Contractor Name		
Contractor Address		
Contact Person	Contact Office Number	Contact Mobile Number
	Authorized Contractor Representative Title Date	
	\$	
		)
(Amount in written	form)	
ADDENDUM H Receipt of the fo	<b>RECEIPT</b> ollowing addenda to the Bidding Documents is acknow	vledged (initial each):
Addendum No.	Dated:	Initials:
Addendum No.	Dated:	Initials:
Addendum No.	Dated:	Initials:

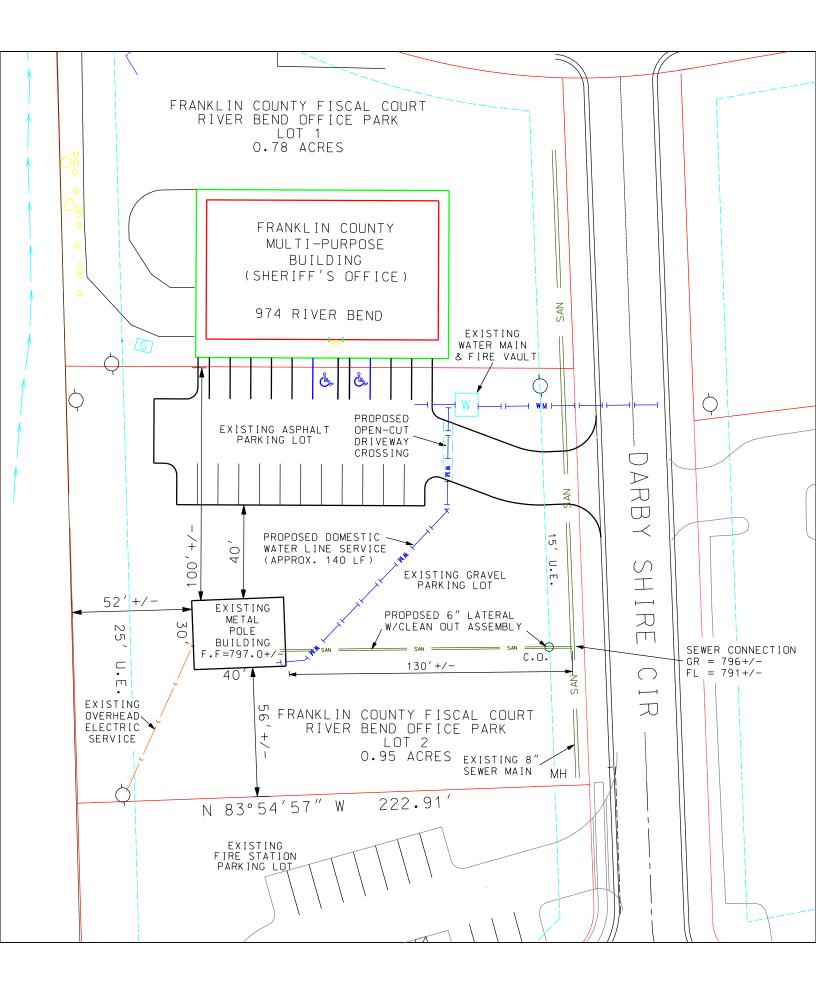
Note: All requirements of these Addenda have been included in this submitted Proposal.

# **BID FORM**

## (Must be submitted with Bid)

Unit prices shall include the furnishing of all labor. Materials, suppliers, and services and shall include all items of cost, overhead and profit for the vendor and any Subcontractors involved, and shall be used uniformly without modification for either additions or deductions. The Unit Prices are established shall be used to determine the equitable adjustment of the Contract Price in connection with changes or extra work performed under the Contract. Failure to completely fill out all unit prices requested may result in bid rejection.

ITEM NO.	QUANTITY	UNIT TO BID BY	DESCRIPTION W/UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	ITEM COST
1.	<u>140</u>	Ŀ	Water Service Line - 3/4" SDR 11 Dollars Cents Per LF (Linear Foot)	\$	\$
2.	<u>130</u>	년	Sanitary Sewer Lateral - 6" SCH 40 Dollars Cents Per LF (Linear Foot)	\$	\$
3.	<u>1</u>	<u>EA</u>	Sanitary Sewer Cleanout Assembly (FSD) Dollars Cents Per EA (Each)	\$	\$
4.	<u>140</u>	<u>SF</u>	Asphalt Entrance Open Cut & Restoration Dollars Cents Per SF (Square Foot)	\$	\$
5.		_	Dollars Cents Per	\$	\$
6.		_	Dollars Cents Per	\$	\$
TOTAL BID \$ Total Amount of Bid ( Items through ) = \$ (Written in Words)					



### FRANKLIN COUNTY SHERIFF'S OFFICE OUTBUILDING UTILITY SERVICES SPECIFICATIONS

- 1. Install approx. 130 LF of SCH 40 PVC sewer service lateral
- 2. Install sanitary sewer service cleanout per Frankfort Sewer Department (FSD) standard drawing at edge of 15' Utility Easement.
- 3. All sewer installation work must meet local, State and Frankfort Sewer Department permitting and construction requirements.
- 4. Sewer main tap must be coordinated with and witnessed by FSD.
- 5. Install approx. 140 LF of 3/4" SDR 11 water service line with the tap tee located on the service line to the Sheriff's Office.
- 6. All water service installation must meet local and State Plumbing Code requirements.
- 7. Contractor is responsible for obtaining all necessary permitting for sanitary sewer and water service installations.
- 8. Contractor must have Kentucky licensed plumber status in good standing.
- 9. All trench backfill shall be clean gravel.
- 10. Water service installation requires open cut of driveway. This item must include the following:
  - Clean saw cut of necessary trench width across driveway (approx. 22' wide)
  - Gravel backfill
  - 3" conduit sleeve for <sup>3</sup>/<sub>4</sub>" service line extended min. 12" beyond asphalt
  - 6" concrete cap
  - 3" Asphalt Surface

### SECTION IV. - WATER SERVICE D. SERVICE EXTENSIONS - SPECIFIC TYPES (CONTINUED)

The buried portion of a customer's water service from the meter to the point of consumption shall conform to appropriate plumbing standards. It is recommended that no smaller than 3/4" service lines be installed to insure adequate supply and that lines have at least 36" of cover to protect them from freezing. Installation of service line shall be in accordance with local and state plumbing codes.

Each service shall have a cut-off valve that is readily accessible for the customer's use, installed at or near the point where the service line enters a building or immediately inside the building wall.

(c) Minor Subdivisions and Land Locked Property – A minor subdivision as defined in the Frankfort and Franklin County Subdivision

and Site Plan Regulations is a subdivision not requiring the dedication

of streets or other public improvements. The subdivisioin consists of not over five lots including any remainder that will be retained by the Owner. Where an improved residential property or minor subdivision is located within a reasonable distance of, but not abutting a public road or a public water main extension, the Plant Board may allow such property to receive water service through a private service line installed within a private water easement so long as the following criteria are met:

# 1. The Plant Board has determined that the installation of a public water main is not in its best interest.

- 2. Each lot to be served has been developed as a single family residence. The customer agrees that he/she, their assigns and heirs, will not develop the property beyond the single family residence. The customer agrees that he/she, their assigns and heirs, will not extend their service line to provide anyone else potable water service.
- 3. The property to be served must have available to it a minimum 10 feet wide perpetual water service easement that permits the installation of a private water line extending from a public water main to the benefited property.



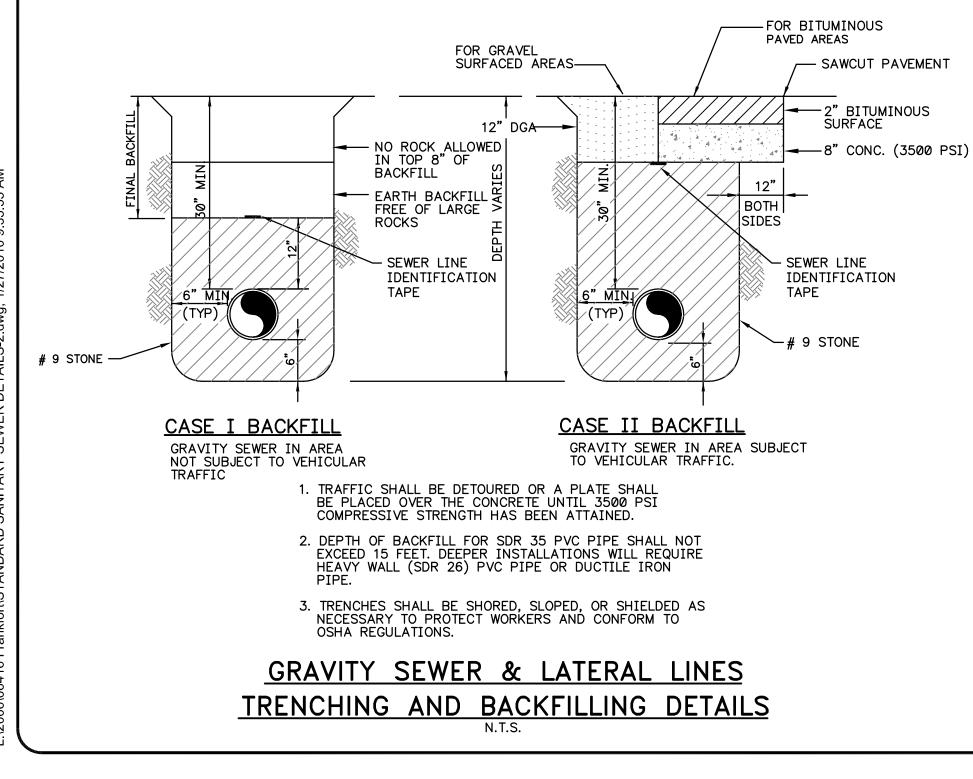
- PVC sewer pipe shall be SDR 35 and shall conform to ASTM D3034. For bury depths greater than 15 feet, SDR 26 PVC pipe or ductile iron pipe (DIP) is required. DIP shall conform to ANSI A21.50 (AWWA C 150) latest revision. Pipe materials other than PVC or DIP must be approved by the Frankfort Sewer Department (FSD) prior to installation.
- Gravity lines, force mains and lateral lines must be encased in #9 crushed stone 2. as shown on standard details. Top: 12 inches. Bottom and Sides: 6 inches. See Case I and Case II Backfill Detail, this sheet.
- 3. Mylar sewer line identification tape is required for all sewer mains, manholes, and laterals. All sewer lines must be installed in a dedicated right-of way or sewer easement. The
- minimum easement width is 15 feet, with the main line centered in the easement. Easement documents must be prepared, reviewed and approved by the City Attorney. Easements shall be properly recorded, with a copy of the stamped documents provided to FSD. Easements are required for any sewer mains crossing through private property.
- 5. A complete set of As-Built drawings shall be provided to the FSD after the construction has been completed.
- Each sheet of the As-Built drawings shall be sealed (or stamped), signed, and dated by a Professional Engineer licensed in the Commonwealth of Kentucky. Revisions to the As-Built drawings must be stamped, signed, and dated on each page.
- Buildings must be set-back from the sewer easement so the building foundation will not be undermined. The set-back must be greater than a 45-degree line from the edge of the trench at the pipe invert to its intersection with the foundation elevation.
- 8. Sewers on 20% slope or greater shall be anchored securely with concrete (or equivalent) pipe anchors, see drawing 3 for detail.
- 9. Aerial crossings, when necessary, shall be designed and constructed in accordance with Ten State Standards. Support shall be provided for all pipe joints. The supports shall be designed to prevent frost heave, overturning, and settlement. Precautions against freezing, such as insulation and increased slope, shall be provided. The impact of flood waters and debris shall be considered.
- 10. The FSD requires that each lot have a separate lateral that does not cross into any other lots. The laterals must extend five (5) feet into the lot. Each lot must have a 6-inch double wye installed at the right-of-way line. The cleanout stub shall extend 3 to 5 feet above ground. See dwgs. 2 & 3 for details.
- 11. After all installation and testing requirements are met and the easements are approved and recorded, the Director will allow the FSD to issue tap permits.
- 12. The FSD tap permits are issued from the main office at 1200 Kentucky Avenue. The FSD will charge a capacity fee for each additional apartment unit, house, or building based on number and size of water meters on lot. See ordinance for details.
- 13. The lowest floor of any structure to be provided service must be a minimum of one (1) foot higher than the rim elevation of the nearest sanitary manhole in accordance with City of Frankfort code of Ordinances, No. 52.04.E.3. If these requirements cannot be met, an ejector or grinder pump will be required to serve the structure. The pump installation must be approved by FSD prior to the sewer connection being permitted.
- 14. After the plumber has connected the building lateral to the sewer, he shall contact the FSD for an inspection of the tie-in. The FSD personnel will place a sticker on the structure indicating "approved" or "not approved" and FAX the results to the City-County Planning Office.
- 15. These drawings and specifications represent standards adopted by the Frankfort Sewer Department. These drawings are not a substitute for detailed design and engineering. Sewers shall be designed in accordance with the Recommended Standards for Wastewater Facilities, 1997 Edition (Ten States Standards). Construction plans and specifications must be approved by the Kentucky Division of Water (DOW). A construction permit must be obtained from DOW before sewers can be installed.
- 16. Field changes to approved plans must be authorized by the Design Engineer and submitted to the FSD for review and approval.
- 17. The FSD reserves the right to check for compliance with the Department's specifications and standards at any time during construction and prior to the Department's acceptance of the sewers. Fallure to construct to FSD standards will result in removal and replacement at the contractor's expense.

# **TESTING REQUIREMENTS**

- \* Visual inspection by FSD inspector
  - \* Video inspection \* Mandrel deflection test (for PVC pipe)
  - \* Low pressure air test
- \* Vacuum test for manholes
- all sewer lines.
- section of piping after placement of the backfill. with UNI-B-6. latest revision.
- -mounted. following time durations:

<u>Manhole Depth</u> <u>4 ft.</u> 20 feet or less 20.1 to 30 feet

- with the Department's Construction Specifications and Standards.
- manholes within the above test requirements.



1. The following tests shall be conducted on gravity sewer lines and manholes:

Testing and inspection shall be conducted no earlier than 30 days after final trench backfill. As-built drawings shall be submitted for approval prior to testing. Any re-testing that is required will be subject to charges under the current Review/Inspection/Testing fee

2. After the punch list items are completed and the As-built drawings are received by the FSD, the FSD will televise the main lines to evaluate their condition. Repairs, if necessary, shall be made at the builder's expense prior to the acceptance of the sewers.

The Mandrel (ao/no-go) device shall be cylindrical in shape and constructed with nine (9) evenly spaced arms of prongs. The Mandrel dimension shall be 95 percent of the flexible pipe's published ASTM average inside diameter. Deflection shall not exceed 5 percent of the pipe's average inside diameter. The Mandrel shall be hand pulled by the contractor through

4. Low pressure air tests shall be conducted using equipment specifically designed and manufactured for the purpose of testing sewer lines using low pressure air. The equipment shall be provided with an air regulator valve or air safety valve so set pressure in the pipeline cannot exceed 8 psig. The test shall be made on each manhole—to—manhole

At least two minutes shall be allowed for the air pressure to stabilize in the section under test. After the stabilization period, testing will commence in accordance

## in place. The vacuum test shall include testing of the seal between the cast iron frame and the concrete cone, slab or grade rings. Test equipement for manholes shall be top

A vacuum of 10 inches of mercury shall be drawn on the manhole. The manhole shall be considered to pass the vacuum test if it holds at least 9 inches of mercury for the

Time . Dia.	(Minutes) <u>5 ft. Dia.</u>	<u>6 ft Dia.</u>
1	2	3
2	3	4

If a manhole fails the vacuum test, it shall be repaired and retested.

Acceptance testing shall not be scheduled until punchlist items are completed and the as-built drawings have been submitted to the Frankfort Sewer Dept. (FSD). The contractor must schedule the test 24 hours in advance and will be required to call the morning of the test to ensure FSD personnel are available to witness the test. The FSD inspector will walk the project first and check for compliance FSD personnel must witness all tests. The Director will review the test results.

7. All tests shall be performed by the contractor. The contractor shall provide all equipment, appurtenances, and labor necessary to properly conduct the tests. The contractor is responsible for the ultimate performance of the sewer line and

