

April 25, 2024
Item No. 9.3.
NETL Ph 4 Design Change Order 2

Sponsor: Jennifer Cain, Director Capital Projects

Reviewed By CBC: City Council

Agenda Caption: Presentation, discussion, and possible action on Change Order No. 2 for the Northeast Sewer Trunk Line Ph IV Project design contract with Kimley-Horn and Associates, Inc., not to exceed \$1,030,400.

Relationship to Strategic Goals:

Core services and infrastructure

Recommendation(s): Staff recommends approval.

Summary: The City of College Station approved a contract in 2022 with Kimley-Horn and Associates, Inc. for the design of the Northeast Sewer Trunk Line Phase IV. The design will include installation of a sewer trunk line which will serve areas of the community including the University Corridor and Northgate. This project will allow for continued development in this area which could soon be limited by existing sewer capacity. The contract amendment allows for the design of the lift station in order to reroute the sewer trunk line to Cooner Street/Chimney Hill instead of through the Beverley Estates neighborhood in Bryan.

Budget & Financial Summary: A budget of \$25,500,000 is included in the Wastewater Capital Improvement Projects Fund for this project. A total of \$1,585,093 has been spent or committed to date, leaving a balance of \$23,914,907 for this change order and future costs.

Attachments:

1. NETL Ph IV Design Change Order #2

CHANGE ORDER NO. 2 DATE: March 14, 2024 Contract No. 22300588
P.O.#- 22204717 PROJECT: NE SEWER TRUNKLINE PH IV DESIGN

OWNER:
City of College Station
P.O. Box 9960
College Station, Texas 77842

CONTRACTOR:
Kimley-Horn and Associates, Inc
2800 S. Texas Ave, Ste 201 Ph: 979-775-9595
Bryan, Texas 77802 Fax: N/A

PURPOSE OF THIS CHANGE ORDER:

A. This change order is for additional design services necessitated by the route change of the proposed sewer trunkline through the Chimney Hill area instead of Beverly Estates. The significant cost increase to the design is due to the added cost of designing the lift station required by this route.

ITEM NO	UNIT	DESCRIPTION	UNIT PRICE	PREVIOUS QUANTITY	REVISED QUANTITY	ADDED COST
CO2	EA	Scope Amendment No. 2 Design Fees	\$1.00	1458500	2488900	\$1,030,400.00
					TOTAL	\$1,030,400.00

THE NET AFFECT OF THIS CHANGE ORDER IS 82%.

LINE 2 SEWER (SCWOC-6590)	\$541,498.00	
LINE 3 SEWER (SCWOC-6590)	\$488,902.00	
TOTAL CHANGE ORDER	<u>\$1,030,400.00</u>	
ORIGINAL CONTRACT AMOUNT	\$1,371,000.00	
CHANGE ORDER NO. 1	\$87,500.00	6% CHANGE
CHANGE ORDER NO. 2	<u>\$1,030,400.00</u>	75% CHANGE
REVISED CONTRACT AMOUNT	\$2,488,900.00	82% TOTAL CHANGE
SUBSTANTIAL COMPLETION DATE	6/4/2025	

APPROVED

A/E CONTRACTOR Date

ASST CITY MGR - CFO Date

PROJECT MANAGER Date

CITY ATTORNEY Date

DEPARTMENT DIRECTOR Date

CITY MANAGER Date

AMENDMENT NUMBER 2 TO THE AGREEMENT BETWEEN CLIENT AND KIMLEY-HORN AND ASSOCIATES, INC.

This is Amendment number 2 dated March 14, 2024 to the agreement between City of College Station ("Client") and Kimley-Horn and Associates, Inc. ("Consultant") dated July 28, 2022 ("the Agreement") concerning Northeast Sewer Trunkline Ph IV Design Contract (the "Project").

The Consultant has entered into the Agreement with Client for the furnishing of professional services, and the parties now desire to amend the Agreement.

The Agreement is amended to include services to be performed by Consultant for compensation as set forth below in accordance with the terms of the Agreement, which are incorporated by reference.

This Amendment is for additional professional services determined to be needed during preliminary sanitary sewer trunk line design, public involvement, and jurisdictional coordination phases. The scope of the project has changed to conveying sanitary sewer flow from the Hensel Park Lift Station to the upstream end of Northeast Sanitary Sewer – Phase 3, on the west side of SH 6, via sanitary sewer force main and gravity sewer. The new alignment will route through Winter Park, Autumn Circle, Tarrow Street, Hearthstone Circle, Chimney Hill Drive, Texas Avenue, and Hensel Street. Services involve design of approximately 1,660 linear feet of 30-inch sanitary sewer gravity line, 6,340 linear feet of 24-inch sanitary sewer gravity line, 2,930 linear feet of 18-inch sanitary sewer force main, and one (1) 6.7 million gallon per day (MGD) sanitary sewer lift station. The proposed 18-inch sanitary sewer force main will convey flow from the proposed sanitary sewer lift station at Hensel Park to an existing 24-inch sanitary sewer along Cooner Street. The proposed 24-inch sanitary sewer will connect to the existing 24-inch sanitary sewer at the east end of Cooner street and route towards Winter Park.

Consultant will perform the following services based on direction provided by City. Additional scope detailed below will be performed in accordance with the original Project scope. Reference **Attachment A** Scoping Exhibit.

Task 1: Project Management

- Prepare and attend five (5) additional project status meetings.
- Perform additional project administration.
- Perform additional Quality Assurance/Quality Control (QA/QC)
 - Perform quality control reviews for the following submittals:
 - Design Survey
 - Preliminary Sanitary Sewer Trunk Line Design (50%)
 - Lift Station Design (50%, 90%)
 - Force Main Design (50%, 90%)

Task 2: Preliminary Investigation

- Perform additional data collection and record research.
- Perform additional data review with the City.

Task 3: Design Survey

- For Setting horizontal and vertical control based on the City of College Station Control Monumentation.
- Chimney Hill Gravity Alignment Survey limits include the area from Cooner Street to Chimney Hill Drive, along Chimney Hill Drive to Spring Loop, along Spring Loop to Tarrow Street, along Tarrow Street to Autumn Circle, along Autumn Circle to Winter Park, along Winter Park for approximately 1500 lf to the southwest line of Parcel 38996, along the southwest line of Parcel 38996 to the south corner, along the southeast line of Parcel

38996 to the existing city of College Station sewer easement, along the existing sewer easement to end of line for a total length of approximately 8200 linear feet.

- Sewer Force Main Survey extents is approximately 2,600 linear feet along with 450 linear feet along Cooner Street to tie to the existing gravity main.

Task 4: Easement Documents – No Change in Scope

Task 5: Subsurface Utility Engineering

- Perform additional Level A – vacuum excavation of existing utility lines up to four (4) locations (up to 12 feet below existing grade).
- Perform Level B – Two-dimensional horizontal information obtained through application and interpretation of non-destructive surface geophysical methods. Also known as “designating,” this level incorporate Level C information and provides horizontal positioning of subsurface utilities to within approximately 1.0 foot. Designation extents will be along the proposed sanitary sewer force main corridor along the east side of Texas Avenue.
 - Level C – Surveyed data depicting visible above-ground features supplemented with Level D information.
 - Level D – information obtained from existing utility records.
 -

Task 6: Geotechnical Investigation – No Change in Scope

Task 7: Preliminary Sanitary Sewer Trunk Line Design (50%)

- Prepare 50% design submittal based upon new alignment.

Task 8: Jurisdictional Coordination

- Perform additional coordination with Texas A&M University and Texas Department of Transportation (TxDOT).

Task 9: Final Sanitary Sewer Trunk Line Design – No additional Scope

Task 10: Erosion Control Plan

- Perform additional plan preparation for sanitary sewer force main and sanitary sewer lift station.

Task 11: Environmental Services

- Perform additional environmental services for sanitary sewer force main and sanitary sewer lift station.

Task 12: Tree Protection Plan

- Perform additional plan preparation for sanitary sewer force main and sanitary sewer lift station.

Task 13: Traffic Control

- Perform additional plan preparation for sanitary sewer force main and sanitary sewer lift station.

Task 14: Public Involvement

- Prepare and attend additional public meetings with affected property owners along new alignment and Texas A&M University.
- Prepare additional exhibits, handouts, presentation slides, and meeting notes.

Task 15: Bidding Phase Services – No additional Scope

Task 16: Control Staking – No additional Scope

Task 17: Construction Phase Services

- Perform additional construction phase services for sanitary sewer force main and sanitary sewer lift station.

Task 18: Construction Materials Testing Services

- Perform additional construction materials testing for sanitary sewer lift station.

Task 19: As-built Survey – No additional Scope

Task 20: Record Drawings

- Prepare record drawings for sanitary sewer force main and sanitary sewer lift station.

Task 21: Tree Inventory – No additional Scope

Task 22: Further Investigation Directed by the City – No additional Scope

Task 23: Lift Station Design

- Preliminary Design
 - Lift Station
 - Site selection
 - Site access
 - Site screening and landscaping
 - Preliminary site layout (up to three (3) site layouts options will be provided)
 - Design calculations
 - Pump head calculations
 - Cycle time calculations
 - Hydraulic grade line calculations
 - Electrical needs
 - Instrumentation, controls, and SCADA
 - Emergency backup power options
 - Ventilation and odor control
 - Metering options (force main)
 - Site security
 - Safety considerations
 - Evaluation of reusing equipment from existing Market Center lift station (including pumps and generator)
 - Geotechnical considerations
 - Opinion of probable construction cost
 - Prepare and submit preliminary (50%) construction plan sheets for the proposed lift station. A list of specifications by section number and title will be submitted with the preliminary 60% submittal. Kimley-Horn will identify any specifications requiring a “delegated design”.
 - Plan sheets will consist of the following:
 - Cover
 - General Notes
 - Project Horizontal and Vertical Control
 - Grading Plan
 - Access Road
 - Mechanical Plan and Section
 - Construction details
 - Electrical site plan
 - Electrical control schematics

- Prepare and submit final (90% and 100% level) Contract Documents for the proposed lift station. Contract Documents shall include construction plans, front-end documents, and technical specifications.
 - Plan sheets will consist of the following:
 - Cover
 - General Notes
 - Project Horizontal and Vertical Control
 - Site Plan
 - Grading and Erosion Control Plan
 - Access Road
 - Mechanical Plan and Section
 - Construction details
 - Structural details (anticipate generator pad and electrical rack/canopy)
 - Odor control details and notes
 - Electrical site plan with arc flash analysis
 - One-line diagram, load analysis
 - Generator sizing calculations
 - Conduit schedule
 - Electrical control schematics
 - Electrical details and notes
 - Existing lift station demolition plan
- Preparation of an opinion of probable construction cost (OPCC) at 60%, 90%, and 100% design.
- Incorporate the City's 60% and 90% comments.
- TCEQ Coordination – Prepare correspondence for submittal to the TCEQ. Kimley-Horn will receive and address up to one (1) round of ordinary and reasonable comments from the TCEQ.

Task 24: Force Main Design

- Prepare and submit preliminary (60% level) 24"x36" construction plan sheets for the proposed lift station. A list of specifications by section number and title will be submitted with the preliminary 60% submittal. Kimley-Horn will identify any specifications requiring a "delegated design".
 - Plan sheets will consist of the following:
 - General Notes
 - Project Horizontal and Vertical Control
 - Site Plan
 - Grading Plan
 - Access Road
 - Mechanical Plan and Section
 - Construction details
 - Electrical site plan
 - Electrical control schematics
- Prepare and submit final (90% and 100% level) Contract Documents for the proposed lift station. Contract Documents shall include construction plans, front-end documents, and technical specifications.
 - Plan sheets will consist of the following:
 - Cover
 - General Notes
 - Project Horizontal and Vertical Control
 - Site Plan
 - Grading and Erosion Control Plan
 - Access Road
 - Mechanical Plan and Section
 - Construction details
 - Structural details (anticipate generator pad and electrical rack/canopy)

- Odor control details and notes
- Electrical site plan with arc flash analysis
- One-line diagram, load analysis, and fault current analysis
- Generator sizing calculations
- Conduit schedule
- Electrical control schematics
- Electrical details and notes
- Preparation of an opinion of probable construction cost (OPCC) at 60%, 90%, and 100% design.
- Incorporate the City's 60% and 90% comments.
- TCEQ Coordination – Prepare correspondence for submittal to the TCEQ. Kimley-Horn will receive and address up to one (1) round of ordinary and reasonable comments from the TCEQ.

We will provide our services as expeditiously as practicable with the goal of meeting the following schedule and presenting 100% Design Plans for the Sanitary Sewer Gravity Main, Sanitary Sewer Force Main, and Sanitary Sewer Lift Station to City Staff by March 14, 2025:

Task 3: Design Survey	<u>16 Weeks</u> from 2/13/2024
Task 7: Preliminary Sanitary Sewer Trunk Line Design (50%)	<u>28 Weeks</u> from 2/13/2024
Task 23: Lift Station Design	<u>28 Weeks</u> for 50%, <u>12 Weeks</u> for 90%, <u>8 Weeks</u> for 100%
Task 24: Force Main Design	<u>28 Weeks</u> for 50%, <u>12 Weeks</u> for 90%, <u>8 Weeks</u> for 100%

For the services set forth above, Client shall pay Consultant the following compensation noted under proposed CO #2 in **Attachment B**.

CLIENT:

By: _____

Title: _____

Date: _____

CONSULTANT:

KIMLEY-HORN AND ASSOCIATES, INC.

By:  _____

Title: Senior Associate

Date: 03/14/2024

LEGEND

PROPERTY LINE

CITY LIMIT

EXISTING OVERHEAD POWER

EXISTING BRYAN SANITARY SEWER MAIN

EXISTING COLLEGE STATION SANITARY SEWER MAIN

EXISTING COLLEGE STATION SANITARY SEWER FORCE MAIN

EXISTING SANITARY SEWER MAIN TO BE ABANDONED

**CO#1 - DESIGN
SURVEY
COMPLETE**

**ORIGINAL
CONTRACT -
DESIGN SURVEY**

**ORIG-
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R BY SLIP LINE INSTALLATION
R BY 12" CIPP REHABILITATION
R
WER

Phase 4 - Chimney Hill Dr Alignment (8,000 LF of 30"/24" Sanitary Sewer Line, 3,000 LF of 18" Force Main, and 4,500 LF of 18"/12" Replacement - Including Trenchless Specialist

Task	Original Contract 7/28/2022	CO #1 7/6/2023	Revised Contract Amount with CO #1	Proposed Amendment Number 2 3/14/2024	Revised Contract Amount with Amendment Number 2
1 Project Management	\$ 67,300.00		\$ 67,300.00	\$ 17,600.00	\$ 84,900.00
2 Preliminary Investigation	\$ 46,100.00		\$ 46,100.00	\$ 20,000.00	\$ 66,100.00
3 Design Survey	\$ 163,600.00	\$ 6,400.00	\$ 170,000.00	\$ 78,000.00	\$ 248,000.00
4 Easement Documents	\$ 53,700.00		\$ 53,700.00		\$ 53,700.00
5 Subsurface Utility Engineering	\$ 24,500.00		\$ 24,500.00	\$ 47,500.00	\$ 72,000.00
6 Geotechnical Investigation	\$ 37,600.00	\$ 1,600.00	\$ 39,200.00	\$ 9,000.00	\$ 48,200.00
7 Preliminary Sanitary Sewer Trunk Line Design	\$ 317,900.00	\$ 30,000.00	\$ 347,900.00	\$ (36,400.00)	\$ 311,500.00
8 Jurisdictional Coordination	\$ 21,300.00		\$ 21,300.00	\$ 6,800.00	\$ 28,100.00
9 Final Sanitary Sewer Trunk Line Design	\$ 246,700.00		\$ 246,700.00	\$ (42,600.00)	\$ 204,100.00
10 Erosion Control Plan	\$ 27,100.00		\$ 27,100.00	\$ 12,500.00	\$ 39,600.00
11 Environmental Services	\$ 23,200.00		\$ 23,200.00	\$ 13,200.00	\$ 36,400.00
12 Tree Protection Plan	\$ 25,400.00		\$ 25,400.00	\$ 12,200.00	\$ 37,600.00
13 Traffic Control	\$ 12,600.00		\$ 12,600.00	\$ 10,200.00	\$ 22,800.00
14 Public Involvement	\$ 40,600.00	\$ 15,000.00	\$ 55,600.00	\$ 5,400.00	\$ 61,000.00
15 Bidding Phase Services	\$ 30,900.00		\$ 30,900.00	\$ (1,000.00)	\$ 29,900.00
16 Control Staking	\$ 4,300.00		\$ 4,300.00		\$ 4,300.00
17 Construction Phase Services	\$ 114,400.00		\$ 114,400.00	\$ 41,900.00	\$ 156,300.00
18 Construction Material Testing Services	\$ 54,000.00		\$ 54,000.00	\$ 3,000.00	\$ 57,000.00
19 As-built Survey	\$ 12,200.00		\$ 12,200.00		\$ 12,200.00
20 Record Drawings	\$ 47,600.00		\$ 47,600.00	\$ 8,500.00	\$ 56,100.00
21 Tree Inventory		\$ 17,000.00	\$ 17,000.00		\$ 17,000.00
22 Further Investigation Directed by the City		\$ 17,500.00	\$ 17,500.00	\$ (17,500.00)	\$ -
23 Lift Station Design				\$ 688,800.00	\$ 688,800.00
24 Force Main Design				\$ 153,300.00	\$ 153,300.00
Contract Totals =	\$ 1,371,000.00	\$ 87,500.00	\$ 1,458,500.00	\$ 1,030,400.00	\$ 2,488,900.00

ATTACHMENT B

Amendment 2 Fee Summary
Northeast Wastewater Trunk Line - Phase 4
City of College Station

Phase 4 - Chimney Hill Dr Alignment (8,000 LF of 30"/24" Sanitary Sewer Line, 3,000 LF of 18" Force Main, and 4,500 LF of 18"/12" Replacement - Including Trenchless Specialist														
Task	Labor Hours					Labor Costs								Subtotal
	Senior Professional	Professional	Analyst	Support Staff	Total	Senior Professional	Professional	Analyst	Support Staff	Total	ODC's and Subs			
1 Project Management	10	42	12	12	76	\$ 4,000	\$ 9,600	\$ 1,900	\$ 1,300	\$16,800	\$800	\$17,600		
2 Preliminary Investigation	4	36	59		99	\$ 1,600	\$ 8,200	\$ 9,300		\$19,100	\$900	\$20,000		
3 Design Survey	12	124	12		148		\$ 2,800	\$ 21,200		\$24,000	\$54,000	\$78,000		
4 Easement Documents														
5 Subsurface Utility Engineering											\$47,500	\$47,500		
6 Geotechnical Investigation											\$9,000	\$9,000		
7 Preliminary Sanitary Sewer Trunk Line Design	-12	-40	-140		-192	\$ (4,800)	\$ (9,100)	\$ (20,800)		(\$34,700)	(\$1,700)	(\$36,400)		
8 Jurisdictional Coordination	4	9	17		30	\$ 1,600	\$ 2,100	\$ 2,700		\$6,400	\$400	\$6,800		
9 Final Sanitary Sewer Trunk Line Design	-10	-42	-184		-236	\$ (4,000)	\$ (9,600)	\$ (27,100)		(\$40,700)	(\$1,900)	(\$42,600)		
10 Erosion Control Plan		12	62		74		\$ 2,800	\$ 9,100		\$11,900	\$600	\$12,500		
11 Environmental Services		30	40		70		\$ 6,900	\$ 5,700		\$12,600	\$600	\$13,200		
12 Tree Protection Plan	2	10	58		70	\$ 800	\$ 2,300	\$ 8,500		\$11,600	\$600	\$12,200		
13 Traffic Control	2	14	40		56	\$ 800	\$ 3,200	\$ 5,700		\$9,700	\$500	\$10,200		
14 Public Involvement	2	8	16		26	\$ 800	\$ 1,900	\$ 2,500		\$5,200	\$200	\$5,400		
15 Bidding Phase Services		-4			-4		\$ (900)			(\$900)	(\$100)	(\$1,000)		
16 Control Staking														
17 Construction Phase Services	15	80	100		195	\$ 6,000	\$ 18,200	\$ 15,700		\$39,900	\$2,000	\$41,900		
18 Construction Material Testing Services											\$3,000	\$3,000		
19 As-built Survey														
20 Record Drawings		12	30		42		\$ 2,700	\$ 4,600		\$7,300	\$1,200	\$8,500		
21 Tree Inventory														
22 Further Investigation Directed by the City		-38	-51		-89		\$ (8,700)	\$ (8,000)		(\$16,700)	(\$800)	(\$17,500)		
23 Lift Station Design	240	1,048	2,117		3,405	\$ 95,100	\$ 238,400	\$ 320,200		\$653,700	\$35,100	\$688,800		
24 Force Main Design	82	192	444		718	\$ 32,500	\$ 43,700	\$ 68,200		\$144,400	\$68,900	\$213,300		
Contract Totals =	351	1,493	2,632	12	4,577	\$ 134,400	\$ 314,500	\$ 419,400	\$ 1,300	\$869,600	\$160,800	\$1,030,400		

**Amendment 2 Fee Summary
 Northeast Wastewater Trunk Line - Phase 4
 City of College Station**

Phase 4 - Chimney Hill Dr Alignment (8,000 LF of 30"/24" Sanitary Sewer Line, 3,000 LF of 18" Force Main, and 4,500 LF of 18"/12" Replacement - Including Trenches)										
Labor Hours										
Task	Senior Professional	Professional	Analyst	Support Staff	Total	Senior Professional	Professional	Professional	Professional	
1 Project Management	10	42	12	12	76	\$	\$	4,000	\$	9,600
2 Preliminary Investigation	4	36	59		99	\$	\$	1,600	\$	8,200
3 Design Survey	12	124	12		148					2,800
4 Easement Documents										
5 Subsurface Utility Engineering										
6 Geotechnical Investigation										
7 Preliminary Sanitary Sewer Trunk Line Design	-12	-40	-140		-192	\$	\$	(4,800)	\$	(9,100)
8 Jurisdictional Coordination	4	9	17		30	\$	\$	1,600	\$	2,100
9 Final Sanitary Sewer Trunk Line Design	-10	-42	-184		-236	\$	\$	(4,000)	\$	(9,600)
10 Erosion Control Plan		12	62		74					2,800
11 Environmental Services		30	40		70					6,900
12 Tree Protection Plan	2	10	58		70	\$	\$	800	\$	2,300
13 Traffic Control	2	14	40		56	\$	\$	800	\$	3,200
14 Public Involvement	2	8	16		26	\$	\$	800	\$	1,900
15 Bidding Phase Services		-4			-4					(900)
16 Control Staking										
17 Construction Phase Services	15	80	100		195	\$	\$	6,000	\$	18,200
18 Construction Material Testing Services										
19 As-built Survey										
20 Record Drawings		12	30		42					2,700
21 Tree Inventory										
22 Further Investigation Directed by the City		-38	-51							(8,700)
23 Lift Station Design	240	1,048	2,117		3,405	\$	\$	95,100	\$	238,400
24 Force Main Design	82	192	444		718	\$	\$	32,500	\$	43,700
Contract Totals =	351	1,493	2,632	12	4,577	\$	\$	134,400	\$	314,500