

**AGREEMENT BETWEEN
THE CITY OF ANN ARBOR AND THE REGENTS OF THE UNIVERSITY OF MICHIGAN
REGARDING RESPONSIBILITIES AND COST ALLOCATION FOR
THE HIGH-LEVEL TRUNKLINE SEWER CAPACITY IMPROVEMENTS PROJECT**

This Agreement ("Agreement") is made and entered into by and between the CITY OF ANN ARBOR, a Michigan municipal corporation ("City"), and THE REGENTS OF THE UNIVERSITY OF MICHIGAN, a Michigan constitutional corporation ("University"), for the purpose of establishing the rights and obligations of the parties related to the design and construction of the High-Level Trunkline Sewer Capacity Improvements Project ("Project"). A Project summary and scope with relevant details is set forth in Exhibit 1, and conceptual planning level cost estimates are set forth in Exhibit 2.

- A. Whereas, the University is proceeding with development of its Central Campus Student Housing Complex (the "Student Housing Complex") which consists of two phases. Phase I involves the construction of an approximately 2,300-bed student residence facility and a dining facility located on the former Elbel Field property bounded by Hill Street, South Division Street, East Hoover Street, and the Ann Arbor Railroad tracks, in the City of Ann Arbor which is planned to be completed in summer 2026. Phase II involves the construction of an approximately 2,500-bed student residence facility and a dining facility and other ancillary uses, and is located on property directly north of Phase I bounded by Hill Street, South Fifth Ave, East Madison Street, and South Division Street, in the City of Ann Arbor;
- B. Whereas, portions of the City's sanitary sewer collection system do not have adequate capacity under certain conditions to receive and accommodate all of the new projected sanitary flows from the University's Student Housing Complex without improvements to the City's sanitary sewer collection system;
- C. Whereas, the City and the University have each, with assistance from engineering consultant, OHM Advisors, considered various alternatives for improvements to the City's sanitary sewer collection system which would add capacity to accommodate the proposed new flows from the University's Student Housing Complex, and the City and the University agree that, of the available alternatives, the Project presents the best alternative for meeting the University's critical path requirements, timing, and other needs and is acceptable to both parties;
- D. Whereas, the Project consists of two parts: Part A involves the construction of approximately 1,520 feet of 36-inch sanitary relief sewer needed to accommodate projected new flows from Phase I and Phase II of the University's Student Housing Complex and, as a benefit to both the University and the City's sanitary sewer collection system, to maintain previously existing capacity in the sanitary sewer collection system for planned growth at an estimated project cost of \$20.51 Million, and Part B involves the lining of approximately 4,000 feet of existing 36-inch sanitary sewer pipe to both accommodate projected flows from Phase II of the Student Housing Complex and to perform maintenance that improves and extends the life of the City's sanitary sewer collection system at an estimated project cost of \$5.04 Million;
- E. Whereas, Part A of the Project is targeted for completion in summer 2026 in advance of or concurrent with the projected opening of Phase I of the University's Student Housing

Complex in August 2026, and Part B of the Project is targeted for completion in advance of or concurrent with the projected opening of Phase II, which is yet to be determined but will be no earlier than August 2028;

- F. Whereas, the City and the University have reached an understanding regarding their respective responsibilities for the construction, performance, and funding of the Project, and they desire to enter into this Agreement to memorialize that understanding, see Exhibit 1;

Therefore, in consideration of the premises and of the mutual undertakings of the parties and in conformity with applicable law, the City and the University agree:

1. Subject to and consistent with the University's consultation, input, and approval, the City shall complete, or have completed, the Project's design and construction, specifically including Parts A and B, in accordance with the final approved Project plans, this Agreement, and its exhibits and attachments.
2. With the University's approval, the City has engaged OHM Advisors to complete the design and to prepare plans for Part A of the Project. OHM Advisors also prepared cost estimates for the Parts A and B, which are included in Exhibit 2. Cost estimates shall be shared with both the City and the University for review and approval.
3. Upon completion of the Project design and plans and the parties' approval thereof, the City shall separately competitively bid the contracts for construction of Parts A and B of the Project pursuant to applicable City procedures, but the City's selection of the contractor for Part A of the Project is subject to the University's written approval. If bids exceed the agreed-upon cost estimates, the University shall be invited to participate in any budget review and value engineering exercise.
4. In its contracts for completion of the Project, the City shall require that all contractors and consultants indemnify and defend the University against and from all claims or lawsuits by third parties arising from or relating to the contractor's or consultant's work, and it shall require the contractors or consultants to add the University as an additional insured on their insurance to the same extent as the City. In addition, the City's contracts for the Project shall name the University as a third-party beneficiary.
5. In consideration of the University being named a third-party beneficiary as described above, the University releases the City from any claims regarding work performed by the contractors and consultants under their contracts with the City, and from other claims related to or based on those contracts, and University shall raise any such claims directly with the contractors and consultants. This release does not apply to other claims the University might have arising from or related to the Project.
6. In the event any claims are brought against the City or the University by a contractor, subcontractor, vendor, or supplier relating to the Project and arising out of the construction or the performance of work relating to the Project, costs incurred by the City in defending or resolving such claims shall be considered Project costs and will be paid or reimbursed in accordance with this Agreement. Any resolution or change order relating to Part A of the Project that results from a claim shall subject to the written approval of the University.

7. The City and the University agree to the following allocation of responsibility for the funding, payment, and/or reimbursement of Project costs:

- a. Part A – The University agrees to and shall fund and pay all costs for the University portion of Part A of the Project (except for the City portion of Part A as described on Exhibit 1) and reimburse the City all amounts contractually owed and paid by the City to contractors and consultants pursuant to their contracts with the City for the performance and completion of the University portion of Part A of the Project. The parties acknowledge and agree that the conceptual planning level estimated cost of the University portion of Part A is \$20.51 million, as set forth in Exhibit 2.
- b. Part B – The City agrees to and shall fund and pay all costs for the City portion of Part A and all costs for Part B of the Project and pay all amounts to contractors and consultants pursuant to their contracts with the City for the performance and completion of Part B of the Project. The parties acknowledge and agree that the conceptual planning level estimated cost of Part B is \$5.04 million, as set forth in Exhibit 2.

8. The City and the University may provide or contract for unique or special services related to the Project, or any part of it, each at their own expense or they may be included as Project costs by written agreement of the parties.

9. The City and the University agree that the cost estimates reflected in Exhibit 2 are only conceptual planning level estimates and that actual costs may vary and that their respective responsibilities to fund, pay for, or reimburse Project costs under this Agreement relates to actual Project costs.

10. The University shall reimburse the City for the amounts contractually-owed and paid by the City for the University portion of Part A of the Project (except for the City portion of Part A as described on Exhibit 1) for the contractor, OHM Advisors, other consultants engaged pursuant to this Agreement for Part A, pursuant to their respective contracts with the City. The University also shall reimburse the City for other costs for the Project, as described in Exhibit 2. The City may invoice the University for those and all other amounts owed under this Agreement no more frequently than monthly. The University shall pay amounts properly invoiced within 30 days of receipt of the invoice.

11. With respect to the University portion of Part A of the Project, the City shall not agree to any change order or amendment to any contract exceeding \$25,000 per change order or amendment, or to any contract with a consultant, unless the University first agrees in writing to the change order or amendment.

12. Notwithstanding the University's responsibility and obligation to fund the University portion of Part A of the Project as described on Exhibits 1 and 2, the parties agree that responsibility for administration, management, construction, and completion of the Project, including all aspects of the contracts with contractors and consultants, rests with the City.

13. The City and the University shall each identify a project manager as the point of contact for the other party on the Project. Each such project manager shall have the authority to provide written approvals required under this Agreement or shall obtain any written approval that is needed from a person with the authority to provide that approval if the project manager does not have that authority.

14. In recognition of the University's payment for the improvements included in the University portion of Part A of the Project to increase the capacity of the City's sanitary sewer collection system, the University's Student Housing Complex project is deemed to comply with the City's Development Offset Mitigation (DOM) program. If the Student Housing Complex, as constructed, results in calculated sewer flows less than the originally-calculated 2.37 cfs, the University may use the difference between the 2.37 cfs and the new calculated sewer flow for new sewer flows at another University development site located upstream of Part A of the Project subject to the City's review and approval for satisfying DOM requirements on that future University development site.

15. Unless stated expressly elsewhere in this Agreement, nothing herein shall be construed to relieve the University of its obligation to pay applicable City fees and charges for new sanitary sewer flows and connections relating to its Student Housing Complex and other University development projects, such as capital recovery charges with applicable credits, tap fees, meter fees, etc., and in the case of other University development projects (i.e. other than the Student Housing Complex), DOM fees.

16. The parties agree to mutually cooperate with one another in good faith to effectuate the intent and purposes of this Agreement and to avoid unduly hindering one another in connection with the performance and completion of the Project.

17. This Agreement may be amended and/or supplemented by written agreement of the parties.

18. Whenever possible, each provision of this Agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this Agreement or the application of any provision to any party or circumstance will be prohibited by or invalid under applicable law, that provision will be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this Agreement or the application of the provision to other parties or circumstances.

19. The parties agree that signatures on this Agreement may be delivered electronically or by facsimile in lieu of a physical signature and agree to treat electronic or facsimile signatures as binding.

20. Each person signing this Agreement represents and warrants that he or she has authority to sign this it on behalf of the University or the City, respectively.

21. This Agreement will become effective when all parties have signed it, and the effective date of this Agreement will be the date this Agreement is signed by the last party to sign it.

[Signatures on next page]

CITY OF ANN ARBOR,
a Michigan municipal corporation

By: _____
Christopher Taylor, Mayor

Date: _____

By: _____
Jacqueline Beaudry, City Clerk

Date: _____

Approved as to substance:

By: _____
Milton Dohoney Jr., City Administrator

By: _____
Jordan Roberts, Public Services Area
Administrator

Approved as to form:

By: _____
Atleen Kaur, City Attorney

THE REGENTS OF THE UNIVERSITY OF
MICHIGAN, a Michigan constitutional
corporation,

By: _____

Date: _____

EXHIBIT 1
High-Level Trunkline Sewer Capacity Improvements Project
Background and Project Summary and Scope

Background

The University of Michigan (the “University”) is proceeding with development of its Central Campus Student Housing Complex (the “Student Housing Complex”) which consists of two phases. Phase I involves the construction of an approximately 2,300-bed student residence facility and a dining facility located on the former Elbel Field property bounded by Hill Street, South Division Street, East Hoover Street, and the Ann Arbor Railroad tracks, in the City of Ann Arbor which is planned to be completed in summer 2026. Phase II involves the construction of an approximately 2,500-bed student residence facility and a dining facility and other ancillary uses located on property directly north of Phase I bounded by Hill Street, South Fifth Ave, East Madison Street, and South Division Street, in the City of Ann Arbor.

The University through its architect, Robert A.M. Stern Architects, commissioned from OHM Advisors a sanitary sewer analysis dated December 21, 2023 for its proposed Student Housing Complex which identified the need for improvements to the City’s sanitary sewer collection system to accommodate the peak sanitary flows from the Student Housing Complex. OHM Advisors’ analysis identified several alternatives for improvements to address the concerns about sanitary sewer collection capacity. The alternatives were subsequently refined and revised, and the City and the University discussed the alternatives on April 17, 2024.

Following their discussion, in a letter dated April 19, 2024, the City presented the University with a recommended project and two cost sharing options. The recommended project is the High-Level Trunkline Sewer Capacity Improvements Project consisting of two parts.

Part A involves the construction of approximately 1,520 feet of 36-inch sanitary relief sewer installed from Washington Street between S. First Street and Third Street to the intersection of N. First Street and Miller Avenue to accommodate projected new flows from the University’s Student Housing Complex and to add capacity in the sanitary sewer collection system. The project will convey flows from existing 18-inch and 24-inch sewers along Washington Street to the proposed relief sewer and to the existing 15-inch sewer that runs north from Washington Street. The relief sewer will eliminate the existing siphon on Washington Street under the Allen Creek Drain and the 18-inch sewer that currently runs under a building north of Washington Street. Due to depths exceeding 30 feet, the proposed sanitary sewer is planned to be installed using a micro-tunneling trenchless construction methodology. The conceptual planning level estimated project cost of Part A is \$20.51 Million.

Part B involves the lining and rehabilitation of approximately 4,000 feet of existing 36-inch sanitary sewer pipe from the intersection of N. First Street and Miller Avenue to Depot Street to accommodate projected flows from Phase II of the Student Housing Complex and to perform maintenance that improves and extends the life of the City’s sanitary sewer collection system. The conceptual planning level estimated project cost of Part B is \$5.04 Million.

The City’s letter also presented two cost-sharing options. Option 1 proposed that each party pay a portion of both parts of the Project with the University paying for a larger portion and the City paying for the portion to accommodate future non-University flows. Option 2 proposed that the University pay for the University portion of Part A of the Project and that the City pay for Part B of the Project.

In its April 22, 2024 response, the University agreed to the Project and selected Cost-Sharing Option 2 with a request for several conditions and that the arrangement be memorialized in a written agreement.

Project Summary and Scope

Part A – Sanitary Relief Sewer (University and City Funded)

The City is administering and managing a design and construction project for approximately 1,520 linear feet of new 36" sanitary sewer from Washington Street between South First Street and Third Street to the intersection of North First Street and Miller Avenue. The sanitary sewer will be micro-tunneled approximately 30 feet deep via several shafts. The installation and removal of the shafts, including but not limited to surface removals, temporary bypass pumping, maintenance of traffic, paving, and restoration are included in the project.

Sanitary structures will be installed along the proposed sanitary sewer, including two diversion structures to divert flow from the existing sewers to the proposed 36" relief sewer. Adjacent sewers along the proposed route will be abandoned and/or reconfigured.

All associated permits are included in the project.

Design is anticipated to be complete by September of 2025. Construction is expected to be complete by August of 2026.

The University and City will fund their respective allocated portions of the design, construction, and all associated costs of Part A – Sanitary Relief Sewer, as described in Exhibit 2.

Part B – Sewer Lining (City Funded)

Approximately 3,940 linear feet of existing 36" sanitary sewer will be lined to rehabilitate sewers in the Low-Level Interceptor. These sewers are located from Manhole (MH) ID 71-70541 at North First Street and Miller Avenue, continuing downstream to MH ID 71-71719 at North Fourth Avenue and Depot Street.

The sewers will be lined prior to the completion and opening of Phase II of the Student Housing Complex, currently estimated to be no earlier than August 2028.

The University will provide a schedule for the Phase II of the Student Housing Complex as soon as it is available so the sewer lining can be scheduled so that it can be completed to meet the University's target date for the opening of Phase II of the Student Housing Complex.

The City will fund 100% of the design, construction, and all associated costs of Part B – Sewer Lining.

Project Cost

60% design -level cost estimates for the above referenced Part A and B scopes of work are provided in Exhibit 2.

EXHIBIT 2
High-Level Trunkline Sewer Capacity Improvements Project
Conceptual Planning Level Cost Estimates

Table 1				
High-Level Sewer Capacity Improvements				
Total Project Cost Estimation as of 9/11/25				
Category	Estimated Total Costs			Notes
	Total	UM	City	
Part A - 36" Sewer				
OHM Design (T2)	\$ 894,720.00	\$ 862,380.00	\$ 32,340.00	See T2
City Design and Construction Oversight (Estimated at ~3% Construction Cost)	\$ 370,002.03	\$ 355,201.95	\$ 14,800.08	To be billed based on actual time spent; includes design and construction
Permits	\$ 100,000.00	\$ 96,000.00	\$ 4,000.00	To be billed based on actual cost
36" Microtunnel Sewer Construction Estimate (T3.1)	\$ 12,333,401.00	\$ 11,470,062.93	\$ 863,338.07	93% UM, 7% City - Based on 60% estimate
Construction Contingency (~20%)	\$ 1,233,340.10	\$ 1,147,006.29	\$ 86,333.81	93% UM, 7% City - Based on 60% estimate
City Project Field Support Costs	\$ 100,000.00	\$ 93,000.00	\$ 7,000.00	Public Works work, to be billed based on actual time spent
Construction Engineering & Inspection, Surveying, and Material Testing	\$ 2,220,000.00	\$ 2,064,600.00	\$ 155,400.00	93% UM, 7% City - Based on 60% estimate
40x48" Sewer CIPP Lining Construction Estimate (T3.2)	\$ 756,602.00	\$ 119,090.00	\$ 637,512.00	16% UM, 84% City - Based on Quote
Part A Total	\$ 18,008,065.13	\$ 16,207,341.17	\$ 1,800,723.96	
Part B - Sewer Lining				
City Design and Construction Oversight	\$ 630,000.00		\$ 630,000.00	100% City
Lining Construction Estimate (T4)	\$ 3,140,000.00		\$ 3,140,000.00	100% City
Construction Contingency (~15%)	\$ 480,000.00		\$ 480,000.00	100% City
Construction Engineering, Surveying, Material Testing & Inspections	\$ 790,000.00		\$ 790,000.00	100% City
Part B Total	\$ 5,040,000.00	\$ -	\$ 5,040,000.00	
Total Project Costs*	\$ 23,048,065.13	\$ 16,207,341.17	\$ 6,840,723.96	
*Note: The actual total project cost will depend on the detailed breakdown allocations per tables T2 and T3.1 & 2 and T4 and final invoices from consultants/contractors.				

Table T2								
Part A Design Costs								
To date totals as of August 2025								
Phase Names/ Tasks	Original Estimated Phase Fee	Actual Phase Fee Billed	City (%)	City To Date	City Total	UM (%)	UM To Date	UM Total
Preliminary Engineering								
Sewer Route Preliminary Engineering	\$ 14,600.00	\$ 14,589.75		\$ -	\$ -	100%	\$ 14,589.75	\$ 14,600.00
Risk Mitigation and Planning Contingency	\$ 25,000.00	\$ 24,983.50		\$ -	\$ -	100%	\$ 24,983.50	\$ 25,000.00
Geotechnical/Environmental								
Geotechnical Investigation	\$ 66,400.00	\$ 66,400.00		\$ -	\$ -	100%	\$ 66,400.00	\$ 66,400.00
Additional Geotechnical Investigation	\$ 42,000.00	\$ 45,000.00		\$ -	\$ -	100%	\$ 45,000.00	\$ 42,000.00
Engineering								
Sewer Route Topographic Survey and Base Plan	\$ 37,000.00	\$ 36,994.00		\$ -	\$ -	100%	\$ 36,994.00	\$ 37,000.00
Project Management and Design Kickoff	\$ 5,000.00	\$ 4,977.50	7%	\$ 348.43	\$ 350.00	93%	\$ 4,629.08	\$ 4,650.00
Preliminary Review and Design Confirmation	\$ 115,000.00	\$ 72,510.50	7%	\$ 5,075.74	\$ 8,050.00	93%	\$ 67,434.77	\$ 106,950.00
30% Design Documents	\$ 95,000.00	\$ 26,659.50	7%	\$ 1,866.17	\$ 6,650.00	93%	\$ 24,793.34	\$ 88,350.00
60% Design Documents	\$ 124,000.00	\$ 62,753.25	7%	\$ 4,392.73	\$ 8,680.00	93%	\$ 58,360.52	\$ 115,320.00
90% Design Documents	\$ 46,000.00	\$ 5,157.50	7%	\$ 361.03	\$ 3,220.00	93%	\$ 4,796.48	\$ 42,780.00
Final Construction Documents	\$ 38,000.00	\$ -	7%	\$ -	\$ 2,660.00	93%	\$ -	\$ 35,340.00
Bidding Assistance	\$ 17,000.00	\$ -	7%	\$ -	\$ 1,190.00	93%	\$ -	\$ 15,810.00
Subconsultant								
Microtunneling Specific Design	\$ 247,720.00	\$ 58,068.25		\$ -	\$ -	100%	\$ 58,068.25	\$ 247,720.00
Environmental Analysis and Specifications	\$ 22,000.00	\$ -	7%	\$ -	\$ 1,540.00	93%	\$ -	\$ 20,460.00
Total	\$ 894,720.00	\$ 418,093.75	4%	\$ 12,044.08	\$ 32,340.00	96%	\$ 406,049.67	\$ 862,380.00

Table T3.1										
Part A - 36" Micortunnel Sanitary Sewer Construction Costs										
W Washington Street and S First Avenue										
60% Design Cost Estimate						Aug-25				
ITEM CODE	DESCRIPTION	UNIT	QNTY	UNIT PRICE	COST	UM Quantity	City Quantity	UM Cost	City Cost	
01000.00	General Conditions, Max. \$1,200,000	LSUM	1	\$ 1,200,000.00	\$ 1,200,000.00	93%	7%	\$ 1,120,363.18	\$ 79,636.82	
01001.00	Project Supervision, Max. \$	LSUM	1	\$ 600,000.00	\$ 600,000.00	93%	7%	\$ 560,181.59	\$ 39,818.41	
01002.00	Project Clean-Up and Restoration	LSUM	1	\$ 50,000.00	\$ 50,000.00	93%	7%	\$ 46,681.80	\$ 3,318.20	
01003.00	Digital Audio Visual Coverage	LSUM	1	\$ 5,000.00	\$ 5,000.00	93%	7%	\$ 4,668.18	\$ 331.82	
01021.00	Erosion Control, Inlet Protection, Fabric Drop	Ea	15	\$ 125.00	\$ 1,875.00	93%	7%	\$ 1,750.57	\$ 124.43	
01030.00	Tree Protection Fence	Ft	125	\$ 5.00	\$ 625.00	93%	7%	\$ 583.52	\$ 41.48	
01040.00	Minor Traffic Control, Max. \$	LSUM	1	\$ 50,000.00	\$ 50,000.00	93%	7%	\$ 46,681.80	\$ 3,318.20	
01041.00	Traffic Regulator Control	LSUM	1	\$ 50,000.00	\$ 50,000.00	93%	7%	\$ 46,681.80	\$ 3,318.20	
01050.00	Sign, Type B, Temp. Prismatic, Furn & Oper	Sft	800	\$ 7.00	\$ 5,600.00	93%	7%	\$ 5,228.36	\$ 371.64	
01051.00	Sign, Type B, Temp. Prismatic, Special, Furn & Oper	Sft	240	\$ 8.00	\$ 1,920.00	93%	7%	\$ 1,792.58	\$ 127.42	
01052.00	Temporary "No Parking" Sign	Ea	35	\$ 150.00	\$ 5,250.00	93%	7%	\$ 4,901.59	\$ 348.41	
01070.00	Sign, Portable, Changeable Message, Furn & Oper	Ea	2	\$ 5,500.00	\$ 11,000.00	93%	7%	\$ 10,270.00	\$ 730.00	
01080.00	Plastic Drum, High Intensity, Lighted, Furn & Oper	Ea	14	\$ 32.00	\$ 448.00	93%	7%	\$ 418.27	\$ 29.73	
01081.00	Channelizer Cone, High Intensity, 42 In., Furn & Oper	Ea	150	\$ 28.50	\$ 4,275.00	93%	7%	\$ 3,991.29	\$ 283.71	
01091.00	Barricade, Type III, High Intensity, Lighted, Furn & Oper	Ea	10	\$ 115.00	\$ 1,150.00	93%	7%	\$ 1,073.68	\$ 76.32	
01100.00	Pedestrian Type II Barricade, Temp. Furn & Oper	Ea	2	\$ 80.00	\$ 160.00	93%	7%	\$ 149.38	\$ 10.62	
01102.00	Temporary Pedestrian Ramp, Furn & Oper	Ea	1	\$ 1,000.00	\$ 1,000.00	93%	7%	\$ 933.64	\$ 66.36	
03060.01	Soil and Groundwater Contamination Allowance	LSUM	1	\$ 450,000.00	\$ 450,000.00	93%	7%	\$ 420,136.19	\$ 29,863.81	
03070.00	Dewatering	LSUM	1	\$ 500,000.00	\$ 500,000.00	93%	7%	\$ 466,817.99	\$ 33,182.01	
03080.00	Sanitary Bypass Pumping	LSUM	1	\$ 100,000.00	\$ 100,000.00	93%	7%	\$ 93,363.60	\$ 6,636.40	
02000.01	Tree, Rem. 6 In. - 12 In.	Ea	4	\$ 500.00	\$ 2,000.00	4		\$ 2,000.00	\$ -	
02021.00	HMA Surface, Rem	Syd	1,393	\$ 12.50	\$ 17,412.50	1393		\$ 17,412.50	\$ -	
02025.00	Concrete Pavt, Any Thickness, Rem	Syd	11	\$ 15.00	\$ 165.00	11		\$ 165.00	\$ -	
02030.00	Curb, Gutter, and Curb and Gutter, Any Type, Rem	Ft	235	\$ 10.00	\$ 2,350.00	235		\$ 2,350.00	\$ -	
02040.00	Sidewalk, Sidewalk Ramp, and Driveway Approach, Any Thickness, Rem	Sft	577	\$ 1.50	\$ 865.50	577		\$ 865.50	\$ -	
02050.00	Sign, Rem. Salv	Ea	1	\$ 25.00	\$ 25.00	1		\$ 25.00	\$ -	
03060.02	Drilling and Geotechnical Instrumentation and Monitoring	LSUM	1	\$ 450,000.00	\$ 450,000.00	1		\$ 450,000.00	\$ -	
03090.01	Reception Shaft STA 155+45	LSUM	1	\$ 560,000.00	\$ 560,000.00	1		\$ 560,000.00	\$ -	
03090.02	Reception Shaft STA 103+80	LSUM	1	\$ 375,000.00	\$ 375,000.00	0	1	\$ -	\$ 375,000.00	
03090.03	Launch Shaft STA 161+30	LSUM	1	\$ 535,000.00	\$ 535,000.00	1		\$ 535,000.00	\$ -	
03090.04	Launch Shaft STA 100+47	LSUM	1	\$ 530,000.00	\$ 530,000.00	1		\$ 530,000.00	\$ -	
03090.05	Reception Shaft STA 150+70	LSUM	1	\$ 525,000.00	\$ 525,000.00	1		\$ 525,000.00	\$ -	
03090.06	Diversion Manhole Shaft STA 105+50	LSUM	1	\$ 415,000.00	\$ 415,000.00	1		\$ 415,000.00	\$ -	
04000.01	8 in., SDR 26 PVC Sanitary Sewer, SD-TD-2	Ft	84	\$ 250.00	\$ 21,000.00	84		\$ 21,000.00	\$ -	
04000.02	10 in., SDR 26 PVC Sanitary Sewer, SD-TD-2	Ft	49	\$ 275.00	\$ 13,475.00	49		\$ 13,475.00	\$ -	
04000.05	18 in., SDR 26 PVC Sanitary Sewer, SD-TD-2	Ft	41	\$ 350.00	\$ 14,350.00	41		\$ 14,350.00	\$ -	
04000.07	24 in., SDR 26 PVC Sanitary Sewer, SD-TD-2	Ft	39	\$ 700.00	\$ 27,300.00	39		\$ 27,300.00	\$ -	
04000.08	30 in., SDR 26 PVC Sanitary Sewer, SD-TD-2	Ft	9	\$ 10,000.00	\$ 90,000.00	9		\$ 90,000.00	\$ -	
04015.00	36 in. FRP Sanitary Sewer (HOBAS)	Ft	1,594	\$ 2,900.00	\$ 4,622,600.00	1594		\$ 4,622,600.00	\$ -	
04030.01	Sanitary Manhole, 48 In. Dia. (0-8' Deep)	Ea	6	\$ 7,500.00	\$ 45,000.00	6		\$ 45,000.00	\$ -	
04030.02	Sanitary Manhole, 48 In. Dia., Additional Depth	Ft	8	\$ 250.00	\$ 2,000.00	8		\$ 2,000.00	\$ -	
04030.07	Sanitary Manhole, 48 In. Dia., Fiberglass (0-8 ft)	Ea	2	\$ 40,000.00	\$ 80,000.00	1	1	\$ 40,000.00	\$ 40,000.00	
04030.08	Sanitary Manhole, 48 In. Dia., Fiberglass, Additional Depth	Ft	35	\$ 250.00	\$ 8,750.00	21	14	\$ 5,250.00	\$ 3,500.00	
04030.09	Sanitary Manhole, 72 In. Dia., Fiberglass (0-8 ft)	Ea	3	\$ 55,000.00	\$ 165,000.00	3		\$ 165,000.00	\$ -	
04030.10	Sanitary Manhole, 72 In. Dia., Fiberglass, Additional Depth	Ft	61	\$ 500.00	\$ 30,500.00	61		\$ 30,500.00	\$ -	
04030.11	Sanitary Manhole, Diversion, STA 100+21	Ea	1	\$ 175,000.00	\$ 175,000.00		1	\$ -	\$ 175,000.00	
04040.06	Sanitary Manhole External Drop Connection, 24 In.	Ea	1	\$ 25,000.00	\$ 25,000.00	1		\$ 25,000.00	\$ -	
04050.04	Sanitary Manhole Over Existing ("Doghouse"), 84 In. Dia	Ea	2	\$ 90,000.00	\$ 180,000.00	2		\$ 180,000.00	\$ -	
04060.00	Sanitary Structure Cover	Ea	13	\$ 650.00	\$ 8,450.00	13		\$ 8,450.00	\$ -	
04061.00	Sanitary Structure Cover, Adjust	Ea	13	\$ 1,750.00	\$ 22,750.00	13		\$ 22,750.00	\$ -	
04070.05	Sanitary Sewer Pipe, 18 In. Dia., Abandon	Ft	450	\$ 40.00	\$ 18,000.00	450		\$ 18,000.00	\$ -	
04080.02	Sanitary Sewer Pipe, 10 In. Dia., Rem	Ft	35	\$ 40.00	\$ 1,400.00	35		\$ 1,400.00	\$ -	
04080.03	Sanitary Sewer Pipe, 12 In. Dia., Rem	Ft	45	\$ 50.00	\$ 2,250.00	45		\$ 2,250.00	\$ -	
04080.07	Sanitary Sewer Pipe, 24 In. Dia., Rem	Ft	40	\$ 50.00	\$ 2,000.00	40		\$ 2,000.00	\$ -	
04090.00	Sanitary Sewer Structure, Abandon	Ea	4	\$ 1,000.00	\$ 4,000.00	4		\$ 4,000.00	\$ -	
04100.00	Sanitary Sewer Structure, Rem	Ea	2	\$ 5,000.00	\$ 10,000.00	1	1	\$ 5,000.00	\$ 5,000.00	
04110.02	Sanitary Sewer Tap, 10 In. Dia.	Ea	1	\$ 2,500.00	\$ 2,500.00	1		\$ 2,500.00	\$ -	
06000.01	12 in., CL IV RCP Storm Sewer, SD-TD-1	Ft	35	\$ 150.00	\$ 5,250.00	35		\$ 5,250.00	\$ -	
06000.05	24 in., CL IV RCP Storm Sewer, SD-TD-1	Ft	49	\$ 200.00	\$ 9,800.00	49		\$ 9,800.00	\$ -	
06030.04	Storm Sewer Tap, 12 In. Dia.	Ea	1	\$ 1,500.00	\$ 1,500.00	1		\$ 1,500.00	\$ -	
06050.01	Storm Manhole, 48 In. Dia. (0-8' deep)	Ea	1	\$ 4,000.00	\$ 4,000.00	1		\$ 4,000.00	\$ -	
06050.03	Storm Manhole, 60 In. Dia. (0-8' deep)	Ea	1	\$ 7,000.00	\$ 7,000.00	1		\$ 7,000.00	\$ -	
06050.04	Storm Manhole, 60 In. Dia., Additional Depth	Ft	2	\$ 165.00	\$ 330.00	2		\$ 330.00	\$ -	
06060.03	Storm Inlet-Junction, 48 In. Dia., (0-8' deep)	Ea	1	\$ 4,000.00	\$ 4,000.00	1		\$ 4,000.00	\$ -	
06060.04	Storm Inlet-Junction, 48 In. Dia., Additional Depth	Ft	3	\$ 150.00	\$ 450.00	3		\$ 450.00	\$ -	
06160.01	Storm Structure Cover	Ea	3	\$ 550.00	\$ 1,650.00	3		\$ 1,650.00	\$ -	
06160.02	Storm Structure Cover, Adjust	Ea	5	\$ 1,750.00	\$ 8,750.00	5		\$ 8,750.00	\$ -	
06181.02	Underdrain, Subbase, 6 In.	Ft	50	\$ 50.00	\$ 2,500.00	50		\$ 2,500.00	\$ -	
07000.05	12 in., PC 350 DIP w/polywrap, SD-TD-1	Ft	221	\$ 300.00	\$ 66,300.00	221		\$ 66,300.00	\$ -	
07013.02	12 in. 45° DIP Bend	Ea	9	\$ 1,800.00	\$ 16,200.00	9		\$ 16,200.00	\$ -	
07030.15	12 in. X 12 in. X 12 in. DIP Tee	Ea	3	\$ 3,000.00	\$ 9,000.00	3		\$ 9,000.00	\$ -	
07040.09	12 in. X 12 in. DIP Cross	Ea	1	\$ 5,000.00	\$ 5,000.00	1		\$ 5,000.00	\$ -	
07050.04	Gate Valve in Box, 12 In.	Ea	1	\$ 4,500.00	\$ 4,500.00	1		\$ 4,500.00	\$ -	
07091.00	Water Structure Cover, Adjust	Ea	1	\$ 1,750.00	\$ 1,750.00	1		\$ 1,750.00	\$ -	
07150.05	Water Main Pipe, 12 In. Dia., Rem	Ft	71	\$ 30.00	\$ 2,130.00	71		\$ 2,130.00	\$ -	
07170.05	Gate Valve in Box, 12 In. Dia., Rem	Ea	1	\$ 1,000.00	\$ 1,000.00	1		\$ 1,000.00	\$ -	
08010.02	Aggregate Base, 6 In., 21AA, CIP	Syd	153	\$ 30.00	\$ 4,590.00	153		\$ 4,590.00	\$ -	
08010.04	Aggregate Base, 10 In., 21AA, CIP	Syd	1,365	\$ 40.00	\$ 54,600.00	906	459	\$ 36,240.00	\$ 18,360.00	
08070.14	HMA 4EL	Ton	241	\$ 200.00	\$ 48,200.00	241		\$ 48,200.00	\$ -	
08070.18	HMA 5EL	Ton	160	\$ 200.00	\$ 32,000.00	160		\$ 32,000.00	\$ -	
08110.00	Conc. Curb or Curb & Gutter, All Types	Ft	251	\$ 50.00	\$ 12,550.00	251		\$ 12,550.00	\$ -	
08131.01	Conc. Sidewalk, Drive Approach, or Ramp, 6 In.	Sft	450	\$ 8.50	\$ 3,825.00	450		\$ 3,825.00	\$ -	
08131.02	Conc. Sidewalk, Drive Approach, or Ramp, 8 In.	Sft	223	\$ 10.00	\$ 2,230.00	223		\$ 2,230.00	\$ -	
08150.00	Detectable Warning Surface	Ft	20	\$ 75.00	\$ 1,500.00	20		\$ 1,500.00	\$ -	
10060.00	Turf Restoration	Syd	14	\$ 25.00	\$ 350.00	14		\$ 350.00	\$ -	
Sub Total								\$ 8,678,238.00	\$ 616,860.00	
Percentage								93%	7%	
Total								\$ 11,514,907.02	\$ 818,493.98	
Grand total								\$12,333,401.00		

Table T3.2									
Part A - First and Miller Cured-In-Place Pipe (CIPP) Lining Construction Costs									
First and Miller 40x48" Brick Sewer									
90% Design Cost Estimate					Sep-25				
ITEM CODE	DESCRIPTION	UNIT	QNTY	UNIT PRICE	COST	UM Quantity	City Quantity	UM Cost	City Cost
01000.70	Mobilization	LSUM	1	\$ 15,000.00	\$ 15,000.00	0%	100%	\$ -	\$ 15,000.00
01040.00	Traffic Control Allowance	DirS	50,000	\$ 1.00	\$ 50,000.00	16%	84%	\$ 8,000.00	\$ 42,000.00
03080.00	Sanitary Bypass Pumping	LSUM	1	\$ 230,000.00	\$ 230,000.00	16%	84%	\$ 36,800.00	\$ 193,200.00
05000.70	Pipe Preparation	LSUM	1	\$ 15,000.00	\$ 15,000.00	16%	84%	\$ 2,400.00	\$ 12,600.00
05050.70	Manhole Rehab	Vft	28	\$ 325.00	\$ 9,100.00		28	\$ -	\$ 9,100.00
05030.01	CIPP Liner, 40 In. x 48 In. Dia., Sanitary Sewer	Ft	426	\$ 1,027.00	\$ 437,502.00	70	356	\$ 71,890.00	\$ 365,612.00
Total								\$ 119,090.00	\$ 637,512.00

Table T4									
Part B – Sewer Lining Construction Costs									
Downstream of High-Level Sewer									
Preliminary Cost Estimate					Dec-24				
ITEM CODE	DESCRIPTION	UNIT	QNTY	UNIT PRICE	COST	UM Percentage	City Percentage	UM Cost	City Cost
1	Audio Video Route Survey	LS	1	\$ 4,000.00	\$ 4,000.00	0	100%	\$ -	\$ 4,000.00
2	Mobilization, Max. 10%	LS	1	\$ 250,000.00	\$ 250,000.00	0	100%	\$ -	\$ 250,000.00
3	Erosion Control	LS	1	\$ 3,000.00	\$ 3,000.00	0	100%	\$ -	\$ 3,000.00
4	Traffic Maintenance and Control	LS	1	\$ 75,000.00	\$ 75,000.00	0	100%	\$ -	\$ 75,000.00
5	36-inch, CIPP Sanitary Sewer Lining	LF	3940	\$ 700.00	\$ 2,758,000.00	0	100%	\$ -	\$ 2,758,000.00
6	Miscellaneous Restoration	LS	1	\$ 50,000.00	\$ 50,000.00	0	100%	\$ -	\$ 50,000.00
Total								\$ -	\$ 3,140,000.00