E Street Improvements
OR 51 to 16th Street
City of Independence

Engineer's Conceptual Estimate

Prepared By: Kittelson - MJB		*Date: 5/3/2024*		
Reviewed By:				
	This Estimate has a Rating of:	**3C**	*(See rating scale guide below.)*	
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
Mobilization	LS	ALL	$256,000.00	$256,000.00
Traffic Control	LS	ALL	$130,000.00	$130,000.00
Construction Staging	LS	ALL	$130,000.00	$130,000.00
Erosion Control	AC	3.1	$10,000.00	$31,000.00
Removal of Structures and Obstructions	LS	ALL	$56,000.00	$56,000.00
Clearing and Grubbing	LS	ALL	$50,000.00	$50,000.00
General Earthworks	CY	6,800	$40.00	$272,000.00
Asphalt Roadway - Full Depth	SF	62,400	$9.20	$574,080.00
Subgrade Geotextile	SY	6,934	$1.50	$10,401.00
Concrete Curbs - Standard Curb & Gutter	LF	3,900	$36.70	$143,130.00
Separated Multi-Use Path - Concrete	SF	39,000	$8.40	$327,600.00
Detectable Warnings	EA	8	$500.00	$4,000.00
Extra for Pedestrian Ramps	EA	8	$1,500.00	$12,000.00
Storm Water Conveyance System, Complete	LS	ALL	$403,000.00	$403,000.00
Regional Water Quality and Hydromodification System, Complete	SF	11,200	$28.00	$313,600.00
Permanent Landscaping	SF	23,400	$4.20	$98,280.00
Irrigation, Complete	SF	23,400	$2.50	$58,500.00
Pavement Markings, Complete	LS	ALL	$27,000.00	$27,000.00
Signage, Complete	LS	ALL	$21,000.00	$21,000.00
Illumination System, Complete	LS	ALL	$188,100.00	$188,100.00
TOTAL CONSTRUCTION COST			**$**	**3,105,691**

E Street Improvements
OR 51 to 16th Street
City of Independence

Engineer's Conceptual Estimate

Prepared By: Kittelson - MJB		*Date: 5/3/2024*		
Reviewed By:				
	This Estimate has a Rating of:	**3C**	*(See rating scale guide below.)*	
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
ENGINEERING SUPPORT				
Engineering & Construction Management	LS	ALL	$777,000.00	$777,000.00
Right-of-Way Support	EA	0	$18,000.00	$0.00
County Staff Time	YR		$50,000.00	$0.00
ENGINEERING SUPPORT SUBTOTAL				**$ 777,000**
ENGINEERING PERMITS				
Public Improvements Permit	LS	ALL		$0.00
Grading & Erosion Control Permit	LS	ALL	$2,734.00	$2,734.00
Joint Permit Application	LS	ALL	$0.00	$0.00
City Inspection Staff Fee	LS	ALL		$0.00
ENGINEERING PERMITS SUBTOTAL				**$ 2,734**
			TOTAL PROJECT SUBTOTAL	**$ 3,885,425**
			30% Contingency	**$ 1,165,630**
			TOTAL ESTIMATED PROJECT COST	**$ 5,051,055**

Unit Costs Note:

The associated product and material costs are based upon the most recent available cost data. Due to the current volatility of the construction market, we cannot guarantee these costs for any duration of time.

Assumptions:

- The assumed roadway section is 8 inches ACP over 16 inches of compacted aggregate base.
- Due to the on-street bicycle facility the assumed storm inlet spacing is 150 feet.
- All overhead utilities will be relocated and remain above ground.
- No sound walls are required for this project.
-
-

Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions; limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

Level C: No engineering performed. Educated guesstimating. Limited technical information available and/or analysis performed. Project Development and Construction Contingencies should be selected appropriately by Project Manager. Contingency may range up to 60% based on risk.

E Street Improvements

16th Street to 13th Street

City of Independence

Engineer's Conceptual Estimate

Prepared By: Kittelson - MJB		*Date: 5/3/2024*		
Reviewed By:				
	This Estimate has a Rating of:	**3C**	*(See rating scale guide below.)*	
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
Mobilization	LS	ALL	$215,000.00	$215,000.00
Traffic Control	LS	ALL	$109,000.00	$109,000.00
Construction Staging	LS	ALL	$109,000.00	$109,000.00
Erosion Control	AC	3.0	$10,000.00	$30,000.00
Removal of Structures and Obstructions	LS	ALL	$47,000.00	$47,000.00
Clearing and Grubbing	LS	ALL	$42,000.00	$42,000.00
General Earthworks	CY	6,800	$40.00	$272,000.00
Asphalt Roadway - Full Depth	SF	66,400	$9.20	$610,880.00
Subgrade Geotextile	SY	7,378	$1.50	$11,067.00
Concrete Curbs - Standard Curb & Gutter	LF	4,150	$36.70	$152,305.00
Separated Multi-Use Path - Concrete	SF	0	$8.40	$0.00
Detectable Warnings	EA	8	$500.00	$4,000.00
Extra for Pedestrian Ramps	EA	8	$1,500.00	$12,000.00
Storm Water Conveyance System, Complete	LS	ALL	$319,000.00	$319,000.00
Regional Water Quality and Hydromodification System, Complete	SF	10,200	$28.00	$285,600.00
Permanent Landscaping	SF	24,900	$4.20	$104,580.00
Irrigation, Complete	SF	24,900	$2.50	$62,250.00
Pavement Markings, Complete	LS	ALL	$26,000.00	$26,000.00
Signage, Complete	LS	ALL	$20,000.00	$20,000.00
Illumination System, Complete	LS	ALL	$178,000.00	$178,000.00
TOTAL CONSTRUCTION COST			**$**	**2,609,682**

E Street Improvements

16th Street to 13th Street

City of Independence

Engineer's Conceptual Estimate

Prepared By: Kittelson - MJB		*Date: 5/3/2024*		
Reviewed By:				
	This Estimate has a Rating of:	**3C**	*(See rating scale guide below.)*	
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
ENGINEERING SUPPORT				
Engineering & Construction Management	LS	ALL	$653,000.00	$653,000.00
Right-of-Way Support	EA	0	$18,000.00	$0.00
County Staff Time	YR		$50,000.00	$0.00
ENGINEERING SUPPORT SUBTOTAL				**$ 653,000**
ENGINEERING PERMITS				
Public Improvements Permit	LS	ALL		$0.00
Grading & Erosion Control Permit	LS	ALL	$2,734.00	$2,734.00
Joint Permit Application	LS	ALL	$0.00	$0.00
City Inspection Staff Fee	LS	ALL		$0.00
ENGINEERING PERMITS SUBTOTAL				**$ 2,734**
			TOTAL PROJECT SUBTOTAL	**$ 3,265,416**
			30% Contingency	**$ 979,630**
			TOTAL ESTIMATED PROJECT COST	**$ 4,245,046**

Unit Costs Note:

The associated product and material costs are based upon the most recent available cost data. Due to the current volatility of the construction market, we cannot guarantee these costs for any duration of time.

Assumptions:

- The assumed roadway section is 8 inches ACP over 16 inches of compacted aggregate base.
- Due to the on-street bicycle facility the assumed storm inlet spacing is 150 feet.
- All overhead utilities will be relocated and remain above ground.
- No sound walls are required for this project.
-
-

Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions; limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

Level C: No engineering performed. Educated guesstimating. Limited technical information available and/or analysis performed. Project Development and Construction Contingencies should be selected appropriately by Project Manager. Contingency may range up to 60% based on risk.

E Street Improvements

10th Street to Bridge

City of Independence

Engineer's Conceptual Estimate

Prepared By: Kittelson - MJB		*Date: 5/3/2024*		
Reviewed By:				
	This Estimate has a Rating of:	**3C**	*(See rating scale guide below.)*	
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
Mobilization	LS	ALL	$80,000.00	$80,000.00
Traffic Control	LS	ALL	$41,000.00	$41,000.00
Construction Staging	LS	ALL	$41,000.00	$41,000.00
Erosion Control	AC	1.1	$10,000.00	$11,000.00
Removal of Structures and Obstructions	LS	ALL	$18,000.00	$18,000.00
Clearing and Grubbing	LS	ALL	$16,000.00	$16,000.00
General Earthworks	CY	2,500	$40.00	$100,000.00
Asphalt Roadway - Full Depth	SF	24,000	$9.20	$220,800.00
Subgrade Geotextile	SY	2,667	$1.50	$4,000.50
Concrete Curbs - Standard Curb & Gutter	LF	1,500	$36.70	$55,050.00
Separated Multi-Use Path - Concrete	SF	0	$8.40	$0.00
Detectable Warnings	EA	8	$500.00	$4,000.00
Extra for Pedestrian Ramps	EA	8	$1,500.00	$12,000.00
Storm Water Conveyance System, Complete	LS	ALL	$119,000.00	$119,000.00
Regional Water Quality and Hydromodification System, Complete	SF	3,700	$28.00	$103,600.00
Permanent Landscaping	SF	9,000	$4.20	$37,800.00
Irrigation, Complete	SF	9,000	$2.50	$22,500.00
Pavement Markings, Complete	LS	ALL	$10,000.00	$10,000.00
Signage, Complete	LS	ALL	$8,000.00	$8,000.00
Illumination System, Complete	LS	ALL	$66,100.00	$66,100.00
TOTAL CONSTRUCTION COST			**$**	**969,851**

E Street Improvements

10th Street to Bridge

City of Independence

Engineer's Conceptual Estimate

Prepared By: Kittelson - MJB		*Date: 5/3/2024*		
Reviewed By:				
	This Estimate has a Rating of:	**3C**	*(See rating scale guide below.)*	
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
ENGINEERING SUPPORT				
Engineering & Construction Management	LS	ALL	$243,000.00	$243,000.00
Right-of-Way Support	EA	0	$18,000.00	$0.00
County Staff Time	YR		$50,000.00	$0.00
ENGINEERING SUPPORT SUBTOTAL				**$ 243,000**
ENGINEERING PERMITS				
Public Improvements Permit	LS	ALL		$0.00
Grading & Erosion Control Permit	LS	ALL	$2,734.00	$2,734.00
Joint Permit Application	LS	ALL	$0.00	$0.00
City Inspection Staff Fee	LS	ALL		$0.00
ENGINEERING PERMITS SUBTOTAL				**$ 2,734**
			TOTAL PROJECT SUBTOTAL	**$ 1,215,585**
			30% Contingency	**$ 364,680**
			TOTAL ESTIMATED PROJECT COST	**$ 1,580,265**

Unit Costs Note:

The associated product and material costs are based upon the most recent available cost data. Due to the current volatility of the construction market, we cannot guarantee these costs for any duration of time.

Assumptions:

- The assumed roadway section is 8 inches ACP over 16 inches of compacted aggregate base.
- Due to the on-street bicycle facility the assumed storm inlet spacing is 150 feet.
- All overhead utilities will be relocated and remain above ground.
- No sound walls are required for this project.
-
-

Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions; limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

Level C: No engineering performed. Educated guesstimating. Limited technical information available and/or analysis performed. Project Development and Construction Contingencies should be selected appropriately by Project Manager. Contingency may range up to 60% based on risk.

E Street Improvements

Bridge to 6th Street

City of Independence

Engineer's Conceptual Estimate

Prepared By: Kittelson - MJB		*Date: 5/3/2024*		
Reviewed By:				
	This Estimate has a Rating of:	**3C**	*(See rating scale guide below.)*	
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
Mobilization	LS	ALL	$80,000.00	$80,000.00
Traffic Control	LS	ALL	$41,000.00	$41,000.00
Construction Staging	LS	ALL	$41,000.00	$41,000.00
Erosion Control	AC	1.1	$10,000.00	$11,000.00
Removal of Structures and Obstructions	LS	ALL	$18,000.00	$18,000.00
Clearing and Grubbing	LS	ALL	$16,000.00	$16,000.00
General Earthworks	CY	2,500	$40.00	$100,000.00
Asphalt Roadway - Full Depth	SF	24,000	$9.20	$220,800.00
Subgrade Geotextile	SY	2,667	$1.50	$4,000.50
Concrete Curbs - Standard Curb & Gutter	LF	1,500	$36.70	$55,050.00
Separated Multi-Use Path - Concrete	SF	0	$8.40	$0.00
Detectable Warnings	EA	8	$500.00	$4,000.00
Extra for Pedestrian Ramps	EA	8	$1,500.00	$12,000.00
Storm Water Conveyance System, Complete	LS	ALL	$119,000.00	$119,000.00
Regional Water Quality and Hydromodification System, Complete	SF	3,700	$28.00	$103,600.00
Permanent Landscaping	SF	9,000	$4.20	$37,800.00
Irrigation, Complete	SF	9,000	$2.50	$22,500.00
Pavement Markings, Complete	LS	ALL	$10,000.00	$10,000.00
Signage, Complete	LS	ALL	$8,000.00	$8,000.00
Illumination System, Complete	LS	ALL	$66,100.00	$66,100.00
TOTAL CONSTRUCTION COST			**$**	**969,851**

E Street Improvements
Bridge to 6th Street
City of Independence

Engineer's Conceptual Estimate

Prepared By: Kittelson - MJB		*Date: 5/3/2024*		
Reviewed By:				
	This Estimate has a Rating of:	**3C**	*(See rating scale guide below.)*	
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
ENGINEERING SUPPORT				
Engineering & Construction Management	LS	ALL	$243,000.00	$243,000.00
Right-of-Way Support	EA	0	$18,000.00	$0.00
County Staff Time	YR		$50,000.00	$0.00
ENGINEERING SUPPORT SUBTOTAL				**$ 243,000**
ENGINEERING PERMITS				
Public Improvements Permit	LS	ALL		$0.00
Grading & Erosion Control Permit	LS	ALL	$2,734.00	$2,734.00
Joint Permit Application	LS	ALL	$0.00	$0.00
City Inspection Staff Fee	LS	ALL		$0.00
ENGINEERING PERMITS SUBTOTAL				**$ 2,734**
			TOTAL PROJECT SUBTOTAL	**$ 1,215,585**
			30% Contingency	**$ 364,680**
			TOTAL ESTIMATED PROJECT COST	**$ 1,580,265**

Unit Costs Note:

The associated product and material costs are based upon the most recent available cost data. Due to the current volatility of the construction market, we cannot guarantee these costs for any duration of time.

Assumptions:

- The assumed roadway section is 8 inches ACP over 16 inches of compacted aggregate base.
- Due to the on-street bicycle facility the assumed storm inlet spacing is 150 feet.
- All overhead utilities will be relocated and remain above ground.
- No sound walls are required for this project.
-
-

Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions; limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

Level C: No engineering performed. Educated guesstimating. Limited technical information available and/or analysis performed. Project Development and Construction Contingencies should be selected appropriately by Project Manager. Contingency may range up to 60% based on risk.

E Street Improvements

Bridge

City of Independence

Engineer's Conceptual Estimate

Prepared By: Kittelson - MJB		*Date: 5/3/2024*		
Reviewed By:				
	This Estimate has a Rating of:	**3C**	*(See rating scale guide below.)*	
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
Mobilization	LS	ALL	$145,000.00	$145,000.00
Traffic Control	LS	ALL	$73,000.00	$73,000.00
Construction Staging	LS	ALL	$73,000.00	$73,000.00
Erosion Control	AC	0.2	$10,000.00	$2,000.00
Removal of Structures and Obstructions	LS	ALL	$32,000.00	$32,000.00
Clearing and Grubbing	LS	ALL	$28,000.00	$28,000.00
General Earthworks	CY	400	$40.00	$16,000.00
Asphalt Roadway - Full Depth	SF	3,200	$9.20	$29,440.00
Subgrade Geotextile	SY	356	$1.50	$534.00
Concrete Curbs - Standard Curb & Gutter	LF	200	$36.70	$7,340.00
Separated Multi-Use Path - Concrete	SF	0	$8.40	$0.00
Detectable Warnings	EA	8	$500.00	$4,000.00
Extra for Pedestrian Ramps	EA	8	$1,500.00	$12,000.00
Storm Water Conveyance System, Complete	LS	ALL	$21,000.00	$21,000.00
Regional Water Quality and Hydromodification System, Complete	SF	500	$28.00	$14,000.00
Permanent Landscaping	SF	1,200	$4.20	$5,040.00
Irrigation, Complete	SF	1,200	$2.50	$3,000.00
Pavement Markings, Complete	LS	ALL	$2,000.00	$2,000.00
Signage, Complete	LS	ALL	$2,000.00	$2,000.00
Illumination System, Complete	LS	ALL	$11,200.00	$11,200.00
Ped/Bike Bridge	LS	ALL	$1,260,000.00	$1,260,000.00
TOTAL CONSTRUCTION COST			**$**	**1,740,554**

E Street Improvements

Bridge

City of Independence

Engineer's Conceptual Estimate

Prepared By: Kittelson - MJB		*Date: 5/3/2024*		
Reviewed By:				
	This Estimate has a Rating of:	**3C**	*(See rating scale guide below.)*	
ITEM	**UNIT**	**TOTAL QUANTITY**	**UNIT PRICE**	**TOTAL COST**
ENGINEERING SUPPORT				
Engineering & Construction Management	LS	ALL	$436,000.00	$436,000.00
Right-of-Way Support	EA	0	$18,000.00	$0.00
County Staff Time	YR		$50,000.00	$0.00
ENGINEERING SUPPORT SUBTOTAL				**$ 436,000**
ENGINEERING PERMITS				
Public Improvements Permit	LS	ALL		$0.00
Grading & Erosion Control Permit	LS	ALL	$2,734.00	$2,734.00
Joint Permit Application	LS	ALL	$0.00	$0.00
City Inspection Staff Fee	LS	ALL		$0.00
ENGINEERING PERMITS SUBTOTAL				**$ 2,734**
			TOTAL PROJECT SUBTOTAL	**$ 2,179,288**
			30% Contingency	**$ 653,790**
			TOTAL ESTIMATED PROJECT COST	**$ 2,833,078**

Unit Costs Note:

The associated product and material costs are based upon the most recent available cost data. Due to the current volatility of the construction market, we cannot guarantee these costs for any duration of time.

Assumptions:

- The assumed roadway section is 8 inches ACP over 16 inches of compacted aggregate base.
- Due to the on-street bicycle facility the assumed storm inlet spacing is 150 feet.
- All overhead utilities will be relocated and remain above ground.
- No sound walls are required for this project.
-
-

Scope Accuracy:

Level 1: Project scope well understood and well defined.

Level 2: Project scope conceptual. Scope lacks detail due to potential permit requirements; Unknown project conditions; limited knowledge of external impacts.

Level 3: Project scope is a "vision" with limited detail.

Engineering Effort:

Level A: Preliminary engineering performed. Technical information is available, engineering calculations have been performed; clear understanding of the materials size and quantities needed to execute job. Schedule understood; staff and permitting is fairly clear, (however this element may still need refining). Project Development & Construction Contingencies ranges between 10%-20%.

Level B: Conceptual engineering performed. Technical information is available, rough engineering calculations may have been performed, or similar information from previous similar work is compared and used. Project Development Contingencies ranges between 15% to 25% and Construction Contingencies ranges between 20% to 30%.

Level C: No engineering performed. Educated guesstimating. Limited technical information available and/or analysis performed. Project Development and Construction Contingencies should be selected appropriately by Project Manager. Contingency may range up to 60% based on risk.