,100.00 for each such tap, and shall cover all expenses related to establishment and installation of the tap, as determined by the City.


Section 2: All previous Ordinances in conflict herewith are hereby repealed to the extent of the conflict, and if any portion of this Ordinance is declared invalid for any reason, then that part shall be considered severed, and the remaining part of this Ordinance shall continue in full force and effect.

Section 3: EMERGENCY. Said Fee has not been amended since 2008. Increased costs make implementation of this increased fee urgent. Accordingly, the immediate effectiveness of the provisions of this Ordinance is necessary and proper for the preservation of the peace, health, safety and welfare of the residents of Elm Springs, Arkansas; and, therefore, an emergency is declared to exist, and this Ordinance shall be in full force and effect from and after its passage and approval.

PASSED AND APPROVED THIS 25th day of February, 2021.


Harold Douthit, Mayor

ATTEST:


Twila Taylor, Clerk