

New Culvert Crossing



Channel Improvements



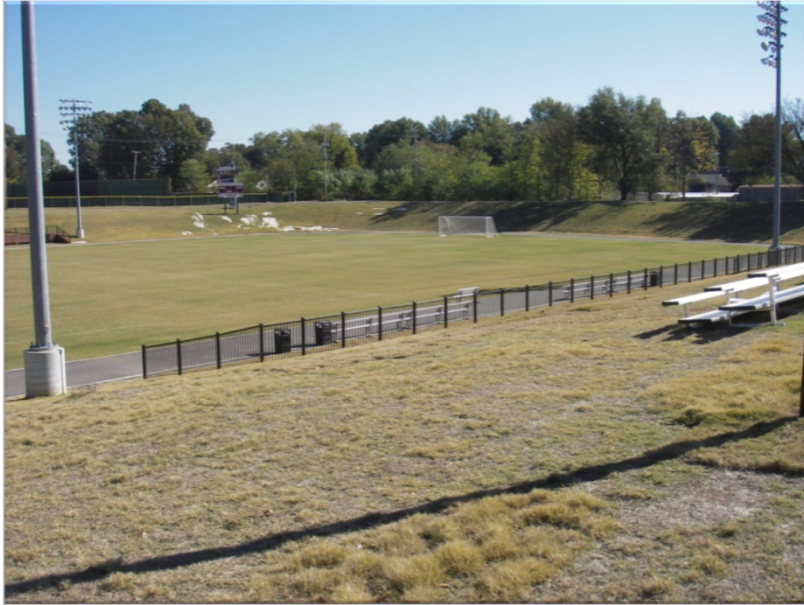
New Storm Sewer



Large Scale Conveyance



Stormwater Detention Ponds



Low Impact Development



How You Can Help?

- Flooding Issues
 - Flooding in yards, buildings, and roadways
 - Reoccurring for small storms
 - Flooding for larger extreme events
- Maintenance Issues
 - Blocked inlets
 - Debris in channel



How Can You Help?

- Flooding Data Collection Form
 - Available in paper or electronic form
 - Can be mailed, e-mailed or faxed
- Email Information To: CherryBayou@TetraTech.com
 - Name
 - Address
 - Location of Flooding/Maintenance Issue
 - Description of Flooding/Maintenance Issue



How Can You Help?

Enter New 311 Request or Check Status of Current 311 Requests

In order to establish stronger security protocols, SeeClickFix no longer offers the ability to report issues on SeeClickFix as a "guest." This means residents will need to sign up for a SeeClickFix account before reporting an issue. However, you can still report anonymously, if you choose to do so. Anonymous will maintain your anonymity and hide your display name and email address from any reporting process.

←

→

↺

Secure

https://memphistn.gov/government/311

REPORT

REQUESTS

Search for issues nearby

Map

Satellite

Drag red marker to refine the location.

Street Address *

3815-3841 Rhodes Avenue

City/County *

Memphis

State/Province *

Tennessee

Step 1 of 2

Next »

311 Call Center

125 N. Main St. Room #438

311, (901) 636-6500

Monday - Friday 8:00 am - 5:00 pm

Report an Issue

SeeClickFix

powered by

Questions?

Thank you for coming!!

Project Management, LLC

DATE: 3/29/2018

TIME: 6:00PM

MEETING DESCRIPTION: Meeting to discuss the City's assement efforts in the area

[illegible]

APPENDIX B: PLANNING-LEVEL COST OPINIONS

This Appendix includes a Planning-Level Opinion of Probable Cost for the proposed Cherry Bayou Drainage Master Plan improvements. The planning-level cost opinions are based on contemporary costs from similar projects, Tennessee Department of Transportation Average Unit Prices (2020 awarded contracts), and engineering judgement.

In general, a 35% mark-up has been included in the adjusted unit costs for mobilization/demobilization, maintenance of traffic, bonds and insurance, contingency, engineering, and permitting. Real estate and utility relocation costs are not included. We also recommend an additional 25% contingency for the conceptual level of design.

Planning-Level Cost Opinion Summary

Project	Type	Base Cost Opinion	With Contingency (25%)
Cherry Bayou			
CB-02 Alternative	Capacity Improvements	\$ 762,048	\$ 952,560
CB-03 Alternative	Capacity Improvements	\$ 110,125	\$ 137,657
CB-05 and CB-05.04 Alternative	Capacity Improvements	\$ 7,647,202	\$ 9,559,003
CB-07 Alternative	Capacity Improvements	\$ 530,439	\$ 663,049
CB-12.6 and CB-12.8 Alternative	Capacity Improvements	\$ 523,380	\$ 654,225
CB-20, CB-20.4, and CB-23 Alternative	Capacity Improvements	\$ 6,070,671	\$ 7,588,339
CB-21 Alternative	Capacity Improvements	\$ 1,783,281	\$ 2,229,101
CB-28 Alternative	Capacity Improvements	\$ 164,149	\$ 205,187
CB-30, CB-30.2, and CB-00 Alternative A ¹	Capacity Improvements	\$ 6,375,632	\$ 7,969,539
CB-30, CB-30.2, and CB-00 Alternative B	Capacity and Storage Improvements	\$ 4,525,488	\$ 5,656,860
CB-43 Alternative	Capacity Improvements	\$ 990,585	\$ 1,238,232
SUBTOTAL		\$ 23,107,370	\$ 28,884,212
Goodwin			
GW-11 Alternative	Capacity Improvements	\$ 1,018,732	\$ 1,273,415
GW-14 and GW-15 Alternative A	Capacity and Storage Improvements	\$ 4,994,568	\$ 6,243,210
GW-14 and GW-15 Alternative B ¹	Capacity and Storage Improvements	\$ 3,570,338	\$ 4,462,923
SUBTOTAL		\$ 6,013,300	\$ 7,516,625
TOTAL			\$ 36,400,837

Footnotes:

1 – Only costs of recommended improvements are included when more than one alternative is provided.

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

CB-02 Alternative - Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
Remove 24" Culvert	LF	\$ 32.00	\$ 43.20	87	\$ 2,784.00	\$ 3,758.40	
Install 36" Culvert	LF	\$ 134.00	\$ 180.90	87	\$ 11,658.00	\$ 15,738.30	Class III
Remove 24" Culvert	LF	\$ 32.00	\$ 43.20	376	\$ 12,032.00	\$ 16,243.20	
Install 42" Culvert	LF	\$ 190.00	\$ 256.50	376	\$ 71,440.00	\$ 96,444.00	Class III
Remove 30" Culvert	LF	\$ 32.00	\$ 43.20	255	\$ 8,160.00	\$ 11,016.00	
Install 54" Culvert	LF	\$ 274.00	\$ 369.90	255	\$ 69,870.00	\$ 94,324.50	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	319	\$ 265,500.44	\$ 358,425.60	24' * Culvert Length * 0.5'
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	6	\$ 55,536.00	\$ 74,973.60	Type 10, 4'-8'
Shore Structures	EA	\$ 6,000.00	\$ 8,100.00	10	\$ 60,000.00	\$ 81,000.00	
Silt Fence	LF	\$ 4.00	\$ 5.40	1476	\$ 5,904.00	\$ 7,970.40	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	1596	\$ 1,595.56	\$ 2,154.00	20' x Culvert Length - Road

TOTAL

\$ 762,048

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

CB-03 Alternative - Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
Install 30" Culvert	LF	\$ 76.00	\$ 102.60	124	\$ 9,424.00	\$ 12,722.40	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	67	\$ 55,466.67	\$ 74,880.00	24' * Culvert Length * 0.5'
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	1	\$ 9,256.00	\$ 12,495.60	Type 10, 4'-8'
Shore Structures	EA	\$ 6,000.00	\$ 8,100.00	1	\$ 6,000.00	\$ 8,100.00	
Silt Fence	LF	\$ 4.00	\$ 5.40	288	\$ 1,152.00	\$ 1,555.20	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	276	\$ 275.56	\$ 372.00	20' x Culvert Length - Road

TOTAL

\$ 110,125

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

CB-05 and CB-05.4 Alternative - Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
CB-05							
Remove 24" Culvert	LF	\$ 32.00	\$ 43.20	383	\$ 12,256.00	\$ 16,545.60	
Install 60" Culvert	LF	\$ 272.00	\$ 367.20	383	\$ 104,176.00	\$ 140,637.60	Class III
Remove 30" Culvert	LF	\$ 32.00	\$ 43.20	35	\$ 1,120.00	\$ 1,512.00	
Install 60" Culvert	LF	\$ 272.00	\$ 367.20	35	\$ 9,520.00	\$ 12,852.00	Class III
Remove 36" Culvert	LF	\$ 32.00	\$ 43.20	290	\$ 9,280.00	\$ 12,528.00	
Install 60" Culvert	LF	\$ 272.00	\$ 367.20	290	\$ 78,880.00	\$ 106,488.00	Class III
Remove 30" Culvert	LF	\$ 32.00	\$ 43.20	43	\$ 1,376.00	\$ 1,857.60	
Install 60" Culvert	LF	\$ 272.00	\$ 367.20	43	\$ 11,696.00	\$ 15,789.60	Class III
Remove 42" Culvert	LF	\$ 32.00	\$ 43.20	438	\$ 14,016.00	\$ 18,921.60	
Install 60" Culvert	LF	\$ 272.00	\$ 367.20	438	\$ 119,136.00	\$ 160,833.60	Class III
Install 66" Culvert	LF	\$ 356.00	\$ 480.60	3418	\$ 1,216,808.00	\$ 1,642,690.80	Class III
Remove 36" Culvert	LF	\$ 32.00	\$ 43.20	1038	\$ 33,216.00	\$ 44,841.60	
Install 42" Culvert	LF	\$ 190.00	\$ 256.50	1038	\$ 197,220.00	\$ 266,247.00	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	2388	\$ 1,987,185.78	\$ 2,682,700.80	24' * Culvert Length * 0.5'
Shore Structures	EA	\$ 6,000.00	\$ 8,100.00	2	\$ 12,000.00	\$ 16,200.00	
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	1	\$ 9,256.00	\$ 12,495.60	Type 10, 4'-8'
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	1	\$ 7,099.00	\$ 9,583.65	4'-8'
New Manholes	EA	\$ 10,118.00	\$ 13,659.30	6	\$ 60,708.00	\$ 81,955.80	8'-12'
New Manholes	EA	\$ 10,719.00	\$ 14,470.65	3	\$ 32,157.00	\$ 43,411.95	12'-16'
New Manholes	EA	\$ 11,320.00	\$ 15,282.00	3	\$ 33,960.00	\$ 45,846.00	16'-20'
Silt Fence	LF	\$ 4.00	\$ 5.40	11350	\$ 45,400.00	\$ 61,290.00	2 x Culvert Length + 60'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	12544	\$ 12,544.44	\$ 16,935.00	20' x Culvert Length - Road

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
CB-05.4							
Remove 30" Culvert	LF	\$ 32.00	\$ 43.20	1315	\$ 42,080.00	\$ 56,808.00	
Install 42" Culvert	LF	\$ 190.00	\$ 256.50	1315	\$ 249,850.00	\$ 337,297.50	Class III
Remove 30" Culvert	LF	\$ 32.00	\$ 43.20	331	\$ 10,592.00	\$ 14,299.20	
Install 54" Culvert	LF	\$ 274.00	\$ 369.90	200	\$ 54,800.00	\$ 73,980.00	Class III
Remove 30" Culvert	LF	\$ 32.00	\$ 43.20	131	\$ 4,192.00	\$ 5,659.20	
Install 60" Culvert	LF	\$ 272.00	\$ 367.20	331	\$ 90,032.00	\$ 121,543.20	Class III
Install 60" Culvert	LF	\$ 272.00	\$ 367.20	875	\$ 238,000.00	\$ 321,300.00	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	1062	\$ 883,768.89	\$ 1,193,088.00	24' * Culvert Length * 0.5'
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	1	\$ 7,099.00	\$ 9,583.65	4'-8'
New Manholes	EA	\$ 10,118.00	\$ 13,659.30	1	\$ 10,118.00	\$ 13,659.30	8'-12'
New Manholes	EA	\$ 10,719.00	\$ 14,470.65	3	\$ 32,157.00	\$ 43,411.95	12'-16'
Silt Fence	LF	\$ 4.00	\$ 5.40	6896	\$ 27,584.00	\$ 37,238.40	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	5311	\$ 5,311.11	\$ 7,170.00	20' x Culvert Length - Road

TOTAL

\$ 7,647,202

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

CB-07 Alternative - Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
Install 30" Culvert	LF	\$ 103.00	\$ 139.05	794	\$ 81,782.00	\$ 110,405.70	Class III
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	1	\$ 9,256.00	\$ 12,495.60	Type 10, 4'-8'
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	353	\$ 293,603.56	\$ 396,364.80	24' * Culvert Length * 0.5'
Silt Fence	LF	\$ 4.00	\$ 5.40	1628	\$ 6,512.00	\$ 8,791.20	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	1764	\$ 1,764.44	\$ 2,382.00	20' x Culvert Length - Road

TOTAL

\$ 530,439

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

CB-12.6 and CB-12.8 Alternative - Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
CB-12.6							
Install 24" Culvert	LF	\$ 76.00	\$ 102.60	120	\$ 9,120.00	\$ 12,312.00	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	53	\$ 44,373.33	\$ 59,904.00	24' * Culvert Length * 0.5'
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	2	\$ 14,198.00	\$ 19,167.30	4'-8'
Silt Fence	LF	\$ 4.00	\$ 5.40	280	\$ 1,120.00	\$ 1,512.00	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	267	\$ 266.67	\$ 360.00	20' x Culvert Length - Road
CB-12.8							
Remove 27" Culvert	LF	\$ 32.00	\$ 43.20	18	\$ 576.00	\$ 777.60	
Install 36" Culvert	LF	\$ 134.00	\$ 180.90	18	\$ 2,412.00	\$ 3,256.20	Class III
Remove 27" Culvert	LF	\$ 32.00	\$ 43.20	139	\$ 4,448.00	\$ 6,004.80	
Install 42" Culvert	LF	\$ 190.00	\$ 256.50	139	\$ 26,410.00	\$ 35,653.50	Class III
Remove 36" Culvert	LF	\$ 32.00	\$ 43.20	324	\$ 10,368.00	\$ 13,996.80	
Install 42" Culvert	LF	\$ 190.00	\$ 256.50	324	\$ 61,560.00	\$ 83,106.00	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	206	\$ 171,207.11	\$ 231,129.60	24' * Culvert Length * 0.5'
Shore Structures	EA	\$ 6,000.00	\$ 8,100.00	1	\$ 6,000.00	\$ 8,100.00	
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	1	\$ 9,256.00	\$ 12,495.60	Type 10, 4'-8'
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	3	\$ 21,297.00	\$ 28,750.95	4'-8'
Silt Fence	LF	\$ 4.00	\$ 5.40	1002	\$ 4,008.00	\$ 5,410.80	2 x Culvert Length + 40'
Seed and Mulch	LF	\$ 1.00	\$ 1.35	1069	\$ 1,068.89	\$ 1,443.00	20' x Culvert Length - Road

TOTAL

\$ 523,380

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

CB-20, CB-20.4, and CB-23 Alternative - Storage and Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
CB-20							
Increase Open Channel to 50'	LF	\$ 1,000.00	\$ 1,350.00	943	\$ 943,000.00	\$ 1,273,050.00	
Shore Structures	EA	\$ 6,000.00	\$ 8,100.00	1	\$ 6,000.00	\$ 8,100.00	
Silt Fence	LF	\$ 4.00	\$ 5.40	1926	\$ 7,704.00	\$ 10,400.40	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	2096	\$ 2,095.56	\$ 2,829.00	20' x Culvert Length - Road
CB-20.4							
Install 3.5' x 5.5' Culvert	LF	\$ 850.00	\$ 1,147.50	850	\$ 722,500.00	\$ 975,375.00	
Remove 3.5' x 5.5' Culvert	LF	\$ 32.00	\$ 43.20	731	\$ 23,392.00	\$ 31,579.20	
Install 4' x 8' Culvert	LF	\$ 1,000.00	\$ 1,350.00	731	\$ 731,000.00	\$ 986,850.00	
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	703	\$ 584,618.67	\$ 789,235.20	24' * Culvert Length * 0.5'
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	1	\$ 9,256.00	\$ 12,495.60	Type 10, 4'-8'
New Manholes	EA	\$ 10,118.00	\$ 13,659.30	1	\$ 10,118.00	\$ 13,659.30	8'-12'
Silt Fence	LF	\$ 4.00	\$ 5.40	3202	\$ 12,808.00	\$ 17,290.80	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	3513	\$ 3,513.33	\$ 4,743.00	20' x Culvert Length - Road
CB-23							
Install 4'x8' Culvert	LF	\$ 1,000.00	\$ 1,350.00	380	\$ 380,000.00	\$ 513,000.00	
Remove 36" Culvert	LF	\$ 32.00	\$ 43.20	628	\$ 20,096.00	\$ 27,129.60	
Install 4'x8' Culvert	LF	\$ 1,000.00	\$ 1,350.00	628	\$ 628,000.00	\$ 847,800.00	
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	448	\$ 372,736.00	\$ 503,193.60	24' * Culvert Length * 0.5'
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	1	\$ 9,256.00	\$ 12,495.60	Type 10
New Manholes	EA	\$ 10,118.00	\$ 13,659.30	2	\$ 20,236.00	\$ 27,318.60	8'-12'
Silt Fence	LF	\$ 4.00	\$ 5.40	2056	\$ 8,224.00	\$ 11,102.40	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	2240	\$ 2,240.00	\$ 3,024.00	20' x Culvert Length - Road

TOTAL

\$ 6,070,671

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

CB-21 Alternative - Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
Install 30" Culvert	LF	\$ 103.00	\$ 139.05	1176	\$ 121,128.00	\$ 163,522.80	Class III
Install 36" Culvert	LF	\$ 134.00	\$ 180.90	652	\$ 87,368.00	\$ 117,946.80	Class III
Install 42" Culvert	LF	\$ 190.00	\$ 256.50	570	\$ 108,300.00	\$ 146,205.00	Class III
Install 54" Culvert	LF	\$ 274.00	\$ 369.90	162	\$ 44,388.00	\$ 59,923.80	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	1066	\$ 886,727.11	\$ 1,197,081.60	24' * Culvert Length * 0.5'
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	1	\$ 9,256.00	\$ 12,495.60	Type 10, 4'-8'
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	1	\$ 7,099.00	\$ 9,583.65	4'-8'
New Manholes	EA	\$ 10,118.00	\$ 13,659.30	3	\$ 30,354.00	\$ 40,977.90	8'-12'
Silt Fence	LF	\$ 4.00	\$ 5.40	5160	\$ 20,640.00	\$ 27,864.00	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	5689	\$ 5,688.89	\$ 7,680.00	20' x Culvert Length - Road

TOTAL

\$ 1,783,281

CB-28 Alternative - Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
Remove 4 'x 6' Culvert	LF	\$ 32.00	\$ 43.20	86	\$ 2,752.00	\$ 3,715.20	
Install 4.5' x 7.5' Culvert	LF	\$ 1,000.00	\$ 1,350.00	86	\$ 86,000.00	\$ 116,100.00	
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	38	\$ 31,800.89	\$ 42,931.20	24' * Culvert Length * 0.5'
Silt Fence	LF	\$ 4.00	\$ 5.40	212	\$ 848.00	\$ 1,144.80	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	191	\$ 191.11	\$ 258.00	20' x Culvert Length - Road

TOTAL

\$164,149

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

CB-30, CB-30.2, and CB-00 Alternative A - Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
CB-30							
Remove 36" Culvert	LF	\$ 32.00	\$ 43.20	1188	\$ 38,016.00	\$ 51,321.60	
Install 42" Culvert	LF	\$ 190.00	\$ 256.50	1188	\$ 225,720.00	\$ 304,722.00	Class III
Remove 42" Culvert	LF	\$ 32.00	\$ 43.20	587	\$ 18,784.00	\$ 25,358.40	
Install 48" Culvert	LF	\$ 269.00	\$ 363.15	587	\$ 157,903.00	\$ 213,169.05	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	789	\$ 656,355.56	\$ 886,080.00	24' * Culvert Length * 0.5'
Shore Structures	EA	\$ 6,000.00	\$ 8,100.00	2	\$ 12,000.00	\$ 16,200.00	
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	1	\$ 9,256.00	\$ 12,495.60	Type 10
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	2	\$ 14,198.00	\$ 19,167.30	4'-8'
New Manholes	EA	\$ 10,118.00	\$ 13,659.30	3	\$ 30,354.00	\$ 40,977.90	8'-12'
New Manholes	EA	\$ 10,719.00	\$ 14,470.65	1	\$ 10,719.00	\$ 14,470.65	12'-16'
Silt Fence	LF	\$ 4.00	\$ 5.40	3590	\$ 14,360.00	\$ 19,386.00	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	3944	\$ 3,944.44	\$ 5,325.00	20' x Culvert Length - Road
CB-30, CB-30.2, and CB-00							
Install 30" Culvert	LF	\$ 103.00	\$ 139.05	115	\$ 11,845.00	\$ 15,990.75	Class III
Install 36" Culvert	LF	\$ 134.00	\$ 180.90	25	\$ 3,350.00	\$ 4,522.50	Class III
Install 48" Culvert	LF	\$ 269.00	\$ 363.15	735	\$ 197,715.00	\$ 266,915.25	Class III
Install 60" Culvert	LF	\$ 272.00	\$ 367.20	300	\$ 81,600.00	\$ 110,160.00	Class III
Install 72" Culvert	LF	\$ 396.00	\$ 534.60	3,499	\$ 1,385,604.00	\$ 1,870,565.40	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	2015	\$ 1,676,572.44	\$ 2,263,372.80	24' * Culvert Length * 0.5'
New Curb Inlets	EA	\$ 7,099.00	\$ 9,583.65	3	\$ 21,297.00	\$ 28,750.95	Type 10
New Manholes	EA	\$ 10,118.00	\$ 13,659.30	4	\$ 40,472.00	\$ 54,637.20	8'-12'
New Manholes	EA	\$ 10,719.00	\$ 14,470.65	3	\$ 32,157.00	\$ 43,411.95	12'-16'
New Manholes	EA	\$ 11,320.00	\$ 15,282.00	3	\$ 33,960.00	\$ 45,846.00	16'-20'
Silt Fence	LF	\$ 4.00	\$ 5.40	9108	\$ 36,432.00	\$ 49,183.20	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	10076	\$ 10,075.56	\$ 13,602.00	20' x Culvert Length - Road

TOTAL

\$ 6,375,632

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

CB-30, CB-30.2, and CB-00 Alternative B - Capacity and Storage Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
CB-30							
Remove 36" Culvert	LF	\$ 32.00	\$ 43.20	1188	\$ 38,016.00	\$ 51,321.60	
Install 42" Culvert	LF	\$ 190.00	\$ 256.50	1188	\$ 225,720.00	\$ 304,722.00	Class III
Remove 42" Culvert	LF	\$ 32.00	\$ 43.20	587	\$ 18,784.00	\$ 25,358.40	
Install 48" Culvert	LF	\$ 269.00	\$ 363.15	587	\$ 157,903.00	\$ 213,169.05	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	789	\$ 656,355.56	\$ 886,080.00	24' * Culvert Length * 0.5'
Shore Structures	EA	\$ 6,000.00	\$ 8,100.00	2	\$ 12,000.00	\$ 16,200.00	
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	1	\$ 9,256.00	\$ 12,495.60	Type 10
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	2	\$ 14,198.00	\$ 19,167.30	4'-8'
New Manholes	EA	\$ 10,118.00	\$ 13,659.30	3	\$ 30,354.00	\$ 40,977.90	8'-12'
New Manholes	EA	\$ 10,719.00	\$ 14,470.65	1	\$ 10,719.00	\$ 14,470.65	12'-16'
Silt Fence	LF	\$ 4.00	\$ 5.40	3590	\$ 14,360.00	\$ 19,386.00	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	3944	\$ 3,944.44	\$ 5,325.00	20' x Culvert Length - Road

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
CB-30, CB-30.2, and CB-00							
<i>Marquette Park Storage</i>							<i>22.2 acre-ft</i>
Clearing and Grubbing	AC	\$ 1,800.00	\$ 2,430.00	4.34	\$ 7,812.00	\$ 10,546.20	
Sod	SY	\$ 4.00	\$ 5.40	1333	\$ 5,333.33	\$ 7,200.00	For Side Slopes
Cut	CY	\$ 25.00	\$ 33.75	30472	\$ 761,800.00	\$ 761,800.00	
Fill	CY	\$ 10.00	\$ 13.50	7618	\$ 76,180.00	\$ 76,180.00	
Install 15" Dewatering Pipe	LF	\$ 60.00	\$ 81.00	300	\$ 18,000.00	\$ 18,000.00	Class III
Install 30" Culvert	LF	\$ 103.00	\$ 139.05	115	\$ 11,845.00	\$ 15,990.75	Class III
Install 36" Culvert	LF	\$ 190.00	\$ 256.50	25	\$ 4,750.00	\$ 6,412.50	Class III
Install 48" Culvert	LF	\$ 269.00	\$ 363.15	735	\$ 197,715.00	\$ 266,915.25	Class III
Install 54" Culvert	LF	\$ 274.00	\$ 369.90	372	\$ 101,928.00	\$ 137,602.80	Class III
Install 72" Culvert	LF	\$ 396.00	\$ 534.60	1085	\$ 429,660.00	\$ 580,041.00	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	809	\$ 672,995.56	\$ 908,544.00	
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	2	\$ 18,512.00	\$ 24,991.20	Type 10
New Manholes	EA	\$ 10,118.00	\$ 13,659.30	6	\$ 60,708.00	\$ 81,955.80	8'-12'
Silt Fence	LF	\$ 4.00	\$ 5.40	3434	\$ 13,736.00	\$ 18,543.60	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	1549	\$ 1,548.89	\$ 2,091.00	20' x Culvert Length - Road

TOTAL

\$ 4,525,488

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

CB-43 Alternative - Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
Remove 24" Culvert	LF	\$ 32.00	\$ 43.20	564	\$ 18,048.00	\$ 24,364.80	
Install 30" Culvert	LF	\$ 103.00	\$ 139.05	564	\$ 58,092.00	\$ 78,424.20	Class III
Install 54" Culvert	LF	\$ 269.00	\$ 363.15	650	\$ 174,850.00	\$ 236,047.50	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	540	\$ 448,910.22	\$ 606,028.80	24' * Culvert Length * 0.5'
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	3	\$ 21,297.00	\$ 28,750.95	4'-8'
Silt Fence	LF	\$ 4.00	\$ 5.40	2468	\$ 9,872.00	\$ 13,327.20	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	2698	\$ 2,697.78	\$ 3,642.00	20' x Culvert Length - Road

TOTAL

\$ 990,585

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

GW-11 Alternative - Capacity Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
Remove 1.8' x 2.8' Culvert	LF	\$ 32.00	\$ 43.20	151	\$ 4,832.00	\$ 6,523.20	
Install 36" Culvert	LF	\$ 134.00	\$ 180.90	151	\$ 20,234.00	\$ 27,315.90	Class III
Remove 2.4' x 2.8' Culvert	LF	\$ 32.00	\$ 43.20	456	\$ 14,592.00	\$ 19,699.20	
Install 42" Culvert	LF	\$ 190.00	\$ 256.50	456	\$ 86,640.00	\$ 116,964.00	Class III
Remove 2.4' x 2.8' Culvert	LF	\$ 32.00	\$ 43.20	542	\$ 17,344.00	\$ 23,414.40	
Install 48" Culvert	LF	\$ 269.00	\$ 363.15	542	\$ 145,798.00	\$ 196,827.30	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	511	\$ 424,874.67	\$ 573,580.80	24' * Culvert Length * 0.5'
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	4	\$ 28,396.00	\$ 38,334.60	4'-8'
Silt Fence	LF	\$ 4.00	\$ 5.40	2338	\$ 9,352.00	\$ 12,625.20	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	2553	\$ 2,553.33	\$ 3,447.00	20' x Culvert Length - Road

TOTAL

\$ 1,018,732

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

GW-14 and GW-15 Alternative A - Capacity and Storage Improvements

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
GW-14							
<i>Barr Avenue Storage</i>							<i>7.4 acre-ft</i>
Clearing and Grubbing	AC	\$ 1,800.00	\$ 2,430.00	1.61	\$ 2,898.00	\$ 3,912.30	
Cut	CY	\$ 25.00	\$ 33.75	13167	\$ 329,175.00	\$ 444,386.25	
Fill	CY	\$ 10.00	\$ 13.50	1317	\$ 13,170.00	\$ 17,779.50	
Sod	SY	\$ 4.00	\$ 5.40	795	\$ 3,178.67	\$ 4,291.20	
Install 24" Dewatering Pipe	LF	\$ 76.00	\$ 102.60	1650	\$ 125,400.00	\$ 169,290.00	Class III
Install 24" Culvert	LF	\$ 76.00	\$ 102.60	202	\$ 15,352.00	\$ 20,725.20	Class III
Install 36" Culvert	LF	\$ 134.00	\$ 180.90	484	\$ 64,856.00	\$ 87,555.60	Class III
Install 48" Culvert	LF	\$ 269.00	\$ 363.15	524	\$ 140,956.00	\$ 190,290.60	Class III
Regrade/Replace 30" Culvert	LF	\$ 135.00	\$ 182.25	940	\$ 126,900.00	\$ 171,315.00	Class III
Remove 24" Culvert	LF	\$ 32.00	\$ 43.20	197	\$ 6,304.00	\$ 8,510.40	
Install 38" x 60" Elliptical Culvert	LF	\$ 625.00	\$ 843.75	197	\$ 123,125.00	\$ 166,218.75	Class III
Install 38" x 60" Elliptical Culvert	LF	\$ 625.00	\$ 843.75	800	\$ 500,000.00	\$ 675,000.00	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	1861	\$ 1,548,259.56	\$ 2,090,150.40	24' * Culvert Length * 0.5'
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	2	\$ 18,512.00	\$ 24,991.20	Type 10, 4'-8'
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	5	\$ 35,495.00	\$ 47,918.25	4'-8'
Silt Fence	LF	\$ 4.00	\$ 5.40	6553	\$ 26,212.00	\$ 35,386.20	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	10660	\$ 10,660.00	\$ 14,391.00	20' x Culvert Length - Road
Titus Road							
Remove 24" Culvert	LF	\$ 32.00	\$ 43.20	197	\$ 6,304.00	\$ 8,510.40	
Install 48" Culvert	LF	\$ 269.00	\$ 363.15	197	\$ 52,993.00	\$ 71,540.55	Class III
Remove 24" Culvert	LF	\$ 32.00	\$ 43.20	61	\$ 1,952.00	\$ 2,635.20	
Install 30" Culvert	LF	\$ 103.00	\$ 139.05	61	\$ 6,283.00	\$ 8,482.05	Class III
Remove 27" Culvert	LF	\$ 32.00	\$ 43.20	268	\$ 8,576.00	\$ 11,577.60	
Install 36" Culvert	LF	\$ 134.00	\$ 180.90	268	\$ 35,912.00	\$ 48,481.20	Class III
Clean/Dig Out Ditch	LF	\$ 100.00	\$ 135.00	241	\$ 24,100.00	\$ 32,535.00	
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	234	\$ 194,503.11	\$ 262,579.20	24' * Culvert Length * 0.5'
New Curb Inlets	EA	\$ 9,256.00	\$ 12,495.60	2	\$ 18,512.00	\$ 24,991.20	Type 10, 4'-8'
Silt Fence	LF	\$ 4.00	\$ 5.40	1092	\$ 4,368.00	\$ 5,896.80	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	1169	\$ 1,168.89	\$ 1,578.00	20' x Culvert Length - Road

ENGINEER'S OPINION OF PROBABLE COST
(PLANNING LEVEL)

Cherry Bayou Drainage Master Plan

Item	Unit	Base Price	*Unit Price	Estimate Quantity	Cost	Adjusted Cost	Description
GW-15							
Install 30" Culvert	LF	\$ 103.00	\$ 139.05	512	\$ 52,736.00	\$ 71,193.60	Class III
24' Road Repair/Curb/Sidewalk	CY	\$ 832.00	\$ 1,123.20	228	\$ 189,326.22	\$ 255,590.40	24' * Culvert Length * 0.5'
New Manholes	EA	\$ 7,099.00	\$ 9,583.65	1	\$ 7,099.00	\$ 9,583.65	4'-8'
Silt Fence	LF	\$ 4.00	\$ 5.40	1064	\$ 4,256.00	\$ 5,745.60	2 x Culvert Length + 40'
Seed and Mulch	SY	\$ 1.00	\$ 1.35	1138	\$ 1,137.78	\$ 1,536.00	20' x Culvert Length - Road

TOTAL

\$ 4,994,568