

MOUNT COMFORT GATEWAY CORRIDOR STELLAR IMPROVEMENTS

Target Projects for Cumberland

Prepared For:

Town of Cumberland 11501 E. Washington Street Cumberland, Indiana 46229



DLZ Job No. 1863-1007-91

September 18, 2018

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EXECUTIVE SUMMARY

The Town of Cumberland contracted with DLZ in order to assist the Town with evaluating select target projects within the Mount Comfort Gateway Corridor - Stellar Improvements. This assistance included meeting with the Town, field reviews, development of an opinion of budgetary costs, conceptual narratives and conceptual-level support graphics where applicable. The two target projects included the Cumberland Heights Trail which seeks to develop a pedestrian sidewalk/pathway along North Buck Creek Road to link Cumberland Heights neighborhood with US 40 and Lions Park and concepts for Gateway Signage for the Mount Comfort Corridor. The following information represents the scope of improvements as discussed at meetings with the Town and the resulting planning level documents for use in the Stellar Communities process.



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CUMBERLAND HEIGHTS TRAIL

BUCK CREEK ROAD

Discussion

The project is located along Buck Creek Road, 300' north of US 40 in Cumberland, Hancock County, Indiana and extends approximately 0.25 miles north. The primary need for this project is to provide a connection from the Cumberland Heights neighborhood to Lion's Park. The pedestrian path is approximately 1700' long and follows along the west side of Buck Creek Road. The west side of Buck Creek Road is preferred to the east side because it will reduce the number of mid-block crossings needed and to reduce the impact on overhead utility pole relocations. Utility relocation for a trail project may entail reimbursement to the utility.

Design Narrative

The following options were considered for this project:

Option 1: A new 10' wide asphalt multi-use path with a 5' grass buffer will be placed along the west side of Buck Creek Road. Approximately 3 overhead utility poles will have to be relocated. New curb will be installed along the west side of the road with new inlets where necessary. Approximately 5' of right-of-way will be needed for the length of the project, approximately 20 parcels.

Option 2: A new 6' sidewalk will be placed against the back of the curb for 600' along the west side of Buck Creek Road. Then the 6' wide sidewalk will transition to a 5' sidewalk with 5' grass buffer for the remaining 1100' along the west side of Buck Creek Road. New curb will be installed along the west side of the road with new inlets where necessary. The project will be able to avoid Utility relocation and purchasing right-of-way.

Option 3: A new 6' sidewalk will be placed against the back of the curb for 600' to avoid utility relocation. The path would then transition into a 10' wide asphalt multi-use path for 1100' along the back or the curb. New curb will be installed along the west side of the road with new inlets where necessary. This option will be able to avoid utility relocation and purchasing right-of-way, but provides no grass buffer between the road and the multi-use path.

Option 4 - PREFERRED: A new 5' sidewalk with a 5' grass buffer will be placed along the west side of Buck Creek Road and extend for approximately 1700'. This option assumes that there will be sufficient space between the existing right-of-way and utility poles to place the sidewalk. New curb will be installed along the west side of the road with new inlets where necessary. This option will be able to avoid utility relocation and purchasing right-of-way.

The primary goal for storm water management on this project will be to maintain the existing drainage pattern. There are 2 street light poles that will need to be relocated along the west side of Buck Creek Road. The cost of relocating the light poles will be significantly cheaper than relocating the overhead distribution poles along the east side of the road. Traffic will be maintained throughout the project with flaggers for traffic when necessary. No detours will be required for the construction of this project.

■Beacon[™] Hancock County, IN



CUMBERLAND HEIGHTS TRAIL: **CONCEPTUAL LAYOUT**

<all other values>

, PRIVATE , PRIVATE I, PUBLIC S, PUBLIC U, PUBLIC

Parcel Search

Date created: 8/20/2018 Last Data Uploaded: 8/20/2018 5:00:31 AM Developed by Schneider



PLANNING LEVEL OPINION OF PROBABLE COST

SEPTEMBER 18, 2018

OPTION 1

No.	Item Number	Description	Quantity	Unit		Unit Price		Amount	
1		30% CONTINGENCY	1	L.S.	\$	146,100.00	\$	146,100.00	
2		UTILITY RELOCATION	1	L.S.	\$	200,000.00	\$	200,000.00	
3	105-06845	CONSTRUCTION ENGINEERING	1	L.S.	\$	12,400.00	\$	12,400.00	
4	110-01001	MOBILIZATION AND DEMOBILIZATION {5%}	1	L.S.	\$	20,700.00	\$	20,700.00	
5	201-52370	CLEARING RIGHT OF WAY {5%}	1	L.S.	\$	20,700.00	\$	20,700.00	
6	202-02278	CURB, CONCRETE, REMOVE	1,700	L.F.	\$	11.45	\$	19,465.00	
7	203-02000	EXCAVATION, COMMON	340	C.Y.	\$	47.51	\$	16,153.40	
8	203-02070	BORROW	225	C.Y.	\$	25.90	\$	5,827.50	
9	207-08266	SUBGRADE TREATMENT, TYPE III	2,650	SYS	\$	4.93	\$	13,064.50	
10	211-09264	STRUCTURE BACKFILL, TYPE 1	5	C.Y.	\$	75.25	\$	376.25	
11	303-01180	COMPACTED AGGREGATE NO. 53	5,660	TON	\$	17.25	\$	97,635.00	
12	304-07491	HMA PATCHING, TYPE C	125	TON	\$	203.17	\$	25,396.25	
13	604-05528	HMA FOR SIDEWALK	340	TON	\$	105.75	\$	35,955.00	
14	604-12083	DETECTABLE WARNING SURFACES	9	SYS	\$	200.58	\$	1,805.22	
15	605-06120	CURB, CONCRETE	1,700	L.F.	\$	33.48	\$	56,916.00	
16	610-08446	PCCP FOR APPROACHES, 6 IN.	580	SYS	\$	75.14	\$	43,581.20	
17	621-06554	SEED MIXTURE U	32	LBS	\$	8.66	\$	277.12	
18	621-06565	MULCHING MATERIAL	1	TON	\$	887.57	\$	887.57	
19	621-06567	WATER	3	M.G.	\$	11.27	\$	33.81	
20	715-04987	CONNECTION {TO EXISTING STRUCTURE}	4	EACH	\$	749.83	\$	2,999.32	
21	715-05149	PIPE, TYPE 2, CIRCULAR, 12 IN.	1,700	L.F.	\$	46.56	\$	79,152.00	
22	720-45010	INLET, A3	4	EACH	\$	2,969.74	\$	11,878.96	
23	801-06775	MAINTAINING TRAFFIC {7.5%}	1	L.S.	\$	20,700.00	\$	20,700.00	
24	808-03439	TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24 IN.	120	L.F.	\$	8.21	\$	985.20	
2018 CONSTRUCTION COSTS								832,989.30	
2018 POTENTIAL SOFT COSTS ¹							\$	208,247.33	
2018 TOTAL PROJECT ³							\$	1,041,236.63	
2022 CONSTRUCTION COSTS ²							\$	937,536.80	
2022 SOFT COSTS ¹							\$	234,384.20	
	2022 TOTAL PROJECT ³ \$								

¹ Potential project 'soft costs' may include, but are not limited to engineering and design consulting fees and expenses, legal fees, detailed analysis such as geotechnical investigation, and/or hydrological/hydraulic modeling, topographic or legal surveying, permitting and associated fees, right-of-way engineering and acquisition, construction phase administrative services, and other similar costs.

² Projected costs for 2022 assume 3% per year inflation.

³ The costs provided herein are for planning purposes only and do not account for unforeseen conditions and items not indicated on available GIS, aerial data or other public information outlets used (such as utilities, actual soils conditions, etc.). In addition, these cost opinions are subject to change based on market conditions, economic conditions, inflation, material selection, etc. Multiple phases of projects, multiple bidding packages, design parameters, etc. all have an impact on project costs that cannot be absolutely identified in a planning study of this level of detail.

PLANNING LEVEL OPINION OF PROBABLE COST



SEPTEMBER 18, 2018

OPTION 2

No.	Item Number	Description	Quantity	Unit		Unit Price		Amount
1		30% CONTINGENCY	1	L.S.	\$	109,600.00	\$	109,600.00
2	105-06845	CONSTRUCTION ENGINEERING	1	L.S.	\$	8,800.00	\$	8,800.00
3	110-01001	MOBILIZATION AND DEMOBILIZATION {5%}	1	L.S.	\$	14,700.00	\$	14,700.00
4	201-52370	CLEARING RIGHT OF WAY {5%}	1	L.S.	\$	14,700.00	\$	14,700.00
5	202-02278	CURB, CONCRETE, REMOVE	1,700	L.F.	\$	11.45	\$	19,465.00
6	203-02000	EXCAVATION, COMMON	200	C.Y.	\$	47.51	\$	9,502.00
7	203-02070	BORROW	100	C.Y.	\$	25.90	\$	2,590.00
8	211-09264	STRUCTURE BACKFILL, TYPE 1	5	C.Y.	\$	75.25	\$	376.25
9	304-07491	HMA PATCHING, TYPE C	125	TON	\$	203.17	\$	25,396.25
10	604-06070	SIDEWALK, CONCRETE	1,015	SYS	\$	55.59	\$	56,423.85
11	604-12083	DETECTABLE WARNING SURFACES	9	SYS	\$	200.58	\$	1,805.22
12	605-06120	CURB, CONCRETE	1,700	L.F.	\$	33.48	\$	56,916.00
13	610-08446	PCCP FOR APPROACHES, 6 IN.	580	SYS	\$	75.14	\$	43,581.20
14	621-06554	SEED MIXTURE U	32	LBS	\$	8.66	\$	277.12
15	621-06565	MULCHING MATERIAL	1	TON	\$	887.57	\$	887.57
16	621-06567	WATER	3	M.G.	\$	11.27	\$	33.81
17	715-04987	CONNECTION {TO EXISTING STRUCTURE}	4	EACH	\$	749.83	\$	2,999.32
18	715-05149	PIPE, TYPE 2, CIRCULAR, 12 IN.	1,700	L.F.	\$	46.56	\$	79,152.00
19	720-45010	INLET, A3	4	EACH	\$	2,969.74	\$	11,878.96
20	801-06775	MAINTAINING TRAFFIC	1	L.S.	\$	14,700.00	\$	14,700.00
21	808-03439	TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24 IN.	120	L.F.	\$	8.21	\$	985.20
2018 CONSTRUCTION COSTS								474,769.75
2018 POTENTIAL SOFT COSTS ¹								118,692.44
2018 TOTAL PROJECT ³								593,462.19
2022 CONSTRUCTION COSTS ²							\$	534,357.54
2022 SOFT COSTS ¹								133,589.38
2022 TOTAL PROJECT ³								

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CUMBERLAND HEIGHTS TRAIL - BUCK CREEK ROAL PLANNING LEVEL OPINION OF PROBABLE COST

SEPTEMBER 18, 2018

OPTION 3

No.	Item Number	Description	Quantity	Unit		Unit Price		Amount
1		30% CONTINGENCY	1	L.S.	\$	135,600.00	\$	135,600.00
2	105-06845	CONSTRUCTION ENGINEERING	1	L.S.	\$	11,500.00	\$	11,500.00
3	110-01001	MOBILIZATION AND DEMOBILIZATION {5%}	1	L.S.	\$	19,200.00	\$	19,200.00
4	201-52370	CLEARING RIGHT OF WAY {5%}	1	L.S.	\$	19,200.00	\$	19,200.00
5	202-02278	CURB, CONCRETE, REMOVE	1,700	L.F.	\$	11.45	\$	19,465.00
6	203-02000	EXCAVATION, COMMON	340	C.Y.	\$	47.51	\$	16,153.40
7	203-02070	BORROW	225	C.Y.	\$	25.90	\$	5,827.50
8	207-08266	SUBGRADE TREATMENT, TYPE III	1,712	SYS	\$	4.93	\$	8,440.16
9	211-09264	STRUCTURE BACKFILL, TYPE 1	5	C.Y.	\$	75.25	\$	376.25
10	303-01180	COMPACTED AGGREGATE NO. 53	3,663	TON	\$	17.25	\$	63,186.75
11	304-07491	HMA PATCHING, TYPE C	125	TON	\$	203.17	\$	25,396.25
12	604-05528	HMA FOR SIDEWALK	220	TON	\$	105.75	\$	23,265.00
13	604-06070	SIDEWALK, CONCRETE	400	SYS	\$	55.59	\$	22,236.00
14	604-12083	DETECTABLE WARNING SURFACES	9	SYS	\$	200.58	\$	1,805.22
15	605-06120	CURB, CONCRETE	1,700	L.F.	\$	33.48	\$	56,916.00
16	610-08446	PCCP FOR APPROACHES, 6 IN.	580	SYS	\$	75.14	\$	43,581.20
17	621-06554	SEED MIXTURE U	32	LBS	\$	8.66	\$	277.12
18	621-06565	MULCHING MATERIAL	1	TON	\$	887.57	\$	887.57
19	621-06567	WATER	3	M.G.	\$	11.27	\$	33.81
20	715-04987	CONNECTION {TO EXISTING STRUCTURE}	4	EACH	\$	749.83	\$	2,999.32
21	715-05149	PIPE, TYPE 2, CIRCULAR, 12 IN.	1,700	L.F.	\$	46.56	\$	79,152.00
22	720-45010	INLET, A3	4	EACH	\$	2,969.74	\$	11,878.96
23	801-06775	MAINTAINING TRAFFIC	1	L.S.	\$	19,200.00	\$	19,200.00
24	808-03439	TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24 IN.	120	L.F.	\$	8.21	\$	985.20
2018 CONSTRUCTION COSTS								587,562.71
2018 POTENTIAL SOFT COSTS ¹							\$	146,890.68
2018 TOTAL PROJECT ³								734,453.39
2022 CONSTRUCTION COSTS ²								661,307.01
2022 SOFT COSTS ¹								165,326.75
2022 TOTAL PROJECT ³								

¹ Potential project 'soft costs' may include, but are not limited to engineering and design consulting fees and expenses, legal fees, detailed analysis such as geotechnical investigation, and/or hydrological/hydraulic modeling, topographic or legal surveying, permitting and associated fees, right-of-way engineering and acquisition, construction phase administrative services, and other similar costs.

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PLANNING LEVEL OPINION OF PROBABLE COST



SEPTEMBER 18, 2018

OPTION 4 - PREFERRED

No.	Item Number	Description	Quantity	Unit		Unit Price		Amount
1		30% CONTINGENCY	1	L.S.	\$	108,200.00	\$	108,200.00
2	105-06845	CONSTRUCTION ENGINEERING	1	L.S.	\$	8,700.00	\$	8,700.00
3	110-01001	MOBILIZATION AND DEMOBILIZATION {5%}	1	L.S.	\$	14,500.00	\$	14,500.00
4	201-52370	CLEARING RIGHT OF WAY {5%}	1	L.S.	\$	14,500.00	\$	14,500.00
5	202-02278	CURB, CONCRETE, REMOVE	1,700	L.F.	\$	11.45	\$	19,465.00
6	203-02000	EXCAVATION, COMMON	200	C.Y.	\$	47.51	\$	9,502.00
7	203-02070	BORROW	100	C.Y.	\$	25.90	\$	2,590.00
8	211-09264	STRUCTURE BACKFILL, TYPE 1	5	C.Y.	\$	75.25	\$	376.25
9	304-07491	HMA PATCHING, TYPE C	125	TON	\$	203.17	\$	25,396.25
10	604-06070	SIDEWALK, CONCRETE	945	SYS	\$	55.59	\$	52,532.55
11	604-12083	DETECTABLE WARNING SURFACES	9	SYS	\$	200.58	\$	1,805.22
12	605-06120	CURB, CONCRETE	1,700	L.F.	\$	33.48	\$	56,916.00
13	610-08446	PCCP FOR APPROACHES, 6 IN.	580	SYS	\$	75.14	\$	43,581.20
14	621-06554	SEED MIXTURE U	32	LBS	\$	8.66	\$	277.12
15	621-06565	MULCHING MATERIAL	1	TON	\$	887.57	\$	887.57
16	621-06567	WATER	3	M.G.	\$	11.27	\$	33.81
17	715-04987	CONNECTION {TO EXISTING STRUCTURE}	4	EACH	\$	749.83	\$	2,999.32
18	715-05149	PIPE, TYPE 2, CIRCULAR, 12 IN.	1,700	L.F.	\$	46.56	\$	79,152.00
19	720-45010	INLET, A3	4	EACH	\$	2,969.74	\$	11,878.96
20	801-06775	MAINTAINING TRAFFIC	1	L.S.	\$	14,500.00	\$	14,500.00
21	808-03439	TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24 IN.	120	L.F.	\$	8.21	\$	985.20
2018 CONSTRUCTION COSTS							\$	468,778.45
2018 POTENTIAL SOFT COSTS ^T							\$	117,194.61
2018 TOTAL PROJECT ³							\$	585,973.06
2022 CONSTRUCTION COSTS ²							\$	527,614.28
2022 SOFT COSTS ¹							\$	131,903.57
2022 TOTAL PROJECT ³								659,517.84

¹ Potential project 'soft costs' may include, but are not limited to engineering and design consulting fees and expenses, legal fees, detailed analysis such as geotechnical investigation, and/or hydrological/hydraulic modeling, topographic or legal surveying, permitting and associated fees, right-of-way engineering and acquisition, construction phase administrative services, and other similar costs.

² Projected costs for 2022 assume 3% per year inflation.

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GATEWAY SIGNAGE

U.S. 40 AND MOUNT COMFORT ROAD

Discussion

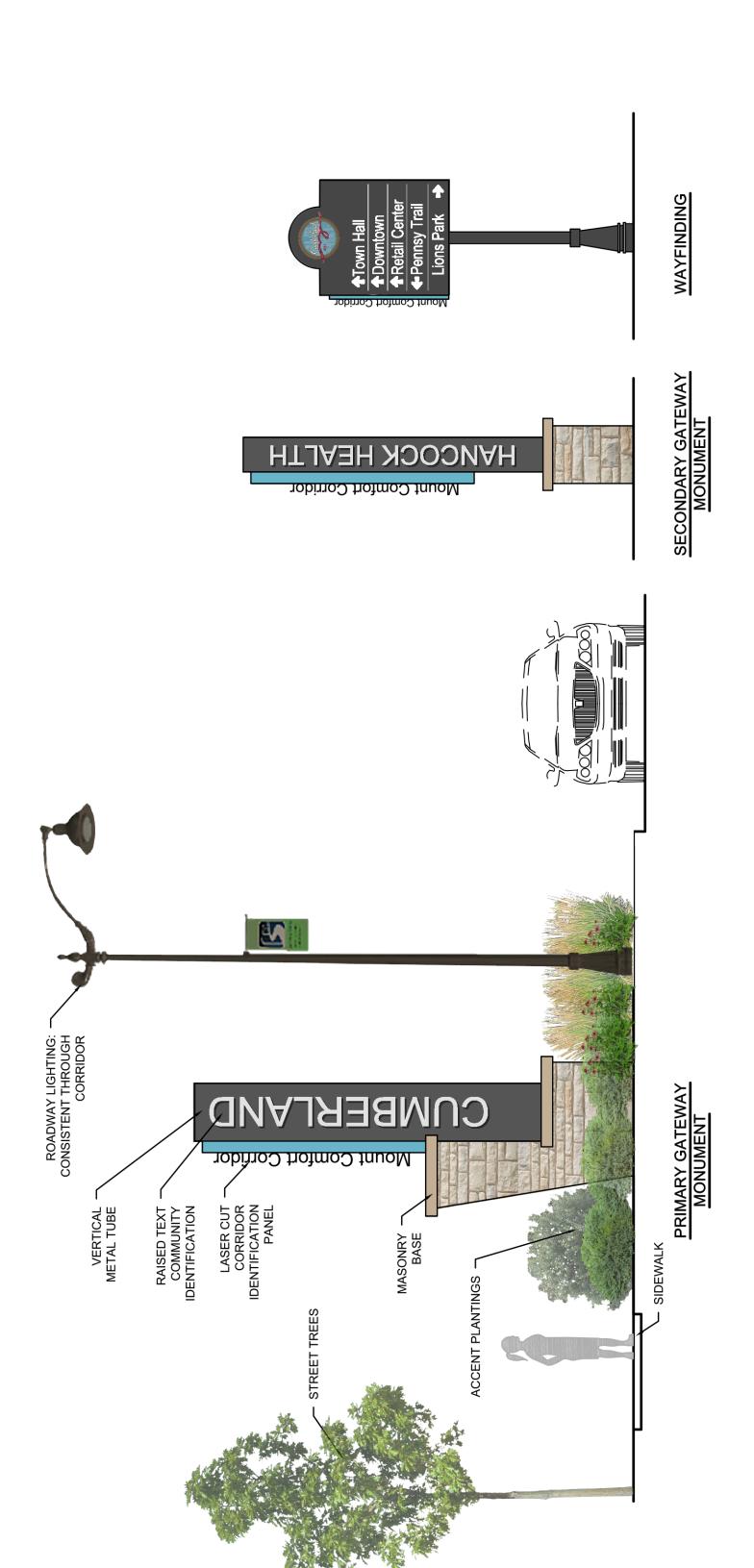
Stakeholders desire to create a uniform gateway monument for all 3 communities (Cumberland, McCordsville, and New Palestine). The basic form and concept should be the same with variations in material and color to customize for each community. Signage should include name of community and Corridor. Would like to see an upright sign to maximize space and convey modern, simple style. Design should easily translate into 'primary' and 'secondary' signage styles for use in other areas of the Corridor. Other elements that may be incorporated depending on adjacent conditions and available right-of-way may include landscape, lighting and sidewalks.

Lighting style varies in each community. Would prefer to not match any and instead create a unique branding aesthetic for the Corridor. Preferred style would be clean lines with an extended arm. Lighting should be standard product available from multiple manufacturers for ease of replacement and addition.

Design Narrative

The gateway monument is designed in a vertical orientation to maximize visibility and minimize the right-of-way required for implementation. The monument can also be simplified for use as a smaller, secondary sign for future developments along the Corridor. Wayfinding may be incorporated and should meet requirements of any permitting agencies (such as INDOT for signage located within their jurisdiction.) All signage should be located outside of required clear zones for safety.

The Cumberland gateways would be located at intersection of Mount Comfort and U.S. 40. Right-of-way is available, and it is anticipated that more could be acquired if needed. The improvements to this intersection would also incorporate streetscape elements such as including landscape, lighting and sidewalks.



Mount Comfort Corridor - Gateway Concept

SEPTEMBER 2018



MOUNT COMFORT CORRIDOR - STELLAR IMPROVEMENTS TOWN OF CUMBERLAND GATEWAY SIGNAGE OPINION OF PROBABLE CONSTRUCTION COST



SEPTEMBER 18, 2018

No.	Item Number	Description	Quantity	Unit	Unit Price			Amount
1	105-06845	CONSTRUCTION ENGINEERING	1	LS	\$	4,512.47	\$	4,512.47
2	110-01001	MOBILIZATION AND DEMOBILIZATION	1	LS	\$	7,520.79	\$	7,520.79
3	801-06775	MAINTAINING TRAFFIC	1	LS	\$	7,520.79	\$	7,520.79
4	201-52370	CLEARING RIGHT OF WAY	1	LS	\$	4,520.79	\$	4,520.79
5	604-06070	SIDEWALK, CONCRETE	167	SYS	\$	55.59	\$	9,265.00
6	604-12083	DETECTABLE WARNING SURFACES	9	SYS	\$	200.58	\$	1,805.22
7	808-03439	TRANSVERSE MARKING, THERMOPLASTIC, CROSSWALK LINE, WHITE, 24 IN.	440	L.F.	\$	8.21	\$	3,612.40
8		PRIMARY GATEWAY SIGNAGE	2	UNIT	\$	34,095.37	\$	68,190.74
9		LANDSCAPE PLANTINGS	2	LS	\$	7,500.00	\$	15,000.00
10		TOPSOIL	75	CY	\$	75.00	\$	5,625.00
11		SEEDING	2,667	SYS	\$	0.60	\$	1,600.00
12		ACCENT LIGHTING AT SIGNAGE	1	LS	\$	25,000.00	\$	25,000.00
13		DECORATIVE STREET LIGHTS AND SERVICE	1	LS	\$	35,000.00	\$	35,000.00
14		PEDESTRIAN SIGNALIZATION IMPROVEMENTS NOT INCLUDED					\$	-
15		CONTINGENCY, 30%					\$	56,751.96
	2018 CONSTRUCTION COSTS							245,925.15
2018 POTENTIAL SOFT COSTS ¹							\$	61,481.29
2018 TOTAL PROJECT ³							\$	307,406.44
2022 CONSTRUCTION COSTS ²								276,790.93
2022 SOFT COSTS ¹								69,197.73
2022 TOTAL PROJECT ³								345,988.66

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