

DRAFT

**Texas General Land Office
CDBG-MIT Competition
Application**

from

CITY OF LEXINGTON

DRAFT

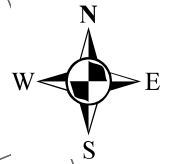
Description

Flooding from significant storms such as hurricanes and tropical storms occurs within the project areas and these areas have been impacted in the last 5 years. Flooding is occurring due to lack of stormwater infrastructure conveyance. Stormwater inundates roads within the City limits and stormwater overtops roads in larger storm events due to inadequate culvert sizing. City of Lexington has widespread issues of flooding in larger storm events and there are three areas of interest identified in this application. The three areas generally represent common areas that outfall stormwater in a given direction. Hazardous vehicular travel and property damage are impacts of the flooding. There are no local mitigation efforts planned or underway for the flooding other than pursuit of this grant application. This flooding hazard has been known by the City; however, due to cost of improvements and lack of funding, mitigation was never an option.

The project will upgrade and improve downstream drainage infrastructure in the three areas. Large diameter pipe and box culverts are proposed on the downstream portions of drainage infrastructure for each area. Improvements will also include clearing debris within the Ordinary High Water Mark (OHWM) of creeks and regrading the creeks immediately downstream of major outfall locations. The drainage improvements described will address the hazard risks described above by improving downstream stormwater conveyance that is currently inadequate.





Project: City of Lexington Drainage Improvements
Project Sites: Area 1, Area 2, Area 3
Activities for Areas 1, 2, and 3:
Storm sewer, culvert and drainage ditch improvements are proposed for all three areas. City of Lexington has widespread issues of flooding in larger storm events and there are three areas of interest identified in this application. The three areas generally represent common areas that outfall stormwater in a given direction. The project will upgrade and improve downstream drainage infrastructure to provide adequate conveyance of stormwater flows. Large diameter pipe and box culverts are proposed on the downstream portions of drainage infrastructure for each area. Improvements will also include clearing debris within the Ordinary High Water Mark (OHWM) of the creeks and regrading the creeks immediately downstream of major outfall locations. In Area 1 the improvements proposed are regrading ditches on the north side of town near Business 77 (N. Rockdale Street) and baseball fields. Culvert improvements crossing Business 77 and within the park are also proposed. In Area 2, an unnamed tributary of Shaw Branch is proposed to be cleared and regraded to provide increased downstream drainage conveyance and depth for upstream storm sewer improvements. Box culvert improvements are proposed from near 3rd St. and Caldwell St. to 4th St. and Caldwell St. A drainage ditch from south of McDade\Belton Street to Business 77 is proposed to be cleared and regraded to provide increased downstream drainage conveyance and depth for upstream storm sewer improvements. Culvert improvements at Belton\McDade Street and Business 77 is proposed. In Area 3, a drainage ditch is proposed to be cleared and regraded to provide increased downstream drainage conveyance and depth for upstream storm sewer improvements south of Avenue D at Shaw St. Culvert improvements are proposed at Avenue D and Shaw Street. The risk being mitigated is flooding.

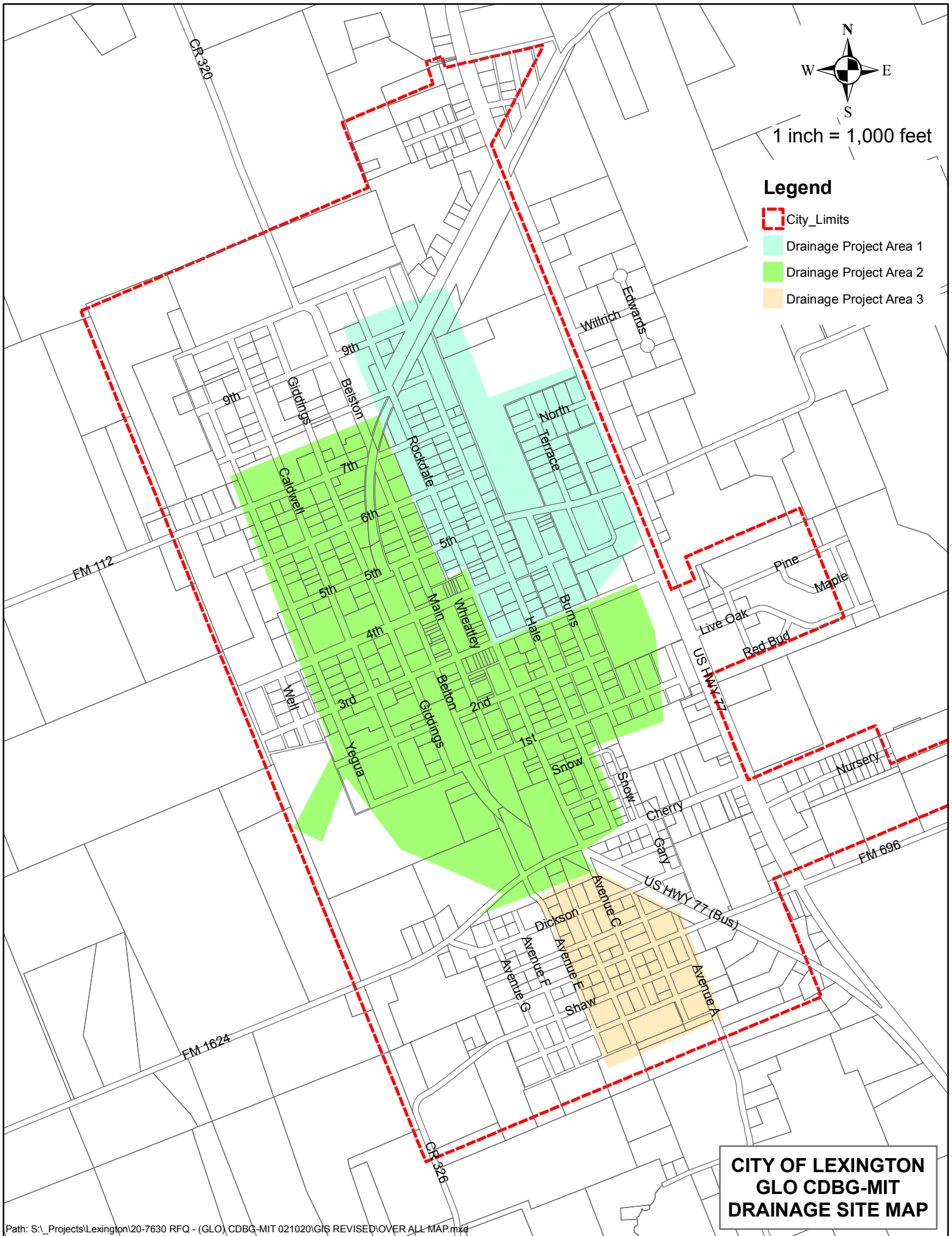
NA



1 inch = 1,000 feet

Legend

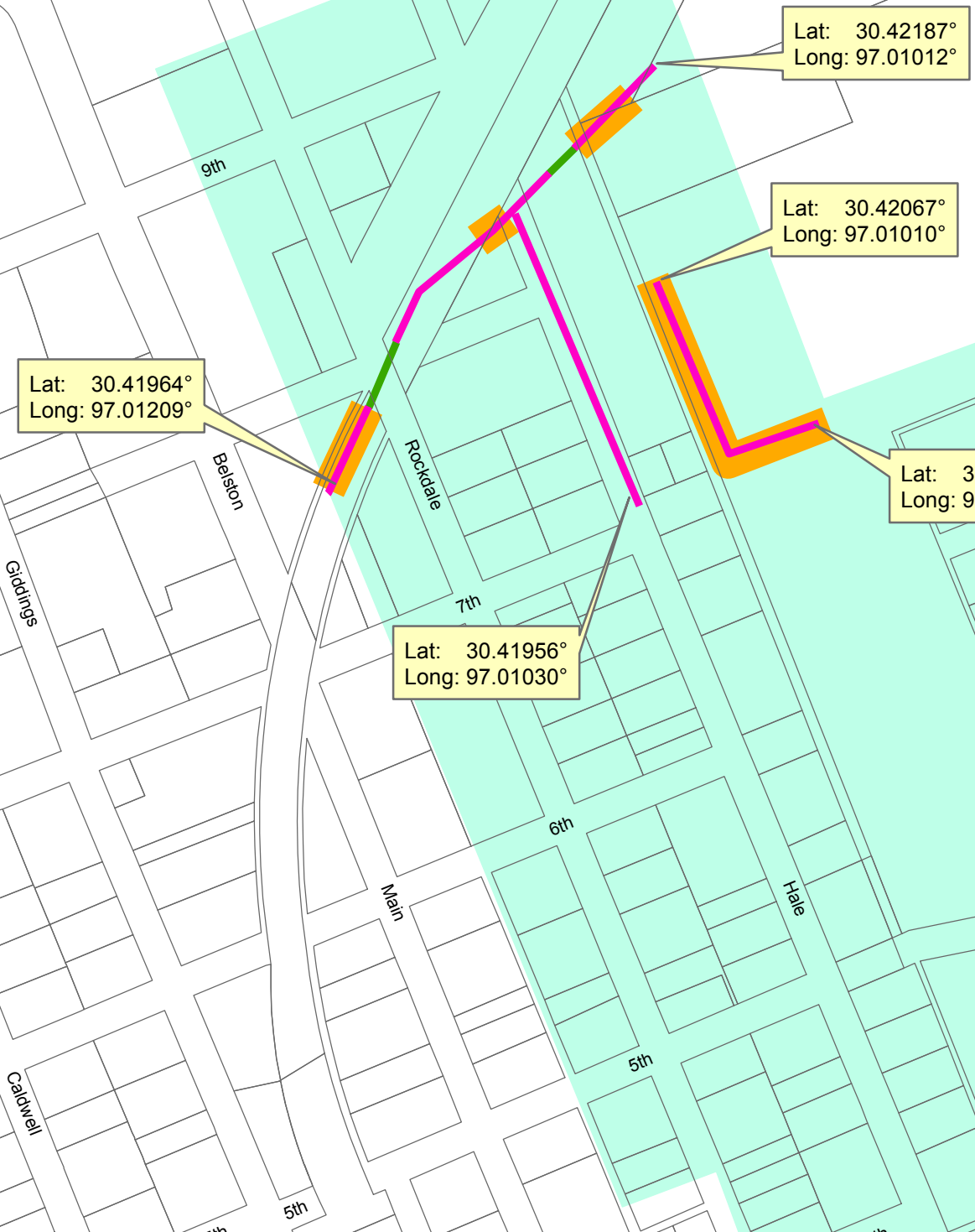
-  City_Limits
-  Drainage Project Area 1
-  Drainage Project Area 2
-  Drainage Project Area 3



**CITY OF LEXINGTON
GLO CDBG-MIT
DRAINAGE SITE MAP**



- Legend**
- City_Limits
 - Drainage Project Area 1
 - DITCH
 - CULVERT
 - Easement Aquisition



Lat: 30.41964°
Long: 97.01209°

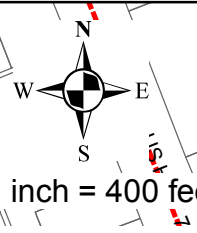
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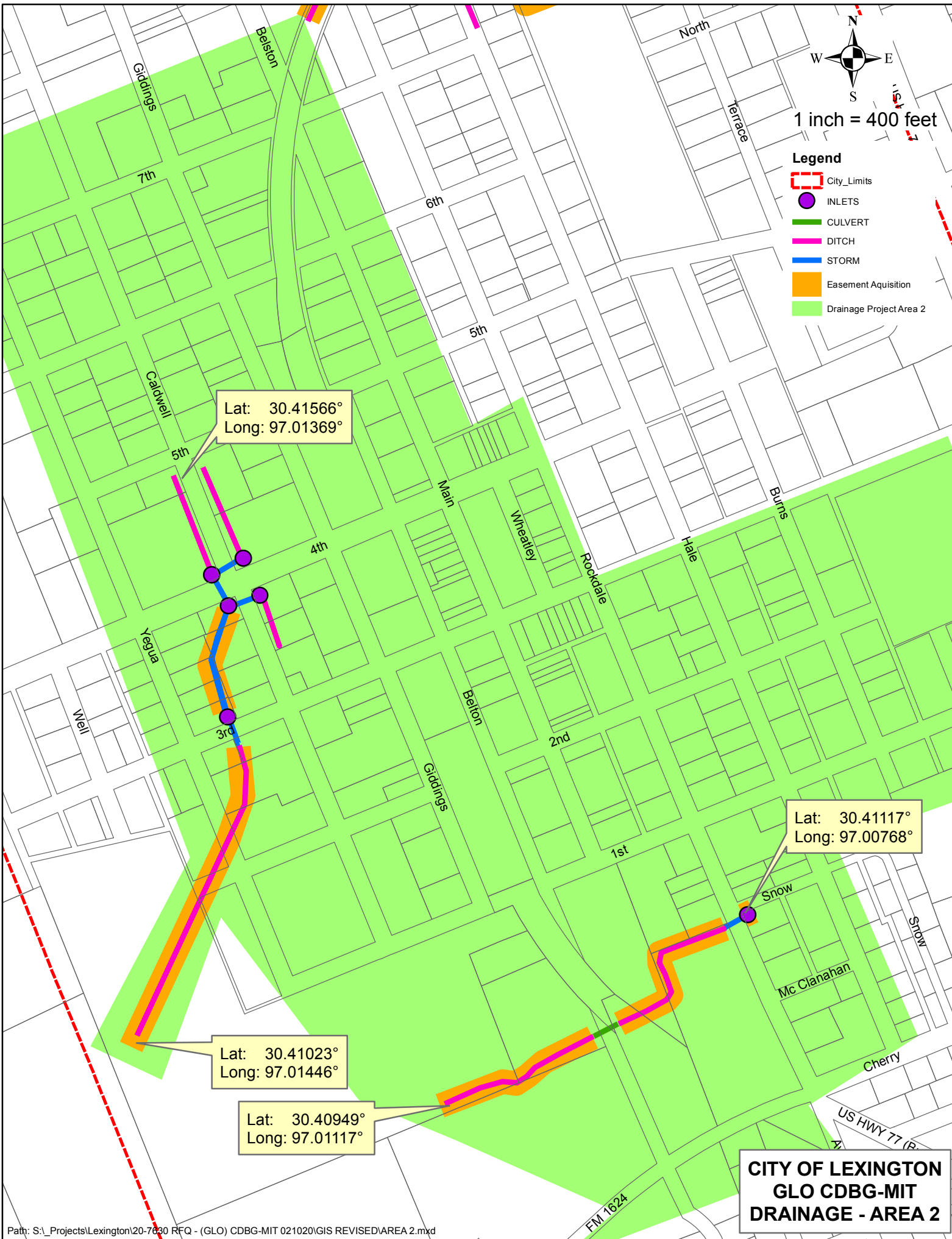
Lat: 30.41985°
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Lat: 30.41956°
Long: 97.01030°

**CITY OF LEXINGTON
GLO CDBG-MIT
DRAINAGE - AREA 1**



- Legend**
- City Limits
 - INLETS
 - CULVERT
 - DITCH
 - STORM
 - Easement Aquisition
 - Drainage Project Area 2



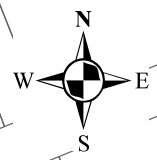
Lat: 30.41566°
Long: 97.01369°

Lat: 30.41117°
Long: 97.00768°

Lat: 30.41023°
Long: 97.01446°






Lat: 30.40949°
Long: 97.01117°

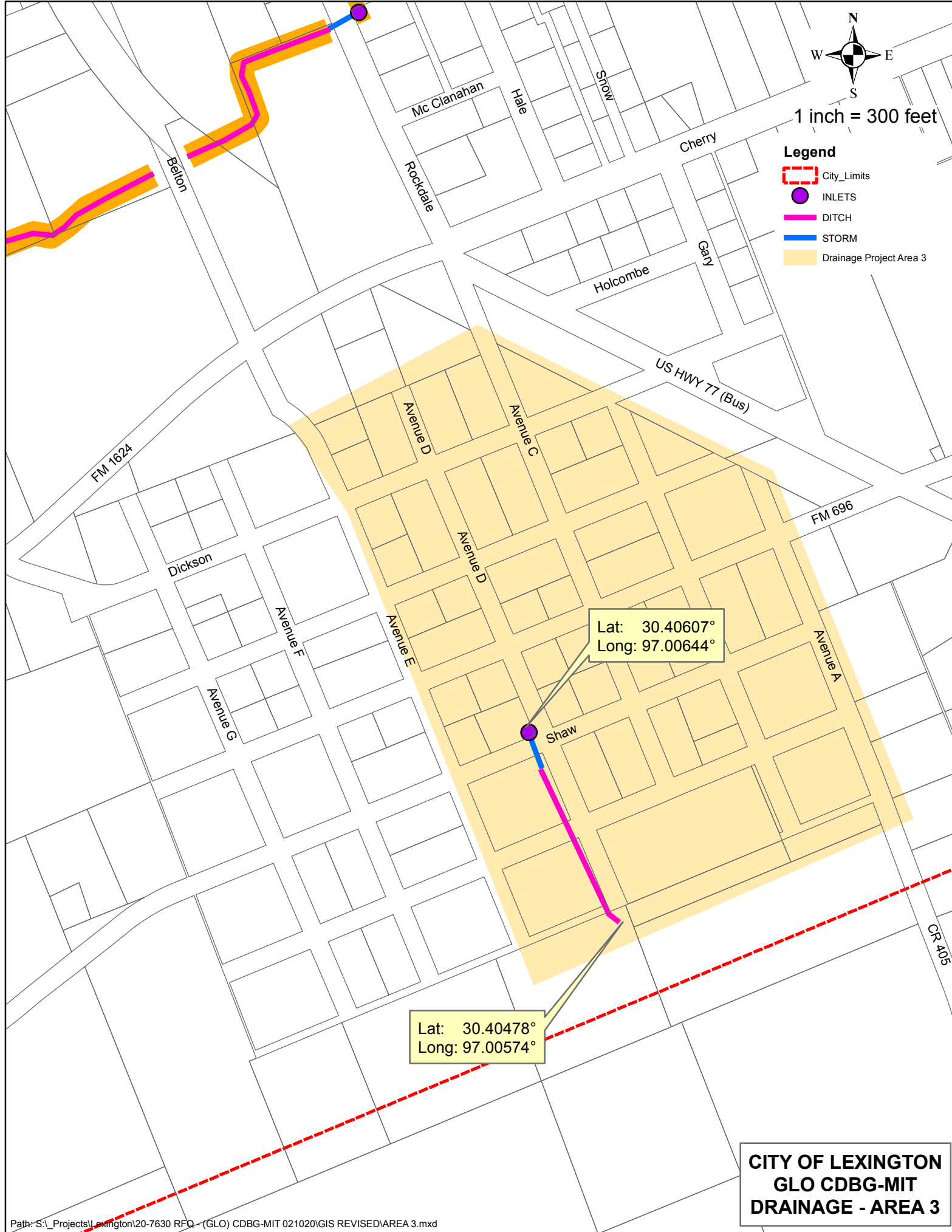
**CITY OF LEXINGTON
GLO CDBG-MIT
DRAINAGE - AREA 2**



1 inch = 300 feet

Legend

-  City Limits
-  INLETS
-  DITCH
-  STORM
-  Drainage Project Area 3



Lat: 30.40607°
Long: 97.00644°

Lat: 30.40478°
Long: 97.00574°

**CITY OF LEXINGTON
GLO CDBG-MIT
DRAINAGE - AREA 3**

CITY OF LEXINGTON

GLO CDBG MIT

Prepared By BEFCO Engineering, Inc.
Date:9/22/2020

Item	Description	Quantity	Units	Unit Price	Total
AREA 1 - DRAINAGE					
1	DITCH GRADING AND HAUL OFF	3990	CY	\$20.00	\$79,800.00
2	REVEGETATION	6215	SY	\$12.00	\$74,580.00
3	7' X 3' BOX CULVERT	80	LF	\$750.00	\$60,000.00
4	TUNNEL BORE 1 - 3' X 3' BOX CULVERT	70	LF	\$2,600.00	\$182,000.00
5	HEADWALL FOR BOX CULVERT	4	EA	\$25,000.00	\$100,000.00
6	CONCRETE APRON	115	SY	\$100.00	\$11,500.00
7	GUARDRAIL AT HEADWALL	80	LF	\$125.00	\$10,000.00
8	PAVEMENT RECONSTRUCTION WITH 8" BASE AND 2" HMAC	600	SY	\$90.00	\$54,000.00
9	UTILITY RELOCATION ALLOWANCE	100	LF	\$100.00	\$10,000.00
10	EROSION CONTROL ALLOWANCE	1	LS	\$5,000.00	\$5,000.00
11	TRAFFIC CONTROL ALLOWANCE	1	LS	\$5,000.00	\$5,000.00
Subtotal Construction					\$591,880.00
Construction Contingency (15%)					\$88,782.00
Total Construction					\$680,662.00
	EASEMENT ACQUISITION	62,750	SF	\$5.00	\$313,750.00
Total Construction and Acquisition - Area 1					\$994,412.00

AREA 2 - DRAINAGE

1	DITCH GRADING AND HAUL OFF	8000	CY	\$20.00	\$160,000.00
2	SHALLOW DITCH GRADING AND HAUL OFF	1920	LF	\$20.00	\$38,400.00
3	DEBRIS REMOVAL WITHIN ORDINARY HIGH WATER MARK AND HAUL OFF	3430	CY	\$20.00	\$68,600.00
4	REVEGETATION	14995	SY	\$12.00	\$179,940.00
5	24" STORM PIPE	120	LF	\$110.00	\$13,200.00
6	6' X 4' BOX CULVERT	130	LF	\$500.00	\$65,000.00
7	8' X 4' BOX CULVERT	510	LF	\$800.00	\$408,000.00
8	TUNNEL BORE 1 - 6' X 3' BOX CULVERT	50	LF	\$5,000.00	\$250,000.00
9	HEADWALL FOR BOX CULVERT	4	EA	\$25,000.00	\$100,000.00
10	CONCRETE APRON	160	SY	\$100.00	\$16,000.00
11	JUNCTION BOX WITH INLETS	4	EA	\$15,000.00	\$60,000.00
12	STORM SEWER INLETS	2	EA	\$10,000.00	\$20,000.00
13	GUARDRAIL AT HEADWALL	80	LF	\$125.00	\$10,000.00
14	PAVEMENT RECONSTRUCTION WITH 8" BASE AND 2" HMAC	1891	SY	\$90.00	\$170,190.00
15	UTILITY RELOCATION ALLOWANCE	600	LF	\$100.00	\$60,000.00
16	EROSION CONTROL ALLOWANCE	1	LS	\$10,000.00	\$10,000.00
17	TRAFFIC CONTROL ALLOWANCE	1	LS	\$10,000.00	\$10,000.00
18	USACE MITIGATION ALLOWANCE	1	LS	\$750,000.00	\$750,000.00
				Subtotal Construction	\$2,389,330.00
				Construction Contingency (15%)	\$358,399.50
				Total Construction	\$2,747,729.50
	EASEMENT ACQUISITION	200,225	SF	\$5.00	\$1,001,125.00
Total Construction and Acquisition - Area 2					\$3,748,854.50

AREA 3 - DRAINAGE

1	DITCH GRADING AND HAUL OFF	605	CY	\$20.00	\$12,100.00
2	REVEGETATION	1100	SY	\$12.00	\$13,200.00
3	42" STORM PIPE	100	LF	\$175.00	\$17,500.00
4	HEADWALL FOR GREATER THAN 24" PIPE	1	EA	\$15,000.00	\$15,000.00
5	CONCRETE APRON	30	SY	\$100.00	\$3,000.00
6	STORM SEWER INLETS	1	EA	\$10,000.00	\$10,000.00
7	PAVEMENT RECONSTRUCTION WITH 8" BASE AND 2" HMAC	625	SY	\$90.00	\$56,250.00
8	UTILITY RELOCATION ALLOWANCE	100	LF	\$100.00	\$10,000.00
9	EROSION CONTROL ALLOWANCE	1	LS	\$5,000.00	\$5,000.00
10	TRAFFIC CONTROL ALLOWANCE	1	LS	\$5,000.00	\$5,000.00
11	USACE MITIGATION ALLOWANCE	1	LS	\$250,000.00	\$250,000.00
				Subtotal Construction	\$397,050.00
				Construction Contingency (15%)	\$59,557.50
				Total Construction	\$456,607.50
	EASEMENT ACQUISITION	0	SF	\$5.00	\$0.00
				Total Construction and Acquisition - Area 3	\$456,607.50

TOTAL CONSTRUCTION (INCLUDES CONTINGENCY):	\$3,884,999.00
ACQUISITION:	\$1,314,875.00
TOTAL CONSTRUCTION AND ACQUISITION:	\$5,199,874.00
ENGINEERING\SURVEYING\ACQUISITION LEGAL (15%):	\$ 779,981.10
TOTAL CONSTRUCTION, ACQUISITION, PROFESSIONAL FEES:	\$5,979,855.10
GRANT ADMINISTRATION (8%):	\$ 478,388.41
Grand Total:	\$6,458,243.51

Notes:

1. BEFCO Engineering, Inc. does not guarantee or warrant that quantities, bids or actual costs will not vary from the professional opinion of probable cost shown herein. Costs reflected herein are based on professional opinions based on experience, available data and limited conceptual engineering design.

BEFCO Engineering, Inc. has no control over the cost of construction such as labor, materials, equipment, etc.

2. Cost estimate provided is not based on detailed engineering design or appraisals.

Lexington Drainage Improvements

Tasks

Project Phase	Start Date	Length (months)	Completion Date
Procurement of GA			
Procurement of Engineer			
Start-up documentation			
Broad Environmental Review			
Engineering Design and Permitting	6/1/2021	36	6/1/2024
Acquisition	6/1/2022	12	6/1/2023
Bid Advertisement	6/1/2024	3	9/1/2024
Contract Award	9/1/2024	1	10/1/2024
Construction NTP	10/1/2024	0	10/1/2024
Submit As-Builts/COCC/FWCR	5/1/2026	1	6/1/2026
Construction	10/1/2024	18	4/1/2026
Construction activity completion	4/1/2026	1	5/1/2026
Contract Closeout	6/1/2026	6	12/1/2026

(2 years of survey and design, 1 year permitting)

(start after 1 year of design and complete prior to start of permitting)