WATER DESIGN CRITERIA MANUAL

SPRINGS HILL
SPECIAL UTILITY DISTRICT

Springs Hill Special Utility District

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TABLE OF CONTENTS

1 General 1
1.1 Authority and Applicable Standards 1
1.2 Abbreviations and Definition of Terms 1
1.2.1 Abbreviations 1
1.2.2 Definitions 2
1.3 Resources 6
2 Development Service Extension and Plan Submittal Requirements 7
2.1 Non-Standard Service Extension 7
2.2 Plan Submittal Requirements 7
2.3 Plan Review Process 8
2.4 Pre-Construction Meeting 8
2.5 Final Inspection 8
2.6 Record Drawings 9
3 Engineering Design Requirements for Water System 9
3.1 General 9
3.2 Sizing of Waterlines 9
3.3 Separation Distances 10
3.4 Routing 10
3.5 Cover Depths 11
3.6 Cross-Connection Control 11
3.7 Connection to Existing Waterlines 11
3.8 Hydrostatic and Leakage Test 11
3.9 Disinfecting Water Systems 12
3.10 Valve Criteria 12
3.11 Fire Hydrant Criteria 12
3.11.1 Fire Hydrant Location 13
3.12 Service Criteria 13
3.13 Encasement Required 13
APPENDIX A 14
APPENDIX B 15
APPENDIX C 16

1 General

The purpose of this Water Design Criteria Manual is to establish standardized criteria and minimum requirements for the planning, design, and construction of public water distribution system facilities within the Springs Hill Special Utility Districts (SHSUD) service area. It serves as a technical guide for engineers, developers, and contractors to ensure the delivery of safe, reliable, and efficient water infrastructure that meets regulatory standards and supports long-term community growth.

1.1 Authority and Applicable Standards

Construction of domestic water pipelines and appurtenances are subject to inspection and approval by SHSUD and shall be in accordance with the requirements of this document and SHSUD's Standard Specifications and Standard Details. Items not specifically referred to herein shall comply with the latest edition of the Standards of the American Water Works Association (AWWA) and shall be subject to approval by SHSUD. Construction methods, materials, and disposal of products shall also be subject to current standards established by the Texas Commission on Environmental Quality (TCEQ) and any other local, state or federal agencies having authority in their respective jurisdictions.

SHSUD will not accept or provide service via any infrastructure that violates any of the standards, conditions, requirements, etc. of their general notes, standard details, standard specifications, and/or any applicable agreements regarding service.

The design criteria, standard specifications, and standard details were adopted for use by SHSUD in July 2025.

1.2 Abbreviations and Definition of Terms

Wherever the following terms are used in these specifications or other contract documents, the intent and meaning will be interpreted as shown below.

1.2.1 Abbreviations

AMRL	AASHTO Materials Reference Laboratory
ANSI	American National Standards Institute
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWWA	American Water Works Association
DIP	Ductile Iron Pipe
EDU	Equivalent Dwelling Unit
EPA	United States Environmental Protection Agency
GIS	Geographic Information System
GPM	Gallons per minute
HDPE	High Density Polyethylene
IFC	International Fire Code
ISO	International Organization for Standardization

NAD83	North American Datum 1983
NAVD88	North American Vertical Datum 1988
NSF	National Sanitation Foundation
NSSA	Non-Standard Service Application
NSSC	Non-Standard Service Contract
OSHA	Occupational Safety & Health Administration, U.S. Department of Labor
PSI	Pounds Per Square Inch
PPI	Plastics Pipe Institute
PE	Professional Engineer
PVC	Polyvinyl chloride
ROW	Right-of-Way
SHSUD	Springs Hill Special Utility District
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality

1.2.2 Definitions

Actual Cost - Contractor's actual cost to provide labor, material, equipment, and project overhead necessary for the work.

Award - SHSUD's acceptance of a Contractor's bid for a proposed Contract that authorizes SHSUD to enter into a Contract.

Bidder - An individual, partnership, limited liability company, corporation, or joint venture submitting a bid for a proposed Contract.

Change Order - Written order to the Contractor detailing changes to the specified work, item quantities or any other modification to the Contract.

Consultant/Engineer - The licensed professional engineer or engineering firm, or the architect or architectural firm, registered in the State of Texas and under Contract to SHSUD to perform professional services. The consultant may be the Engineer or architect of record or may provide services through and be subcontracted to the Engineer or architect of record.

Contract - The agreement between SHSUD and the Contractor establishing the obligations of the parties for furnishing of materials and performance of the work prescribed in the Contract documents.

Contract Documents - Elements of the Contract including but not limited to the plans, specifications incorporated by reference, special provisions, special specifications, Contract bonds, change orders, and supplemental agreements.

Contract Time - The number of working days specified for completion of the work including authorized additional working days.

Contractor - The individual, partnership, limited liability company, corporation, or joint venture and all principals and representatives with which the Contract is made by SHSUD.

Developer - Owner of the property that is proposed for development

Development - A proposed site for construction that requires improvements such as residential, industrial, or commercial development.

Distribution Line - Waterline used for distributing and delivering water to customers. These waterlines have several interconnections with service lines and may be looped for reliability.

Hazardous Materials or Waste - Hazardous materials or waste include but are not limited to explosives, compressed gas, flammable liquids, flammable solids, combustible liquids, oxidizers, poisons, radioactive materials, corrosives, etiologic agents, and other material classified as hazardous by 40 CFR 261, or applicable state and federal regulations.

Highway, Street, or Road - General terms denoting a public way for purposes of vehicular travel, including the entire area within the right of way. Recommended usage in urban areas is highway or street; in rural areas, highway or road.

Impact Fees - The Texas Legislature has defined “impact fees” as a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansion necessitated by and attributable to the new development.

Inspector - The person assigned by SHSUD to inspect for compliance with the Contract any or all parts of the work and the materials used.

Intersection - The general area where 2 or more highways, streets, or roads join or cross, including the roadway and roadside facilities for traffic movements within it.

Licensed Professional Engineer - A person who has been duly licensed by the Texas Board of Professional Engineers to engage in the practice of engineering in the State of Texas; also referred to as a Professional Engineer.

Limits of Construction - An area with established boundaries, identified within the highway right of way and easements, where the Contractor is permitted to perform the work.

Local Street/Road - A street or road primarily for access to residence, business, or other abutting property.

Milestone Date - The date that a specific portion of the work is to be completed, before the completion date for all work under the Contract.

Notification - Either written or oral instruction to the Contractor concerning the work. Voice mail is oral notification.

Pavement - That part of the roadway having a constructed surface for the use of vehicular traffic.

Pavement Structure - Combination of surface course and base course placed on a subgrade to support the traffic load and distribute it to the roadbed.

Plans - The drawings approved by the Engineer including true reproductions of the drawings that show the location, character, dimensions, and details of the work and are a part of the Contract.

Prequalification - The process for determining a Contractor's eligibility to bid work.

Proposal - The offer of the Bidder submitted on the prescribed form, including addenda issued, giving unit bid prices for performing the work described in the plans and specifications.

Quality Assurance (QA) - Sampling, testing, inspection, and other activities conducted by the Engineer to determine payment and make acceptance decisions.

Quality Control (QC) - Sampling, testing, and other process control activities conducted by the Contractor to monitor production and placement operations.

Reservation Fees - Fees based on the number of service units intended to be developed. The fee credits the development a reserved capacity of water based on the number of services requested. As long as the development is constructed within the allotted time, the utility is required to save the reserved capacity for the development.

Right- of-Way - A general term denoting land or property devoted to transportation purposes.

Roadside - The areas between the outside edges of the shoulders and the right of way boundaries. Unpaved median areas between inside shoulders of divided highways and areas within interchanges are included.

Roadway - The portion of the highway (including shoulders) used by the traveling public.

Service Line - A small waterline off of a distribution line to supply a single customer with water service.

Sidewalk - Portion of the right of way constructed exclusively for pedestrian use.

Special Provisions - Additions or revisions to these standard specifications or special specifications.

Special Specifications - Supplemental specifications applicable to the Contract not covered by these standard specifications.

Specifications - Directives or requirements issued or made pertaining to the method and manner of performing the work or to quantities and qualities of materials to be furnished under the Contract. References to TxDOT DMSs, ASTM or AASHTO specifications, or TxDOT bulletins and manuals, imply the latest standard or tentative standard in effect on the date of the proposal. The Engineer will consider incorporation of subsequent changes to these documents in the project Scope of Work.

State - The State of Texas.

Station - A unit of measurement consisting of 100 horizontal feet.

Subcontract - The agreement between the Contractor and subcontractor establishing the obligations of the parties for furnishing of materials and performance of the work prescribed in the Contract documents.

Subcontractor - An individual, partnership, limited liability company, corporation, or any combination thereof that the Contractor sublets, or proposes to sublet, any portion of a Contract, excluding a material supplier, truck owner-operator, wholly owned subsidiary, or specialty-type businesses such as security companies and rental companies.

Subsidiary - Materials, labor, or other elements that because of their nature or quantity have not been identified as a separate item and are included within the items on which they necessarily depend.

Substructure - The part of the structure below the bridge seats or below the springing lines of arches. Parapets, back walls, and wing walls of abutments are considered as parts of the substructure.

Surplus Materials - Any debris or material related to the Contract not incorporated into the work.

Transmission Line - Larger diameter waterline used for transporting large amounts of water over long distances to water storage facilities.

Utility - Privately, publicly, or cooperatively owned lines, facilities, and systems for producing, transmitting, or distributing communications, power, heat, gas, oil, water, waste, or storm water that are not connected with the highway drainage, signal systems, or other products that directly or indirectly serve the public; the utility company.

Verification Tests - Tests used to verify accuracy of QC and QA and mixture design testing.

Wholly Owned Subsidiary - A legal entity owned entirely by the Contractor or subcontractor.

Work - The furnishing of all labor, materials, equipment, and other incidentals necessary for the successful completion of the Contract.

Work Order - Written notice to the Contractor to begin the work. The work order may include the date on which work or time charges are to begin, the number of working days for specified work (for multiple work order Contracts), and plan sheets providing additional details specific to a location or to an item of work for non-site-specific work.

Written Notice - Written notice is considered to have been duly given if delivered in person to the individual or member to whom it is intended or if sent by regular, registered, or certified mail and delivered to the last known business address; sent by facsimile to the last known phone number; or sent by e-mail to the last known address. The date of the letter will serve as the beginning day of notice. Unclaimed mail or failure to provide current mailing address will not be considered a failure to provide written notice.

1.3 Resources

For additional information on SHSUD Forms and Reports go to:

- https://springshill.org/all-forms-and-reports

For information on TxDOT Departmental Material Specifications (DMS), Manual of Testing Procedures, Material Inspection Guide and other TxDOT material information go to:

- http://www.dot.state.tx.us

For more information on Texas Commission on Environmental Quality's 30 Texas Administrative Code (TAC) §290 – Public Drinking Water, go to:

- https://www.tceq.texas.gov/rules/current.html

2 Development Service Extension and Plan Submittal Requirements

This section outlines the process for obtaining water service for new developments (Non-Standard Service), including application, plan submittal and review, construction coordination, and submittal of record drawings.

2.1 Non-Standard Service Extension

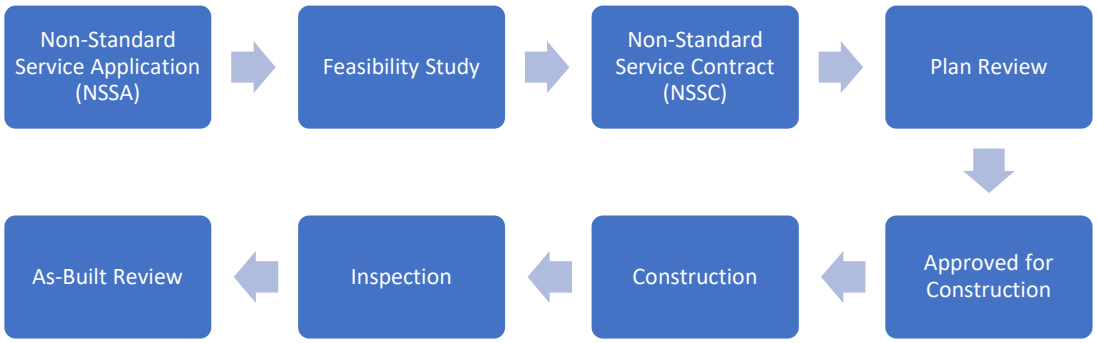


Figure 1: Steps of Development Service Procedure

Figure 1 provides a high-level overview of the water service extension process for new developments. The process begins with the submission of a Non-Standard Service Application (NSSA), which enables SHSUD to evaluate the feasibility of providing service based on the proposed land use and projected water demand, including the estimated number of Equivalent Dwelling Units (EDUs). If service is deemed feasible, the applicant may proceed with a Non-Standard Service Contract (NSSC) to reserve capacity for up to five years. Following execution of the NSSC, the developer submits construction plans for review and approval. Once approved, the project may proceed to construction, followed by SHSUD inspection and an as-built drawing review.

Appendix A presents an excerpt from SHSUDs Service Policy regarding Developers, Subdivisions, and non-standard service as well as a Non-Standard Service Application.

This overview is intended to provide general guidance on the extension request process. For specific details on SHSUD's Service Policy, refer to the SHSUD Service Policy (Effective May 1, 2025) available at https://springshill.org/all-forms-and-reports.

2.2 Plan Submittal Requirements

All water distribution systems, main extensions, and appurtenances must be designed in accordance with these Design Criteria, SHSUD Standard Specifications and Details, and 30 Texas Administrative Code (TAC) §290. Plans shall also conform with Section 3.13 for all applicable crossings; non-compliance may result in rejection. Where discrepancies exist, the most stringent standard shall apply. For clarification on specific requirements, contact SHSUD.

SHSUD will own and maintain all portions of the water system up to and including the water meter. Any infrastructure intended for SHSUD ownership must be located within recorded utility easements dedicated to SHSUD.

For detailed requirements regarding SHSUDs Plan submittal requirements refer to Appendix B, which includes the Plan Review Checklist as well as an example Hydraulic Performance Certification. These documents are also available at https://springshill.org/all-forms-and-reports.

2.3 Plan Review Process

For all subdivision and site development projects, the developer must submit electronic copies of all documents listed in the Plan Review Checklist. Construction plans must include both on-site and off-site water improvements, including irrigation plans. Building plans are not required.

The Submittal will be reviewed by the Engineer, who will provide comments as necessary to achieve a satisfactory submittal in accordance with SHSUD standards. Once approved, SHSUD will mark the plans as “Approved for Construction.” A stamped set must remain on-site throughout construction.

Changes made during construction must be documented:

- Minor changes may be reviewed and approved in the field by SHSUD and noted on the as-built plans.
- Major changes must be submitted in writing for formal review. SHSUD will determine the level of submittal required on a case-by-case basis.

2.4 Pre-Construction Meeting

The Contractor must schedule a mandatory pre-construction meeting at SHSUD’s main office one week prior to beginning any work. The meeting will serve to review the project scope and coordinate construction activities.

2.5 Final Inspection

SHSUD will conduct a final inspection of all main line construction. This inspection will verify the operation and proper installation of valves, hydrants, and services. All components (e.g., meter boxes, valve boxes, vaults) must be set to finished grade, and the site must be clean and free of debris.

Bacteriological test results must be negative for coliform bacteria and meet standards equivalent to the system’s source water. These results must be documented on SHSUD’s acceptance form by a certified Water Quality Technician.

Following a successful inspection, the SHSUD Inspector will issue three signed acceptance forms, which are distributed to the Engineer, Contractor, and SHSUD. The one-year warranty period will begin on the date noted on this form.

2.6 Record Drawings

Upon project completion, the contractor and Design Engineer are required to submit a full Record Drawing package to SHSUD. This includes a signed set of "Record Drawings" (also referred to as "As-Builts") and all associated digital files. Submittals must be made within 14 calendar days of project completion and must meet the requirements outlined in SHSUD's *As-Built Plan Set Review Checklist*, which is presented in Appendix C.

At a minimum, submittals shall include:

- PDF of the final Record Drawings signed by the Engineer of Record
- A digital CAD file (.dwg) showing all utility (water) linework in Texas state plane coordinates, NAD83 south central zone.
- A completed punch list and redlines
- Other supporting documentation as specified in the checklist

SHSUD will not accept or assume ownership of infrastructure until all submittals are complete and approved.

SHSUD's *As-Built Plan Set Review Checklist* is also available at https://springshill.org/all-forms-and-reports.

3 Engineering Design Requirements for Water System

The following parameters are intended to assist engineers and developers in the design and construction of water facilities within SHSUD's service area. They establish the minimum requirements for water system improvements and must be followed in all applicable projects. In addition, all plans and project manuals must be developed in accordance with the SHSUD Standard Specifications and Standard Details, which are available on the SHSUD website. Additional project-specific requirements may be imposed when warranted by the conditions of the existing system.

All plans for water facilities within the SHSUD system must be prepared by, or under the direct supervision of a Professional Engineer licensed in the State of Texas. The responsible engineer shall ensure that all plans comply with the latest applicable federal, state, and local ordinances, rules, and regulations.

3.1 General

a) Waterlines shall be designed, sized, and located per the Water Design Criteria Manual, SHSUD Standard Specifications and Standard Details, and TCEQ and IFC requirements unless otherwise directed by SHSUD.

3.2 Sizing of Waterlines

a) Water distribution systems shall be designed to, at a minimum, meet 100% of the combined maximum day demand plus the required fire flow.

b) The minimum allowable service pressure during fire flow conditions shall not be less than 20 psi at any point in the system.
c) Under peak demand conditions (defined as 1.5 times the average day demand), the service pressure shall not be less than 35 psi at the highest elevation served within the project area.
d) All system designs must meet the current TCEQ minimum flow requirement per Equivalent Dwelling Unit (EDU), which is 0.6 gallons per minute per EDU.
e) Transmission lines shall be sized to allow for a maximum flow velocity of 3 feet per second, while distribution lines shall be sized for a maximum of 5 feet per second.
f) Oversizing of water lines may be required in certain areas to accommodate future growth, as outlined in the SHSUD Water Master Plan. The need for oversizing shall be determined solely by SHSUD.
g) The minimum pipe size for distribution mains shall be 2 inches. However, any distribution main serving fire hydrants or fire hydrant branches shall have a minimum diameter of 6 inches.

3.3 Separation Distances

a) Water mains shall be installed with a minimum horizontal separation of 9 feet from any existing or proposed wastewater line (gravity or force main), measured outside-of-pipe to outside-of-pipe, in accordance with TCEQ regulations.
    i. Where it is not practical to maintain the required 9-foot horizontal separation from wastewater lines, an alternative design may be submitted to SHSUD for review and approval.
b) A minimum horizontal separation of 5 feet shall be maintained between water mains and all other utilities, including gas, telephone, electric, and storm sewer lines.
c) Joint trench installations combining water mains with electrical, telecommunications, or cable lines are not permitted under any circumstances.
d) When water mains cross other pipelines, a minimum vertical separation of 18 inches shall be maintained between the outside of the water pipe and the outside of the intersecting utility, regardless of whether the water main crosses above or below. Whenever possible, configurations where the water main crosses below another utility should be avoided.
    i. At all crossings, one full joint of water pipe shall be installed such that both pipe joints are as far as possible from the intersecting pipeline or conduit.
    ii. All water mains crossing wastewater lines shall comply with 30 TAC §290.44(e), as applicable.

3.4 Routing

a) Water distribution systems shall be designed to minimize dead-end mains and incorporate looping wherever feasible to enhance water quality, fire protection, and system reliability.
    i. When looping is not possible, dead-end lines shall terminate with an automatic flushing hydrant. Multiple connection points may also be required to minimize service interruptions during maintenance or emergencies.

b) Water lines serving residential or commercial subdivisions shall be routed outside of public rights-of-way and placed within a 15-foot minimum utility easement dedicated to SHSUD, either exclusive or non-exclusive.
    i. With SHSUD approval, water lines may be routed 3 to 5 feet within the public right-of-way, subject to applicable design and utility coordination requirements.
c) For all non-metallic pipes installed within private easements or along cross-country routes, a tracer wire shall be installed and securely attached to the pipe.

3.5 Cover Depths

a) Waterlines shall maintain a minimum depth of 48 inches from finished grade. Exceptions must be approved by SHSUD.

3.6 Cross-Connection Control

a) Backflow prevention devices shall be installed on all lines where there is potential for water from an alternative source to enter the public water supply system.
    i. The following types of service lines shall be metered and equipped with appropriate backflow preventors. Alternative installations will need to be approved by SHSUD.
        1. All water lines serving properties with more than one source of water
        2. All water lines with a possible cross connection
        3. All commercial and industrial fire lines
        4. All commercial and industrial irrigation lines

3.7 Connection to Existing Waterlines

a) All connections to existing waterlines shall be made under the direct supervision of SHSUD.
    i. Waterlines shall be tapped in a manner that avoids disturbance to the operation of the active main and ensures protection of the potable water supply from potential contamination.
    ii. The Contractor shall be responsible for properly backfilling the work area pit upon completion of the connection work.
    iii. Only SHSUD personnel are authorized to operate valves on existing mains.
b) When water service must be interrupted to existing customers during the construction of a tap or the addition of appurtenances, the Contractor shall provide a minimum of three (3) days' advance notice to SHSUD.

3.8 Hydrostatic and Leakage Test

a) All water mains shall be tested in accordance with SHSUD Standard Specification Section 33 05 05.31, Hydrostatic Testing.
b) The Contractor shall furnish, install, and operate all pumps, gauges, and measuring devices required for testing. All testing equipment and its installation must be approved by SHSUD.
c) Only potable water supplied by SHSUD shall be used for testing and flushing. The cost of all water used for these purposes shall be borne by the Contractor.

d) The entire pressure and leakage testing process shall be performed in the presence of a SHSUD Inspector.
e) If leakage exceeds the allowable limits, the Contractor shall locate and repair all defective pipe, joints, or appurtenances at their own expense. If the defective section(s) cannot be located, the Contractor shall, at their own cost, remove and reconstruct as much of the original work as necessary to achieve compliance upon retesting.

3.9 Disinfecting Water Systems

a) Disinfection shall be performed in accordance with SHSUD Standard Specification Section 33 01 10, Disinfection.
b) The Contractor shall disinfect all newly installed pipe and fittings in the water system and obtain all required approvals and clearances before placing the system into service.
c) Disinfection must cover the entire system to ensure complete sanitation. After the disinfection process is completed, the Contractor will thoroughly flush the line until water samples show a chlorine content equal to or greater than existing system and no less than 0.20 mg/L.
d) All bacteriological test results must be satisfactory.

3.10 Valve Criteria

a) Inline valves shall be positioned to minimize the maximum length of water main that must be shut down for repair, as determined by SHSUD.
b) Pressure reducing valves may be installed on water mains only with SHSUD approval.
c) Valves shall not be installed within curbs, sidewalks, driveways, or roadways. SHSUD will not be liable for damages to concrete or paved areas caused by noncompliance. Additionally, SHSUD will not cover relocation costs if valves are installed contrary to these regulations.
d) For detailed valve requirements, see SHSUD Standard Specification Section 40 05 60, Valves.

3.11 Fire Hydrant Criteria

a) Fire hydrants shall conform to SHSUD Standard Specification Section 40 05 81.13, Fire Hydrants and SHSUD Standard Detail WA-20.
b) Guadalupe County has adopted the 2018 International Fire Code (IFC) as its official fire code standard. All commercial developments must be designed in accordance with the 2018 IFC or its latest revision. In cases where the County Fire Marshal's requirements conflict with the guidelines listed below, the more stringent requirement shall apply.
c) Fire flow requirements shall be calculated in accordance with standards established by the Insurance Services Office (ISO), based on population, density, and the hazard classification of the proposed construction. Additional fire flow requirements may be imposed by the City or County Fire Marshals. A minimum residual pressure of 20 psi shall be maintained in each pressure zone under peak hour, maximum day demand conditions, plus fire flow.
d) One inline gate valve shall be installed on the lateral line connecting the fire hydrant assembly to the water main.

3.11.1 Fire Hydrant Location

a) Fire hydrants shall be installed at street intersections and, as needed, between intersections to maintain a maximum spacing of 500 feet, unless otherwise directed by the Fire Marshal.
b) Hydrants shall typically be located within one foot of the side lot lines, between adjacent properties in residential areas, or in front of commercial and industrial properties as required.
c) Hydrants shall be a minimum of 2 feet from edge of rights-of-way or curb in areas without sidewalks and shall not obstruct sidewalks.
d) Hydrants located on dead-end mains shall be auto-flush hydrants.
e) Hydrants shall not be installed within curbs, sidewalks, driveways, or roadways. SHSUD will not be responsible for any damage to concrete or paved areas resulting from noncompliance.
f) The location of new fire hydrants shall be identified with a blue reflective pavement marker installed on the roadway. The reflective marker shall be located perpendicular to the hydrant, as noted in SHSUD's Standard Detail WA-34.

3.12 Service Criteria

a) Water services shall be in accordance with SHSUD Standard Specifications and Details.
b) No more than two meters shall be installed on a single service line (domestic and irrigation meters included).
c) Service lines shall have a minimum cover of 30 inches from the final grade.
d) Service lines from fire lines are not permitted.
e) If the service line crosses any public or private roadways, a sleeve is required to protect the service line. For services of 1-inch or smaller, a 2-inch sleeve is required. For services larger than 1-inch, a 4-inch sleeve is required.
f) Meter boxes shall have Automatic Meter Reading Accessibilities (AMR) and be set square and level 1-inch above the finished grade of the surrounding area to avoid run-off water.
g) Meter boxes will not be placed within a driveway, or within any paved area.
h) Side-lot services are not accepted by SHSUD.

3.13 Encasement Required

a) When existing or proposed waterlines are crossed by existing or proposed highways, railroads, roadways, driveways, waterways, or other features as specified by SHSUD, the waterline will require casing in private easements or in public right of way. Casing protects the carrier pipe from external loads, settlement, and future excavations.
b) Installations shall conform to SHSUD Standard Detail WA-1 (Casing Detail). Casing pipe shall be steel unless otherwise noted in the plans or Contract Documents and approved by SHSUD.
c) For existing water mains, split casing shall be used to encase the pipe. Water lines shall be adequately protected against the heat of welding as applicable. Protection shall be provided to the satisfaction of the SHSUD inspector prior to any welding.
d) Residential roadways and driveways are an exception due to their low traffic use. For residential use, roadway crossings must use ductile iron or casing.

APPENDIX A

SECTION 4.0 DEVELOPERS, SUBDIVISIONS, AND NON-STANDARD SERVICE

Part One – General Requirements

This Part One details the requirements for all types of non-standard service requests.

Section 4.1 District's Limitations.

All Applicants shall recognize that the District must comply with local, state, and federal rules and regulations as promulgated from time to time, and with covenants of current indebtedness. The District is not required to extend retail water service to an Applicant in a subdivision within the District's CCN where the responsible party (Applicant/Developer) of the applicable property (subdivision) has failed to comply with the terms of this Service Policy. Texas Water Code § 13.2502 requires that notice be given herein or by publication (see Appendix A) or by alternative means to the Developers/Applicants. .

Section 4.2 Purpose.

It is the purpose of this Section to define the process by which the specific terms and conditions for service to subdivisions and other kinds of Non-Standard Service are determined, including the Non-Standard Service Applicant's and the District's respective costs.

For purposes of the Section, the term "***Applicant***" shall refer to the individual or entity that desires to secure Non-Standard Service from the District. The Applicant must be the same person or entity that is authorized to enter into a contract with the District setting forth the terms and conditions pursuant to which Non-Standard Service will be furnished to the property. In most cases, the Applicant shall be the owner of real property for which Non-Standard Service is sought. In the event that the Applicant is other than the owner of real property, the Applicant must furnish evidence to the District that it is authorized to request Non-Standard Service on behalf of such owner, or that it otherwise has authority to request Non-Standard Service for the real property

Section 4.3 Application of Rules.

This Section is applicable to subdivisions, additions to subdivisions, developments, or whenever additional service facilities are required for a single tract of property. Examples of non-standard services for a single tract of land can include, but are not limited to, road bores, extensions to the distribution system, service lines exceeding 3/4" diameter and service lines exceeding ten (10) feet. Non-residential or residential service applications requiring a larger sized meter typically will be considered non-standard. For the purposes of this Service Policy, Applications subject to this Section shall be defined as Non-Standard. This Section may be altered or suspended for planned facility expansions when the District extends its indebtedness. The Board of Directors of the District or their designee shall interpret on an individual basis whether or not the Applicant's service request shall be subject to all or part of the conditions of this Section.

This Section sets forth the general terms and conditions pursuant to which the District will process Non-Standard Service Requests. The specific terms and conditions pursuant to which the District will provide non-standard service in response to any request will depend upon the nature of such request and may be set forth in a legally enforceable, contractual agreement to be entered into by the District and the service Applicant. The agreement may not contain any terms or conditions that conflict with this Section

Section 4.4 Non-Standard Service Application.

The Applicant shall meet the following requirements prior to the initiation of a Non-Standard Service Contract with the District.

a. The Applicant shall provide the District a completed Non-Standard Service Application giving special attention to the item**(s)** on SPECIAL SERVICE NEEDS OF THE APPLICANT.

b. A preliminary plat approved by the District must accompany the Application showing the Applicant's requested service area. The plat must be approved by all governmental authorities exercising jurisdiction over lot sizes, sewage control, drainage, right-of-way, and other service facilities. Plans, specifications, and special requirements of such governmental authorities shall be submitted with the plat. Applicants for single taps involving extension or upsizing of facilities shall be required to submit maps or plans detailing the location of the requested extension and details of demand requirements.

NOTE: It is the responsibility of the Developer/Applicant to secure all necessary approvals of the subdivision once an Non-Standard Service Contract is in place between the District and the Developer/Applicant.

c. A **Non-Standard Service Investigation Fee** shall be paid to the District in accordance with the requirements of Section 5 of this Service Policy for purposes of paying initial administrative, legal, and engineering fees. The District shall refund any balance that remains after it has completed its service investigation, and has completed all legal and engineering services associated with processing a request. In the event such a fee is not sufficient to pay all expenses incurred by the District, the Applicant shall pay to the District upon the District's request all additional expenses that have been, or will be incurred by the District and District shall have no obligation to complete processing of the Application until all remaining expenses have been paid. The District may require the Applicant to execute an agreement to memorialize Applicant's reimbursement of the District's legal, engineering, and other professional fees incurred in the transaction.

d. If after the service investigation has been completed, the District determines that the Applicant's service request is for property located, in whole or in part, outside the area described in the District's Certificate of Convenience and Necessity, service may be extended provided that:

i. The service location is not in an area receiving similar service from another retail public utility;

ii. The service location is not within another retail public utility's water Certificate of Convenience and Necessity or the applicant owns a tract of twenty-five (25) acres or more and has not legally opted out of the current CCN;

iii. The District's Certificate of Convenience and Necessity shall be amended to include the entirety of Applicant's property for which service is requested. Applicant shall pay all costs incurred by District in amending its CCN, including but not limited to legal, engineering, and other professional fees. If the service location is contiguous to or within one-fourth (1/4) mile of District's Certificate of Convenience and Necessity, District may extend service prior to completing the amendment to its CCN, but will do so only upon Applicant's legally enforceable agreement to fully support such amendment (including but not limited to payment of all professional fees, including legal, surveying and engineering fees incurred by District in securing the amendment).

Section 4.5 Design.

The District shall approve the design requirements of the Applicant's required facilities after the execution of a Non-Standard Service Contract in accordance with the following schedule:

a. The Applicant's Engineer shall design all on-site and off-site service facilities for the Applicant's requested service within the District's specifications, incorporating any applicable municipal or other

governmental codes and specifications, subject to the District Engineer's review and approval.

b. The District's Engineer's fees shall be paid out of the Non-Standard Service Investigation Fee under Sections 4.4.c and 5.

c. The Applicant's Engineer shall submit to the District a set of detailed plans, specifications, and cost estimates for the project.

d. The Applicant's Engineer shall ensure that all facilities for any Applicant meet the demand for service as platted and/or requested in the plans or plat submitted in application for service. The District reserves the right to upgrade design of service facilities to meet future demands provided however, that the District shall pay the expense of such upgrading in excess of that which is reasonably allocable to the level and manner of service requested by the Applicant.

Section 4.6 Non-Standard Service Contract.

a. After submission of a complete Non-Standard Service Application and confirmation of availability of water service through a feasibility study, Applicants shall execute a written contract, prepared by the District's Attorney, providing the terms and conditions for the District's provision of non-standard water service ("***Non-Standard Service Contract***"). Said Non-Standard Service Contract shall define the terms of service prior to construction of required service facilities.

b. An Applicant shall have forty-five (45) calendar days from receipt of the Non-Standard Service Contract to execute such Non-Standard Service Contract. If Applicant fails to execute the Non-Standard Service Contract within such time, then the District automatically withdraws its offer to provide non-standard water service under such Non-Standard Service Contract, and the Applicant shall be required to submit a new Non-Standard Service Application and obtain a new feasibility study, including paying any applicable fees.

c. The Applicant shall pay the applicable Reservation Fees within forty-five (45) calendar days of executing the Non-Standard Service Contract. If Applicant fails to pay the applicable Reservation Fees within such time, then the Non-Standard Service Contract shall automatically terminate and Applicant shall be required to submit a new Non-Standard Service Application and obtain a new feasibility study, including paying any applicable fees.

d. The General Manager of the District may grant exceptions to the deadlines provided in this Section 4.6 for good cause.

e. The Non-Standard Service Contract may include, but is not limited to:

i. All costs associated with required administration, design, construction, and inspection of facilities for water/sewer service to the Applicant's service area and terms by which these costs are to be paid.

ii. Procedures by which the Applicant shall accept or deny a contractor's bid, thereby committing to continue or discontinue the project.

iii. Reservation Fees and Impact Fees required by the District in addition to the other costs required under this Section.

iv. Terms by which service capacity shall be reserved for the Applicant and duration of reserved service with respect to the demand which the level and manner of the service will have upon the District's system facilities.

v. Terms by which the Applicant shall be reimbursed or compensated for fees duplicated in assessments for monthly rates, Reservation Fees, and/or Impact Fees.

vi. Terms by which the District shall administer the Applicant's project with respect to:

1. Design of the Applicant's service facilities;

2. Securing and qualifying bids;

3. Execution of the Non-Standard Service Contract and Addendums;

4. Selection of a qualified bidder for construction;

5. Dispensing advanced funds for construction of facilities required for the Applicant's service;

6. Inspecting construction of facilities; and

7. Testing facilities and closing the project.

vii. Terms by which the Applicant shall indemnify the District from all third party claims or lawsuit**s** in connection with the project.

viii. Terms by which the Applicant shall dedicate, assign and convey to the District all constructed facilities and related rights (including contracts, easements, rights-of-way, deeds, warranties, and so forth) by which the District shall assume operation and maintenance responsibility for the Applicant's project. The Applicant shall also provide reproducible as-built drawings of all constructed facilities. The as-built drawings must verify that all facilities have been properly located within the easements conveyed to the District.

Section 4.7 Construction of Facilities by Applicants Prior to Execution of Service Contract.

The District and the Applicant must execute a Non-Standard Service Contract prior to the purchase of supplies and materials or initiation of construction of facilities by the Applicant. In the event that the Applicant commences construction of any such facilities prior to execution of a Non-Standard Service Contract with the District, then the District may refuse to provide service to the Applicant or, in a subdivision, to any person purchasing a lot or home from the Applicant. Alternatively, the District may require full costs of replacing/repairing/relocating any facilities constructed without prior execution of a contract from any person buying a lot or home from Applicant. At a minimum, the District will require that all facilities be uncovered by the Applicant for inspection by the District, require that any facilities not approved by the District be replaced, and take any other lawful action determined appropriate by the Board of Directors of the District.

Section 4.8 Property and Right-of-Way Acquisition.

With regard to construction of facilities, the District shall require private right-of-way easements or purchase of private property as per the following conditions:

a. If the District determines that right-of-way easements or facility sites outside the Applicant’s property are required, the Applicant shall secure easements or else title to facility sites in behalf of the District. All right-of-way easements and property titles shall be researched, validated, and filed by the District at the expense of the Applicant.

b. All additional costs associated with facilities that must be installed in public rights-of-way on behalf of the Applicant, due to the inability of the Applicant to secure private right-of-way easements, such as including road bores and TXDOT approvals shall be paid by the Applicant. Alternatively, Applicant shall

pay all costs, including legal and other professional fees and the condemnation award in the event District secures such private easements or facility sites through eminent domain proceedings.

c. The District shall require an exclusive dedicated right-of-way on the Applicant's property (as required by the size of the planned facilities and as determined by the District) and title to property required for other on-site and off-site facilities.

d. Easements and facilities sites shall be prepared for the construction of the District's pipelines and facility installations in accordance with the District's requirements and at the expense of the Applicant.

Section 4.9 Bids for Construction.

The District's Engineer shall advertise for bids for the construction of the Applicant's proposed facilities in accordance with generally accepted practices and as required by applicable laws and regulations. Plans and specifications shall be made available, with or without charge (as per the Engineer's determination), to prospective bidders. Although the District reserves the right to reject any bid or contractor, the District shall generally award the contract to the lowest qualified bidder in accordance with the following criteria:

a. The Applicant shall sign the Non-Standard Service Contract noting willingness to proceed with the project and shall pay all costs in advance of construction associated with the project;

b. The Contractor shall provide an adequate bid bond under terms acceptable to the District;

c. The Contractor shall secure adequate performance and payment bonding for the project under terms acceptable to the District;

d. The Contractor shall supply favorable references acceptable to the District.

e. The Contractor shall qualify with the District as competent to complete the work (including but not limited to current water/sewer license, OSHA competent person training, and other licenses / certificates as required to complete the project); and

f. The Contractor shall provide adequate certificates of insurance as required by the District.

Section 4.10 Pre-Payment for Construction and Service.

After the Applicant has executed the Non-Standard Service Contract, the Applicant shall pay to the District all costs necessary for completion of the project prior to construction and in accordance with the terms of the Non-Standard Service Contract.

Section 4.11 Construction.

a. The Water System Extension (the facilities necessary to serve the Applicant) shall be engineered and designed by a Texas Licensed Professional Engineer in accordance with the applicable specifications of the District and all governmental agencies having jurisdiction. All plans and specifications must be reviewed and approved by the District's Engineer consulting engineer prior to the issuance of any request for bids for the construction of the Water System Extension. After such approval of the plans and specifications by the District's Engineer, the plans and specifications shall become part of the Non-Standard Service Contract by reference and shall more particularly define "the Water System Extension."

b. No part of the Water System Extension may be placed under a sidewalk or any paved surface.

c. All roadwork pursuant to state, county and/or municipal standards (as applicable) shall be completed prior to facility construction to avoid future problems resulting from road right-of-way completion and excavation. Subject to approval of the requisite authority, approved road sleeves / casings may be installed prior to road construction to avoid road damage during construction of Applicant's facilities.

d. The District shall, at the expense of the Applicant, inspect the facilities to ensure compliance with District's standards. In the event any part of the Water System Extension is placed under a paved surface or otherwise fails to comply with the District's standards after reasonable notice and opportunity to cure, the District shall have the right, in its sole discretion, to: (i) remove, relocate, and/or replace, at the sole expense of the developer and/or contractor, any part of the Water System Extension placed under any paved surface or otherwise failing to comply with the District's standards; or (ii) deny service until the developer and/or contractor removes, relocates, and/or replaces any part of the Water System Extension placed under a paved surface or otherwise failing to comply with the District's standards. The District will not be responsible for any damages to concrete or paved areas if any part of the Water System Extension is placed under a paved surface or otherwise fails to comply with the District's standards.

e. Construction plans and specifications shall be strictly adhered to, but the District reserves the right to issue change-orders of any specifications, due to unforeseen circumstances during the design phase, to better facilitate construction or operation of the Applicant's facility. All change-order amounts shall be charged to the Applicant.

Part Two – Requests for Service to Subdivisions

In addition to the Part One general requirements, this Part Two contains additional requirements for developers of subdivisions.

Section 4.12 Service Applications for Subdivisions.

All Developers or subdividers of property shall provide the District sufficient information describing the level and manner of service requested and the timeline for initiation of this service. The following is the minimum information needed for an engineering evaluation of the requested service to the property described in the application:

a. Completion of requirements described in Section 4.4. *Non-Standard Service Application* above.

b. Applicant shall provide the District with details concerning access to the property during evaluation of application.

c. Applicant shall be notified in writing by the District or designated representative if service can be extended in accordance with the details described on the Applicant's request for service.

Section 4.13 Service Within Subdivisions.

The District's obligation to provide service to any customer located within a subdivision governed by this Section is strictly limited to the level and manner of the nonstandard service specified by the Applicant. The Applicant is responsible for paying for all costs necessary for non-standard service to a subdivision as determined by the District under the provisions of this Service Policy and specifically the provisions of this Section; if the Applicant fails to pay these costs, the District has the right to require payment of these costs by any one or more of the persons purchasing lots or homes within such subdivision before the District is obligated to provide water service. In addition, the District may elect to pursue any remedies provided by the Non-Standard Service Contract, if one has been executed. Applicant is advised that purchasers of lots also may have legal recourse to the Applicant under Texas law, including but not limited to Texas Water Code § 13.257 and the Texas Deceptive Trade Practices–Consumer Protection Act, Chapter 17, Subchapter E, Business and Commerce Code.

Section 4.14 Information Required for Subdivisions

a. For service to subdivisions, the Applicant/Developer must provide the following in addition to other information otherwise required by this Section:

i. Map and description of the area to be served using map criteria in 16 TAC § 24.257.

ii. Time frame for:

1. Initiation of service
2. Service to each additional phase following the initial service

iii. Level of service (quantity and quality) for:

1. Initial needs
2. Phased and final needs and the projected land uses that support the requested level of service for each phase

iv. Manner of service for:

1. Initial needs
2. Phased and final needs and the projected land uses that support the requested level of service for each phase

v. Any additional information requested by the District necessary to determine the capacity and the costs for providing the requested service.

vi. Copies of all required approvals, reports and studies done by or for the Applicant / Developer to support the viability of the proposed development.

b. Applicant / Developer must provide reasonably sufficient information, in writing, to allow the District to determine whether the level and manner of service specified by the Applicant / Developer can be provided within the time frame specified by the Applicant / Developer and to generally determine what capital improvements, including expansion of capacity of the District's production, treatment and/or storage facilities and/or general transmission facilities properly allocable directly to the service request are needed.

c. If the Applicant / Developer proposes development in phases, the Applicant / Developer should specify the level and manner of service and the estimated time frame within which that service must be provided for each phase, and the Applicant / Developer must depict the currently estimated location of each phase on the maps required under 16 TAC § 24.257.

d. It is important that the Applicant / Developer's written request be complete. A complete application by the Applicant / Developer should include: (a) the proposed improvements to be constructed by the Applicant / Developer; (b) a map or plat signed and sealed by a licensed surveyor or registered professional engineer; (c) the intended land use of the development, including detailed information concerning the types of land uses proposed; (d) the projected water demand of the development when fully built out and occupied, the anticipated water demands for each type of land use, and a projected schedule of build-out; (e) a schedule of events leading up to the anticipated date upon which service from the CCN holder will first be needed; and a proposed calendar of events, including design, plat approval, construction phasing and initial occupancy. Applicant / Developer must establish that current and projected service demands justify the level and manner of service being requested. In making his/her written request for service, the Applicant / Developer must advise the CCN holder that he/she may request expedited decertification from the PUC.

e. Upon payment of the required fees, the District shall review Applicant / Developer's service request. If no additional information is required from Applicant / Developer, the District will prepare a written report on Applicant / Developer's service request, subject to any final approval by the District's governing body

(if applicable) which must be completed within the ninety (90) days from the date of application and payment of the required fees. The District's written report will state whether the requested service will be provided, whether the requested service can be provided within the time frame specified by the Applicant / Developer, and the costs for which the Applicant / Developer will be responsible (including capital improvements, easements or land acquisition costs, and professional fees.)

f. In the event the District's initial review of the Applicant / Developer's service shows that additional information is needed, the District will notify Applicant / Developer of the need for such additional information. Notice of the need for additional information will be made in writing within thirty (30) days of the date the District receives the Applicant / Developer's payment of the required fees. Applicant / Developer should respond to the District's request for additional information within fifteen (15) days of receipt of the District's written request. In any case, the District will provide the written report, including any final approval by the District's Board of Directors (if applicable) within ninety (90) days from the date of the written application and payment of all required fees

g. By mutual written agreement, the District and the Applicant / Developer may extend the time for review beyond the ninety (90) days provided for expedited petitions to the PUC.

Section 4.15 Non-Standard Service Contract for Subdivisions.

Upon final approval by the District and acceptance of proposal for service by the Applicant / Developer, a Non-Standard Service Contract will be executed and the District shall provide service according to the conditions contained in the Non-Standard Service Contract.

Section 4.16 Reservation Fees.

Reservation Fees may be charged and are defined in Section 5 of this Service Policy.

SPRINGS HILL SPECIAL UTILITY DISTRICT (SUD)

APPLICATION FOR NON-STANDARD SERVICE

NOTE: FORM MUST BE COMPLETED BY APPLICANT ONLY.

Please Print Date:_____

APPLICANT'S NAME_____

SUBDIVISION NAME_____

PHONE NUMBER - Home ( ) _____ Work ( ) _____
Cell ( ) _____ Fax ( ) _____
Email: _____

□ PROOF OF OWNERSHIP PROVIDED BY DEED
PROPERTY OWNER'S NAME: _____
DEVELOPER'S NAME: _____
FINANCING OF DEVELOPMENT BY: _____
APPLICANT'S ENGINEER: _____
DRIVER'S LICENSE NUMBER OF APPLICANT: _____
LEGAL DESCRIPTION OF PROPERTY: _____
MAXIMUM NUMBER LOTS: _____ MAXIMUM NUMBER EDU's: _____

DESCRIBE ALL INTENDED LAND USES IN THE DEVELOPMENT:

□ Residential Subdivision □ Apartments □ Manufactured Home Park □ RV Park
□ Commercial or other uses: _____

DESCRIBE FLOW AND VOLUME NEEDED

_____

_____

_____

NON-STANDARD SERVICE FEASIBILITY STUDY FEE: SEE ENGINEER'S FEE SCHEDULE

CHECK NUMBER _____
AMOUNT PAID $ _____

BY MY SIGNATURE BELOW, I CERTIFY THAT THE INFORMATION IN THIS APPLICATION AND ALL ATTACHMENTS IS TRUE, ACCURATE AND COMPLETE.

APPLICANT SIGNATURE _____ TITLE _____

APPENDIX B

Springs Hill Special Utility District

Plan Set Review Form

Project

Name

Plat & Document Number

Submittal Number

Date

Applicant

Name

Contact

Address

Phone

E-mail

Engineer

Name

Firm

Address

Phone

E-mail

Submittal Information

_____ Final Plat. The plat sheet should include the development boundaries.

_____ Master Water Plan. The master water plan should show the water utility for overall development on one sheet. The master utility plan needs to clearly depict the overall development and unit boundaries and names, tie-in locations, existing and proposed pipe sizes, pipe material for the overall development. This sheet can be provided separately from the plan set.

_____ Hydraulic Performance Certification. A single page, signed and sealed by a professional engineer, that states satisfactory hydraulic performance.

_____ EDU Calculation Table (overall, existing platted lots, proposed this phase). The table should be provided on the overall cover sheet or on the water sheet. The table must include information about total available, previously used, and proposed EDUs with this plan set.

_____ NSSC and Feasibility Study. The executed Non-Standard Service Contract (NSSC) and feasibility studies (FS) should be provided.

_____ Construction Plans. The signed and sealed full set of construction plans should be submitted.

[DATE]

Springs Hill Special Utility District
5510 South State Highway 123 Bypass
Seguin, Texas 78155

Hydraulic Performance Certification

Project: [SUBDIVISION/SITE NAME]
[LOCATION]

remove
Mr. Pepin:

As the engineer of record for the above-referenced project, I hereby certify the following:

- I have used standard practice and applicable requirements to analyze the water distribution infrastructure constructed as a part of the above-referenced project.
- I have ensured that the design meets the requirements of 30 TAC Chapter 290, the current Springs Hill Water Supply Corporation (SHSUD) *Standard Specifications and Details*, and the standard of care with regard to engineering design. SUD?
- Any deviations from the above-referenced standards have been clearly identified and written approval obtained.
- Any changes to the design following approval by SHSUD that bear my seal adhere to the same certification.

Signature and Seal of the Engineer of Record:

APPENDIX C

Springs Hill Special Utility District

Infrastructure Acceptance & As-Built Plan Set Review Form

Project

Name

Plat & Document Number

Submittal Number

Date

Applicant

Name

Contact

Address

Phone

E-mail

Engineer

Name

Firm

Address

Phone

E-mail

Submittal Information

_____ As-Built / Plan of Record Drawings – Signed PDF file by Engineer. The record drawings should include the following:

a) Engineer's Signature and Certification
b) Plat ID Number (If Applicable)
c) Quantity Table (Example A)
d) Pipe, FH, and Valve Material and Manufacturer (Example B)
e) Contractor Name, Inspector Name, and Completion Date (Example C)
f) EDU Table

_____ Completion of Punch List Items issued by SHSUD

_____ As-Built / Plan of Record Drawings in Grid Coordinate System – Dwg File. The dwg file should include the following:

a) Contractor Field Points in CAD
b) Utility (Water) Linework

_____ Contractor's Redline Drawings

_____ Contractor's Field Points (CSV File):

a) Field points at valves, fire hydrants, and end of the line. Contractor shall provide description and offset it any for the location of the point versus the water main feature.

_____ Testing Reports. The following shall be included:

a) Compaction
b) Bac-T
c) Pressure

_____ Maintenance Bond (15% of Total Improvement Cost for a period of 2 years) with Engineer Signed Cost Tabulation and Final Pay Application

_____ Engineer's Certification that all facilities to be dedicated are located in ROW or easement.

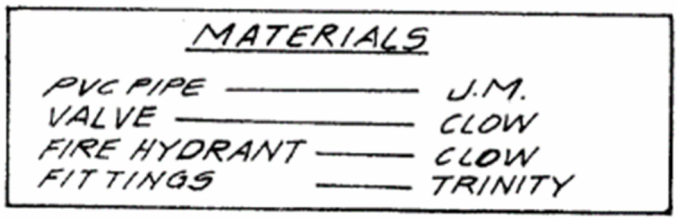
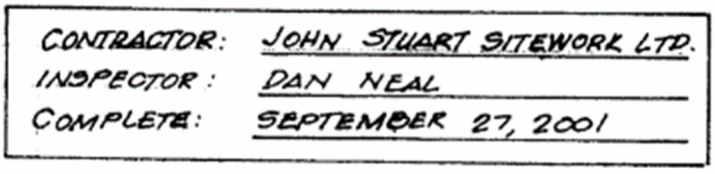
_____ Record Documents:

a) Address Plat
b) Recorded Final Plat
c) Separate Instrument Easement Dedication Documents (If Applicable)

Example A:

WATER QUANTITIES	
1400	LF 12" C909 CL 200
349	LF 12" DICL
98	LF 8" C909 CL 200
3	FIRE HYDRANT ASSEMBLY
4	12" GATE VALVE MJ W/ BOX
2	12" x 12" TEE, MJ
1	12" x 8" TEE, MJ
10	12 " 45˚ BEND, MJ
1	8" GATE VALVE MJ W/ BOX
1	8" 45˚ BEND, MJ
3	2" TEMPORARY BLOWOFF

Example B:



Example C: