

MARSHALL COUNTY SANITATION DISTRICT - WEST SEWER EXPANSION
Alternate A - Mike Miller Park to Maintenance Facility
ESTIMATE OF PROBABLE COST
UPDATED JUNE 2020

ITEM	DESCRIPTION	UNITS	QTY.	UNIT PRICE BID	TOTAL
1.	8" SDR-35 PVC Gravity Sewer (10-15' Deep)	l.f.	1,000	\$52.00	\$ 52,000.00
2.	8" SDR-35 PVC Gravity Sewer (0-10' Deep)	l.f.	3,700	\$43.00	\$ 159,100.00
3.	8" RJ/PVC Gravity Sewer (w/in Encasement)	l.f.	300	\$40.00	\$ 12,000.00
4.	6" HDPE Force Main (Open Cut)	l.f.	6,720	\$30.00	\$ 201,600.00
5.	6" HDPE Force Main (w/in Encasement)	l.f.	580	\$25.00	\$ 14,500.00
6.	24" Steel Encasement (FM Bore & Jack - Purchase Parkway)	l.f.	340	\$450.00	\$ 153,000.00
7.	16" Steel Encasement (Gravity Bore & Jack - US 68)	l.f.	60	\$350.00	\$ 21,000.00
8.	16" Steel Encasement (Stream Crossing)	l.f.	240	\$140.00	\$ 33,600.00
9.	16" Steel Encasement (Open Cut Road Crossing)	l.f.	0	\$110.00	\$ -
10.	12" Steel Encasement (Force Main Bore & Jack - US 68)	l.f.	60	\$275.00	\$ 16,500.00
11.	12" Steel Encasement (Stream Crossing)	l.f.	180	\$130.00	\$ 23,400.00
12.	4' Diameter Precast Concrete Manhole (10-15' Deep)	each	3	\$4,100.00	\$ 12,300.00
13.	4' Diameter Precast Concrete Manhole (4-10' Deep)	each	12	\$3,600.00	\$ 43,200.00
14.	Park Lift Station (Incl. Site & Electrical)	l. sum	1	\$230,000.00	\$ 230,000.00
15.	2" Air Release Valve & Vault	each	2	\$4,200.00	\$ 8,400.00
16.	Core Drill Existing Wet Well/Manhole	l. sum	1	\$1,500.00	\$ 1,500.00
17.	Class III Channel Lining (w/ Geotextile Fabric)	s.y.	1,680	\$40.00	\$ 67,200.00
18.	Landscaping & Seeding	s.y.	30,000	\$1.50	\$ 45,000.00
19.	Select Fill	tons	1,000	\$23.00	\$ 23,000.00
20.	Clearing & Grubbing	l. sum	1	\$12,000.00	\$ 12,000.00
21.	Mobilization/Demobilization	l. sum	1	\$5,000.00	\$ 5,000.00
22.	Bonds & Insurance	l. sum	1	\$34,000.00	\$ 34,000.00
23.	Erosion & Sediment Control	l. sum	1	\$5,000.00	\$ 5,000.00
Construction Subtotal Cost					\$ 1,173,300
Construction Contingencies (15.00%)					\$ 175,995
TOTAL ESTIMATED CONSTRUCTION COST					\$ 1,349,295
Easements (Assume 10 Esmnts @ \$1,000 each)					\$ 10,000
Legal Expenses					\$ 5,000
Design (RD Table) (8.50%)					\$ 114,690
Inspection (RD Table) (5.30%)					\$ 71,513
TOTAL ESTIMATED COST - ALTERNATE A					\$ 1,550,498

MARSHALL COUNTY SANITATION DISTRICT - WEST SEWER EXPANSION
Alternate B - Robbie Way to Maintenance Facility with Tributary Sewers
ESTIMATE OF PROBABLE COST
UPDATED JUNE 2020

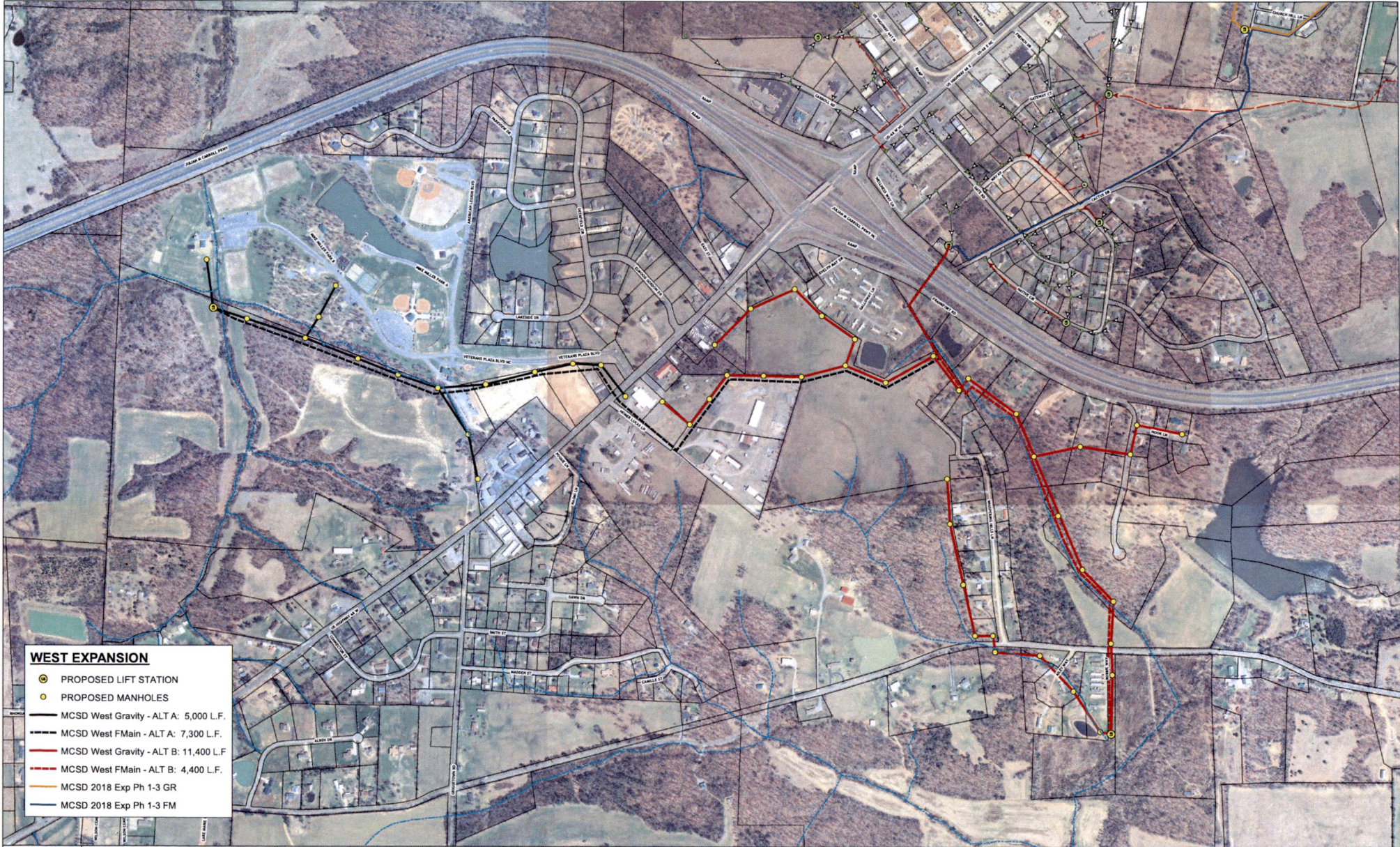
ITEM	DESCRIPTION	UNITS	QTY.	UNIT PRICE BID	TOTAL
1.	8" SDR-35 PVC Gravity Sewer (10-15' Deep)	l.f.	3,000	\$52.00	\$ 156,000.00
2.	8" SDR-35 PVC Gravity Sewer (0-10' Deep)	l.f.	8,120	\$43.00	\$ 349,160.00
3.	8" RJ/PVC Gravity Sewer (w/in Encasement)	l.f.	280	\$40.00	\$ 11,200.00
4.	6" HDPE Force Main (Open Cut)	l.f.	3,830	\$30.00	\$ 114,900.00
5.	6" HDPE Force Main (w/in Encasement)	l.f.	570	\$25.00	\$ 14,250.00
6.	24" Steel Encasement (FM Bore & Jack - Purchase Parkway)	l.f.	340	\$450.00	\$ 153,000.00
7.	16" Steel Encasement (Gravity Bore & Jack)	l.f.	100	\$350.00	\$ 35,000.00
8.	16" Steel Encasement (Stream Crossing)	l.f.	180	\$140.00	\$ 25,200.00
9.	16" Steel Encasement (Open Cut Road Crossing)	l.f.		\$110.00	\$ -
10.	12" Steel Encasement (Force Main Bore & Jack)	l.f.	50	\$275.00	\$ 13,750.00
11.	12" Steel Encasement (Stream Crossing)	l.f.	180	\$130.00	\$ 23,400.00
12.	4' Diameter Precast Concrete Manhole (10-15' Deep)	each	10	\$4,200.00	\$ 42,000.00
13.	4' Diameter Precast Concrete Manhole (4-10' Deep)	each	26	\$3,600.00	\$ 93,600.00
14.	Robbie Way Lift Station (Incl. Site & Electrical)	l. sum	1	\$220,000.00	\$ 220,000.00
15.	2" Air Release Valve & Vault	each	2	\$4,200.00	\$ 8,400.00
16.	Core Drill Existing Wet Well/Manhole	l. sum	1	\$1,500.00	\$ 1,500.00
17.	Class III Channel Lining (w/ Geotextile Fabric)	s.y.	1,440	\$40.00	\$ 57,600.00
18.	Landscaping & Seeding	s.y.	40,000	\$1.50	\$ 60,000.00
19.	Select Fill	tons	700	\$23.00	\$ 16,100.00
20.	Clearing & Grubbing	l. sum	1	\$20,000.00	\$ 20,000.00
21.	Mobilization/Demobilization	l. sum	1	\$5,000.00	\$ 5,000.00
22.	Bonds & Insurance	l. sum	1	\$43,000.00	\$ 43,000.00
23.	Erosion & Sediment Control	l. sum	1	\$5,000.00	\$ 5,000.00
Construction Subtotal Cost					\$ 1,468,060
Construction Contingencies (15.00%)					\$ 220,209
TOTAL ESTIMATED CONSTRUCTION COST					\$ 1,688,269
Easements (Assume 15 Esmnts @ \$1,000 each)					\$ 15,000
Legal Expenses					\$ 7,500
Design (RD Table) (8.00%)					\$ 135,062
Inspection (RD Table) (4.90%)					\$ 82,725
TOTAL ESTIMATED COST - ALTERNATE B					\$ 1,928,556

MARSHALL COUNTY SANITATION DISTRICT - WEST SEWER EXPANSION
Alternate B-1 - Robbie Way to Maintenance Facility Trunkline Sewer & Lift Station
ESTIMATE OF PROBABLE COST
UPDATED JUNE 2020

ITEM	DESCRIPTION	UNITS	QTY.	UNIT PRICE BID	TOTAL
1.	8" SDR-35 PVC Gravity Sewer (10-15' Deep)	l.f.	2,500	\$52.00	\$ 130,000.00
2.	8" SDR-35 PVC Gravity Sewer (0-10' Deep)	l.f.	3,530	\$43.00	\$ 151,790.00
3.	8" RJ/PVC Gravity Sewer (w/in Encasement)	l.f.	170	\$40.00	\$ 6,800.00
4.	6" HDPE Force Main (Open Cut)	l.f.	3,830	\$30.00	\$ 114,900.00
5.	6" HDPE Force Main (w/in Encasement)	l.f.	570	\$25.00	\$ 14,250.00
6.	24" Steel Encasement (FM Bore & Jack - Purchase Parkway)	l.f.	340	\$450.00	\$ 153,000.00
7.	16" Steel Encasement (Gravity Bore & Jack)	l.f.	50	\$350.00	\$ 17,500.00
8.	16" Steel Encasement (Stream Crossing)	l.f.	120	\$140.00	\$ 16,800.00
9.	16" Steel Encasement (Open Cut Road Crossing)	l.f.		\$110.00	\$ -
10.	12" Steel Encasement (Force Main Bore & Jack)	l.f.	50	\$275.00	\$ 13,750.00
11.	12" Steel Encasement (Stream Crossing)	l.f.	180	\$130.00	\$ 23,400.00
12.	4' Diameter Precast Concrete Manhole (10-15' Deep)	each	9	\$4,100.00	\$ 36,900.00
13.	4' Diameter Precast Concrete Manhole (4-10' Deep)	each	9	\$3,600.00	\$ 32,400.00
14.	Robbie Way Lift Station (Incl. Site & Electrical)	l. sum	1	\$220,000.00	\$ 220,000.00
15.	2" Air Release Valve & Vault	each	2	\$4,200.00	\$ 8,400.00
16.	Core Drill Existing Wet Well/Manhole	l. sum	1	\$1,500.00	\$ 1,500.00
17.	Class III Channel Lining (w/ Geotextile Fabric)	s.y.	1,200	\$40.00	\$ 48,000.00
18.	Landscaping & Seeding	s.y.	30,000	\$1.50	\$ 45,000.00
19.	Select Fill	tons	1,000	\$23.00	\$ 23,000.00
20.	Clearing & Grubbing	l. sum	1	\$12,000.00	\$ 12,000.00
21.	Mobilization/Demobilization	l. sum	1	\$5,000.00	\$ 5,000.00
22.	Bonds & Insurance	l. sum	1	\$32,000.00	\$ 32,000.00
23.	Erosion & Sediment Control	l. sum	1	\$4,000.00	\$ 4,000.00
Construction Subtotal Cost					\$ 1,110,390
Construction Contingencies (15.00%)					\$ 166,559
TOTAL ESTIMATED CONSTRUCTION COST					\$ 1,276,949
Easements (Assume 15 Esmnts @ \$1,000 each)					\$ 15,000
Legal Expenses					\$ 7,500
Design (RD Table) (8.50%)					\$ 108,541
Inspection (RD Table) (5.30%)					\$ 67,678
TOTAL ESTIMATED COST - ALTERNATE B-1					\$ 1,475,667

MARSHALL COUNTY SANITATION DISTRICT - WEST SEWER EXPANSION
Alternate C - Maintenance Facility Lift Station & Force Main
ESTIMATE OF PROBABLE COST
UPDATED JUNE 2020

ITEM	DESCRIPTION	UNITS	QTY.	UNIT PRICE BID	TOTAL
1.	8" SDR-35 PVC Gravity Sewer (10-15' Deep)	l.f.	700	\$52.00	\$ 36,400.00
2.	8" SDR-35 PVC Gravity Sewer (0-10' Deep)	l.f.	1,940	\$43.00	\$ 83,420.00
3.	8" RJ/PVC Gravity Sewer (w/in Encasement)	l.f.	60	\$40.00	\$ 2,400.00
4.	6" HDPE Force Main (Open Cut)	l.f.	360	\$30.00	\$ 10,800.00
5.	6" HDPE Force Main (w/in Encasement)	l.f.	340	\$25.00	\$ 8,500.00
6.	24" Steel Encasement (FM Bore & Jack - Purchase Parkway)	l.f.	340	\$450.00	\$ 153,000.00
7.	16" Steel Encasement (Stream Crossing)	l.f.	60	\$140.00	\$ 8,400.00
8.	4' Diameter Precast Concrete Manhole (10-15' Deep)	each	3	\$4,100.00	\$ 12,300.00
9.	4' Diameter Precast Concrete Manhole (4-10' Deep)	each	7	\$3,600.00	\$ 25,200.00
10.	Galloway Lane Lift Station (Incl. Site & Electrical)	l. sum	1	\$155,000.00	\$ 155,000.00
11.	2" Air Release Valve & Vault	each	1	\$4,200.00	\$ 4,200.00
12.	Core Drill Existing Wet Well/Manhole	l. sum	1	\$1,500.00	\$ 1,500.00
13.	Class III Channel Lining (w/ Geotextile Fabric)	s.y.	240	\$40.00	\$ 9,600.00
14.	Landscaping & Seeding	s.y.	5,000	\$1.50	\$ 7,500.00
15.	Select Fill	tons	500	\$23.00	\$ 11,500.00
16.	Mobilization/Demobilization	l. sum	1	\$5,000.00	\$ 5,000.00
17.	Bonds & Insurance	l. sum	1	\$16,000.00	\$ 16,000.00
18.	Erosion & Sediment Control	l. sum	1	\$4,000.00	\$ 4,000.00
Construction Subtotal Cost					\$ 554,720
Construction Contingencies (15.00%)					\$ 83,208
TOTAL ESTIMATED CONSTRUCTION COST					\$ 637,928
Easements (Assume 2 Esmnts @ \$1,000 each)					\$ 2,000
Legal Expenses					\$ 1,500
Design (RD Table) (9.60%)					\$ 61,241
Inspection (RD Table) (6.60%)					\$ 42,103
TOTAL ESTIMATED COST - ALTERNATE C					\$ 744,772



WEST EXPANSION

- ⊙ PROPOSED LIFT STATION
- PROPOSED MANHOLES
- MCSD West Gravity - ALT A: 5,000 L.F.
- - - MCSD West FMain - ALT A: 7,300 L.F.
- MCSD West Gravity - ALT B: 11,400 L.F.
- - - MCSD West FMain - ALT B: 4,400 L.F.
- MCSD 2018 Exp Ph 1-3 GR
- MCSD 2018 Exp Ph 1-3 FM

JOB NO.: 18000
 DESIGNED BY: CDM
 DRAWN BY: ELY
 CHECKED BY: RBF

EXISTING SEWER SYSTEM LEGEND

⊙	MANHOLES	MAINS
⊙	MCSD 2018 LIFT STATION	TYPE
⊙	PRIVATE LIFT STATION	— FORCE MAIN
—		— GRAVITY SEWER
—		— DRAINAGE WAY



MARSHALL COUNTY SANITATION DISTRICT
MARSHALL CO. FISCAL COURT

PREPARED BY:
 DEC. 2018

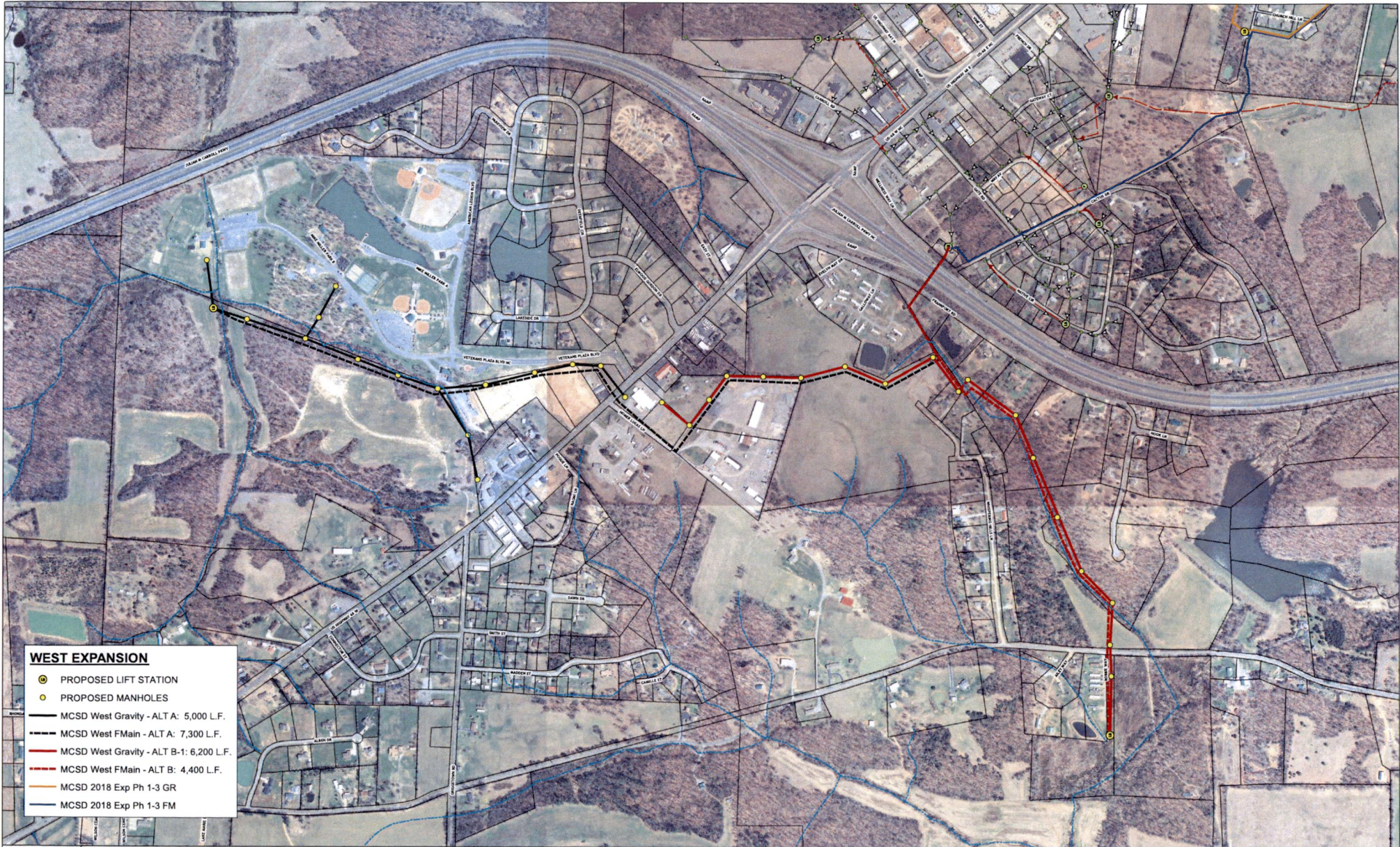


7020 U.S. HWY 68 W.
 PADUCAH, KY 42003

PROJECT: PROJECT PLANNING MAP

TITLE: MCSD WEST SEWER EXPANSION
 ALTs A & B

MAP No.:



WEST EXPANSION

- ⊙ PROPOSED LIFT STATION
- PROPOSED MANHOLES
- MCSD West Gravity - ALT A: 5,000 L.F.
- MCSD West FMain - ALT A: 7,300 L.F.
- MCSD West Gravity - ALT B-1: 6,200 L.F.
- MCSD West FMain - ALT B: 4,400 L.F.
- MCSD 2018 Exp Ph 1-3 GR
- MCSD 2018 Exp Ph 1-3 FM

JOB NO.:	18000
DESIGNED BY:	CDM
DRAWN BY:	ELY
CHECKED BY:	RBF

EXISTING SEWER SYSTEM LEGEND	
○	MANHOLES
⊙	LIFT STATIONS
⊙	MCSO NGS LIFT STATION
⊙	PRIVATE LIFT STATION
—	GRAVITY SEWER
—	DRAINAGE WAY
—	MAINS
—	TYPE
—	FORCE MAIN
—	GRAVITY SEWER

1 inch = 300 feet

MARSHALL COUNTY SANITATION DISTRICT
MARSHALL CO. FISCAL COURT

PREPARED BY:
DEC. 2018

Rivercrest
Engineering, Inc.

7020 U.S. HWY 68 W.
PADUCAH, KY 42003

PROJECT:
PROJECT PLANNING MAP

TITLE:
MCSD WEST SEWER EXPANSION
ALTS A & B-1



WEST EXPANSION

- ⊙ PROPOSED LIFT STATION
- PROPOSED MANHOLE
- MCSD West FM - ALT C: 700 L.F.
- MCSD West Gravity - ALT C: 2,700 L.F.
- MCSD 2018 Exp Ph 1-3 GR
- MCSD 2018 Exp Ph 1-3 FM

JOB NO: 18000
 DESIGNED BY: CDM
 DRAWN BY: ELY
 CHECKED BY: RBF

EXISTING SEWER SYSTEM LEGEND

- | | | |
|---|-----------------------|-----------------|
| ⊙ | MANHOLES | MAINS |
| ⊙ | LIFT STATIONS | TYPE |
| ⊙ | MCSD No2 LIFT STATION | — FORCE MAIN |
| ⊙ | PRIVATE LIFT STATION | — GRAVITY SEWER |
| | | — DRAINAGE WAY |



MARSHALL COUNTY SANITATION DISTRICT
MARSHALL CO. FISCAL COURT

PREPARED BY: **Rivercrest Engineering, Inc.**
 DEC. 2018
 7020 U.S. HWY 68 W.
 PADUCAH, KY 42003

PROJECT: **PROJECT PLANNING MAP**
 TITLE: **MCSD WEST SEWER EXPANSION - ALT C**