



March 11, 2025

Mr. Matt Garcia  
Pursuit Development  
316 West Residence Avenue  
Albany, GA 31701

Re: Circle K – Buckeye Loop Road/Dundee Road  
Lincks Project No: 24014

Dear Mr. Garcia,

The purpose of this letter is to provide the proportionate share cost of the improvements at the intersection of Dundee Road and Buckeye Loop Road that include the following:

- Construct a southbound right turn lane.
- Convert the existing lanes to southbound dual left turn lanes.
- Modifying the signal to accommodate the improvements.

The methodology utilized to calculate the proportionate share shown in Table 1 of this letter is as follows:

1. The cost utilized in the letter was based on the total construction cost developed by Kimley-Horn. See Appendix.
2. The capacity for the critical movements within the intersection were extracted from the Synchro printout.
3. The project traffic within the critical movements was obtained from the Access Management Analysis dated December, 2024.

Table 2 provides the calculation of the percent of the capacity consumed for the project from the intersection of Dundee Road and Buckeye Loop Road.

As shown in Table 1, the project's proportionate share of the proposed intersection improvements is \$74,939.

Mr. Matt Garcia  
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If you have any questions, please do not hesitate to contact me at [shenry@lincks.com](mailto:shenry@lincks.com) or (813)-559-9589.

LINCKS & ASSOCIATES  
A TMC Company



Steven Henry, P.E.  
President

SJH/ANM/JAW

Enclosures

TABLE 1  
 INTERSECTION PROPORTIONATE SHARE DETERMINATION

	<u>Improvement</u>	<u>Improvement Cost (1)</u>	<u>Percentage Capacity Consumed by Project Traffic (2)</u>	<u>Proportionate Share</u>
Dundee Rd and Buckeye Loop Rd	Intersection Modification	\$780,615.39	9.60%	\$74,939

(1) Source: Kimley-Horn Cost Estimates dated 2/7/25.

(2) Percent Capacity Consumed - See Table 2.

TABLE 2  
 PROJECT CAPACITY CONSUMED CALCULATION

<u>Intersection</u>	<u>Time Period</u>	<u>Critical Movement</u>	<u>Lane Group Capacity</u>	<u>New Project Trips</u>	
Dundee Rd and Buckeye Loop Rd	AM	EB Left	165	9	
		WB Through	1,012	72	
		NB Left/Through/Right	20	0	
			SB Left/Through	<u>231</u>	<u>46</u>
				1,428	127
					8.89%
	PM	EB Left	257	12	
		WB Through	843	51	
		NB Left/Through/Right	21	0	
		SB Left/Through	<u>317</u>	<u>75</u>	
			1,438	138	
				9.60%	

APPENDIX



TRAFFIC VOLUMES

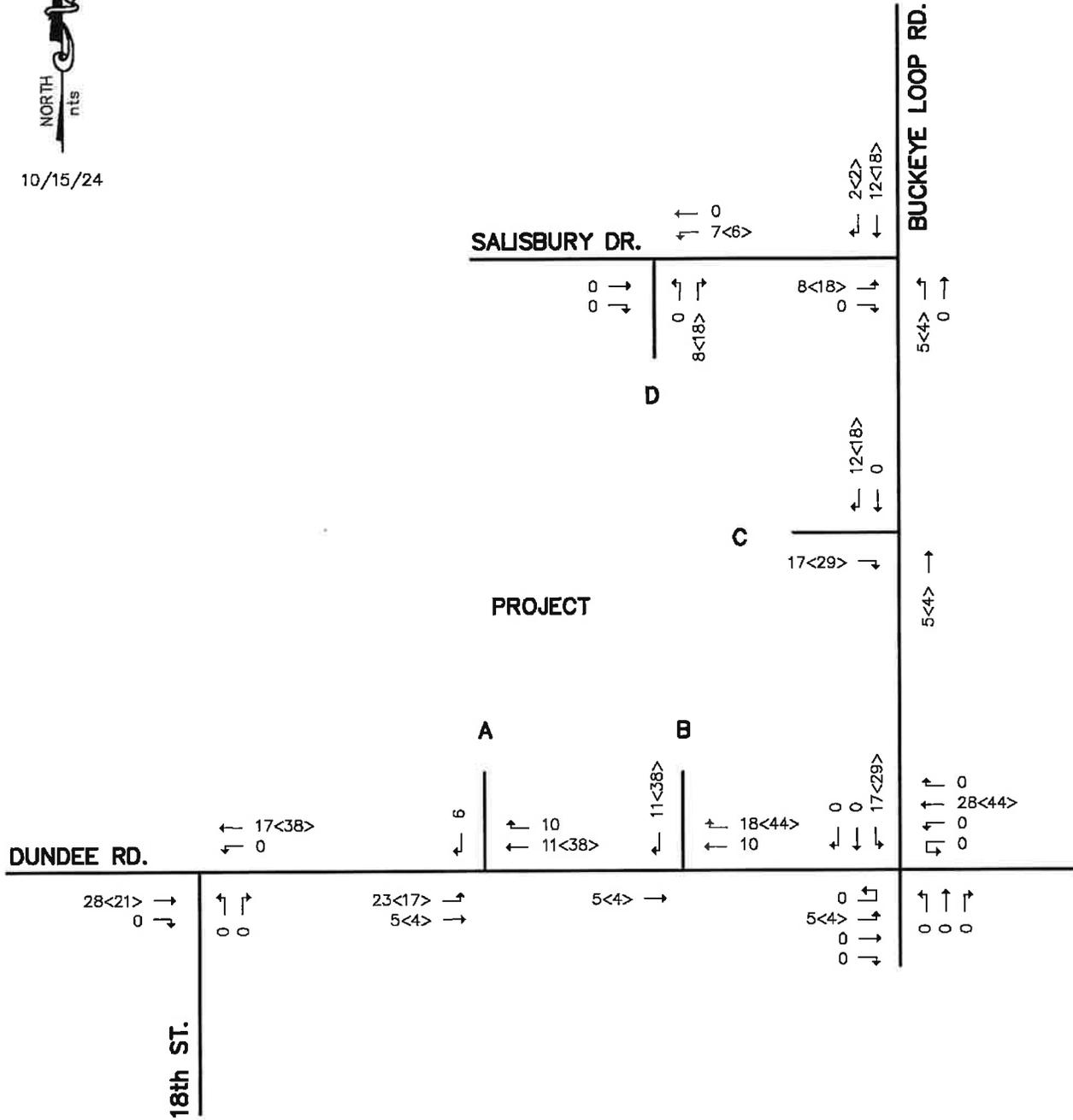




10/15/24

**LEGEND**

- 33 = NEW PROJECT TRAFFIC
- <36> = PASSERBY PROJECT TRAFFIC



**FIGURE 2  
AM PEAK HOUR  
PROJECT TRAFFIC**

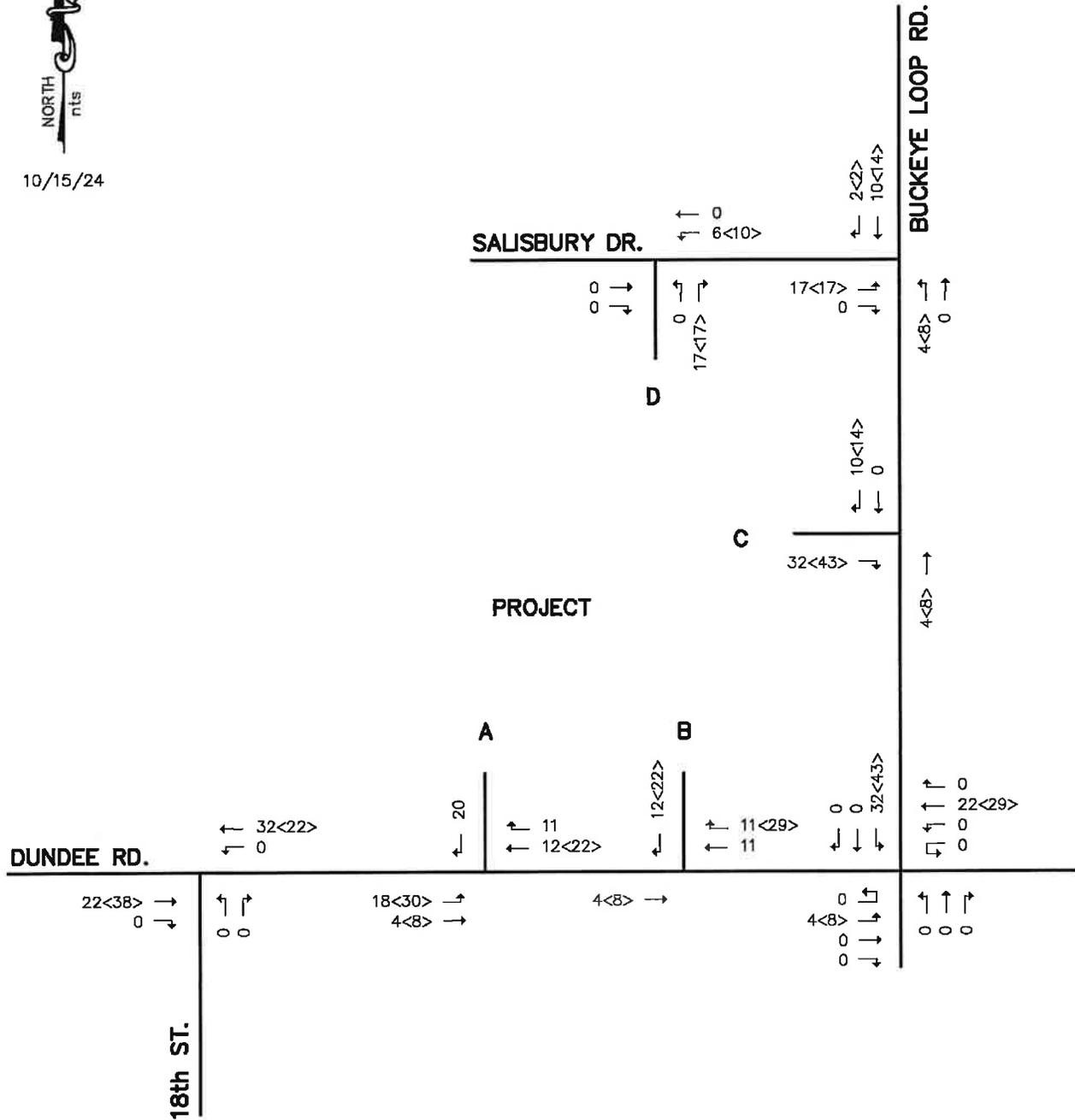




10/15/24

**LEGEND**

- 33 = NEW PROJECT TRAFFIC
- <36> = PASSERBY PROJECT TRAFFIC



**FIGURE 3**  
**PM PEAK HOUR**  
**PROJECT TRAFFIC**



INTERSECTION ANALYSIS



HCM Signalized Intersection Capacity Analysis  
 1: Buckeye Loop Road & Dundee Road

01/28/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	552	1	20	908	420	1	0	0	402	1	218
Future Volume (vph)	113	552	1	20	908	420	1	0	0	402	1	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.3		7.3	7.3	7.3		6.1		6.6	6.6	6.6
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00		1.00		0.95	0.95	1.00
Fr't	1.00	1.00		1.00	1.00	0.85		1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95		0.95	0.95	1.00
Satd. Flow (prot)	1719	3470		1626	1863	1568		1805		1603	1607	1583
Flt Permitted	0.06	1.00		0.43	1.00	1.00		0.95		0.95	0.95	1.00
Satd. Flow (perm)	110	3470		736	1863	1568		1805		1603	1607	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	120	587	1	21	966	447	1	0	0	428	1	232
RTOR Reduction (vph)	0	0	0	0	0	143	0	0	0	0	0	199
Lane Group Flow (vph)	120	588	0	21	966	304	0	1	0	214	215	33
Heavy Vehicles (%)	5%	4%	0%	11%	2%	3%	0%	0%	0%	7%	0%	2%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	2			6		6						4
Actuated Green, G (s)	72.3	65.6		63.9	61.4	61.4		1.3		16.3	16.3	16.3
Effective Green, g (s)	72.3	65.6		63.9	61.4	61.4		1.3		16.3	16.3	16.3
Actuated g/C Ratio	0.64	0.58		0.57	0.54	0.54		0.01		0.14	0.14	0.14
Clearance Time (s)	7.3	7.3		7.3	7.3	7.3		6.1		6.6	6.6	6.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	165	2014		435	1012	851		20		231	231	228
v/s Ratio Prot	c0.04	0.17		0.00	c0.52			c0.00		0.13	c0.13	
v/s Ratio Perm	c0.42			0.03		0.19						0.02
v/c Ratio	0.73	0.29		0.05	0.95	0.36		0.05		0.93	0.93	0.15
Uniform Delay, d1	26.6	12.0		10.8	24.5	14.6		55.2		47.8	47.8	42.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	14.8	0.1		0.0	18.2	0.3		1.0		39.2	40.5	0.3
Delay (s)	41.3	12.1		10.9	42.7	14.9		56.3		86.9	88.3	42.6
Level of Service	D	B		B	D	B		E		F	F	D
Approach Delay (s/veh)		17.0			33.5			56.3			71.8	
Approach LOS		B			C			E			E	
<b>Intersection Summary</b>												
HCM 2000 Control Delay (s/veh)			38.4	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			113.0	Sum of lost time (s)				27.3				
Intersection Capacity Utilization			83.8%	ICU Level of Service				E				
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis  
 1: Buckeye Loop Road & Dundee Road

01/28/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	182	967	8	38	645	361	8	2	0	458	6	114
Future Volume (vph)	182	967	8	38	645	361	8	2	0	458	6	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.3		7.3	7.3	7.3		6.1		6.6	6.6	6.6
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00		1.00		0.95	0.95	1.00
Fr't	1.00	1.00		1.00	1.00	0.85		1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.96		0.95	0.95	1.00
Satd. Flow (prot)	1805	3570		1805	1863	1568		1825		1698	1705	1583
Flt Permitted	0.12	1.00		0.19	1.00	1.00		0.96		0.95	0.95	1.00
Satd. Flow (perm)	234	3570		359	1863	1568		1825		1698	1705	1583
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	204	1087	9	43	725	406	9	2	0	515	7	128
RTOR Reduction (vph)	0	1	0	0	0	195	0	0	0	0	0	104
Lane Group Flow (vph)	204	1095	0	43	725	211	0	11	0	263	259	24
Heavy Vehicles (%)	0%	1%	0%	0%	2%	3%	0%	0%	0%	1%	0%	2%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6		8	8		7	7	
Permitted Phases	2			6		6						7
Actuated Green, G (s)	57.8	49.9		49.4	45.7	45.7		1.2		18.8	18.8	18.8
Effective Green, g (s)	57.8	49.9		49.4	45.7	45.7		1.2		18.8	18.8	18.8
Actuated g/C Ratio	0.57	0.49		0.49	0.45	0.45		0.01		0.19	0.19	0.19
Clearance Time (s)	7.3	7.3		7.3	7.3	7.3		6.1		6.6	6.6	6.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	257	1765		228	843	710		21		316	317	294
v/s Ratio Prot	c0.06	0.31		0.01	c0.39			c0.01		c0.15	0.15	
v/s Ratio Perm	c0.39			0.09		0.13						0.02
v/c Ratio	0.79	0.62		0.19	0.86	0.30		0.52		0.83	0.82	0.08
Uniform Delay, d1	18.3	18.6		14.3	24.7	17.5		49.6		39.5	39.4	33.9
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	15.4	0.7		0.4	8.9	0.2		21.6		16.8	14.9	0.1
Delay (s)	33.7	19.3		14.7	33.7	17.7		71.2		56.4	54.3	34.0
Level of Service	C	B		B	C	B		E		E	D	C
Approach Delay (s/veh)		21.6			27.4			71.2			51.2	
Approach LOS		C			C			E			D	
<b>Intersection Summary</b>												
HCM 2000 Control Delay (s/veh)			30.1									C
HCM 2000 Volume to Capacity ratio			0.86									
Actuated Cycle Length (s)			100.9						27.3			
Intersection Capacity Utilization			76.5%									D
Analysis Period (min)			15									
c Critical Lane Group												

CONSTRUCTION COST



# Kimley»Horn

## Kimley-Horn and Associates, Inc.

1530 Cornerstone Blvd.  
Daytona Beach, FL 32117  
Ph: 386-672-0282

Project: Dundee & Buckeye Loop  
Permit No.: Polk County Driveway Permit  
BUCKEYE LOOP IMPROVEMENTS  
KHA Project No. 249343005

Date: 3/11/2025

Quantities for construction are based on the turn lane improvements on Buckeye Loop per the Dundee & Buckeye Loop Concept Plan SP-08 dated 01/06/2025. This concept is not final and has not been through formal review by the necessary permitting agencies and is subject to change.

### Project Description

*Note: The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at this time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.*

DEMOLITION					
Item No.	Description	Quantity	Unit	Unit Price	TOTAL
1	Mobilization / Demobilization	1	LS	\$20,000.00	\$20,000.00
2	Polk County Performance and Payment Bond coordination	1	LS	\$5,000.00	\$5,000.00
3	Inlet Protection	2	EA	\$50.00	\$100.00
4	Maintenance of Traffic	1	LS	\$15,000.00	\$15,000.00
5	Clearing and Grubbing	0.106	AC	\$200.00	\$21.12
6	Saw cut and remove existing Type 'F' curb	40	LF	\$20.00	\$800.00
7	Milling and Resurfacing (2"-3 1/2" average depth)	750	SY	\$4.20	\$3,150.00
8	Remove and Relocate Fire Hydrant	1	EA	\$5,000.00	\$5,000.00
9	Removal of existing force main (Utility pipe, remove & Dispose 5-7.9")	340	LF	\$50.00	\$17,000.00
10	Remove and relocate fiber optic box	1	EA	\$1,500.00	\$1,500.00
11	Remove and relocate existing single sign and post	1	EA	\$370.00	\$370.00
12	Remove and relocate existing street light pole	1	EA	\$6,500.00	\$6,500.00
				<b>Sub-Total</b>	<b>\$74,441.12</b>

SITE WORK					
Item No.	Description	Quantity	Unit	Unit Price	TOTAL
1	9" Limerock Base (Optional base Group 15) (Type B-12.5)	250	SY	\$105.00	\$26,250.00
2	12" Stabilized Subgrade	360	SY	\$5.00	\$1,800.00
3	2" Asphalt Structural Course (Traffic C) (2 LIFTS)	500	SY	\$158.00	\$79,000.00
4	1.5" Asphalt Friction Course FC-12.5 (Traffic C) (1 LIFTS)	250	SY	\$180.00	\$45,000.00
5	4" Concrete Sidewalk (Class I, 3,000 psi)	110	SY	\$80.00	\$8,800.00
6	Type B Stabilization	250	SY	\$13.00	\$3,250.00
7	Concrete curb and gutter (Type F)	50	LF	\$48.50	\$2,425.00
8	Concrete Traffic Separator (Type 1, Option II)	60	LF	\$160.00	\$9,600.00
9	Resod / restore right of way	250	SY	\$4.50	\$1,125.00
10	Construction Admin	1	LS	\$7,500.00	\$7,500.00
	Maintenance of Traffic	1	LS	\$100,000.00	\$100,000.00
				<b>Sub-Total</b>	<b>\$284,750.00</b>

Pavement Markings and Signage					
Item No.	Description	Quantity	Unit	Unit Price	TOTAL
1	Thermoplastic, standard open graded asphalt surfaces, white, solid 6"	0.097	GM	\$6,700.00	\$647.16
2	Thermoplastic, standard open graded asphalt surfaces, yellow, solid 6"	0.098	GM	\$6,800.00	\$664.55
3	Thermoplastic, standard, yellow, solid, 18" for diagonals and chevrons	60	LF	\$6.00	\$360.00
4	Directional Arrows (thermoplastic)	6	EA	\$95.00	\$570.00
5	Thermoplastic, standard, white solid, 24" for stop bar	35	LF	\$8.00	\$280.00
6	Testing (density, thickness, etc.)	1	LS	\$8,000.00	\$8,000.00
7	As-Built Documentation	1	LS	\$5,000.00	\$5,000.00
				<b>Sub-Total</b>	<b>\$15,521.70</b>

SANITARY					
Item No.	Description	Quantity	Unit	Unit Price	TOTAL
1	Compaction of Trenches	1	LS	\$5,000.00	\$5,000.00
2	6" Sanitary Force Main installation (include fittings, restraints, adapters, etc.)	180	LF	\$290.00	\$52,200.00
3	Testing (pressure, etc.)	1	LS	\$5,000.00	\$5,000.00
4	As-Built Documentation	1	LS	\$3,000.00	\$3,000.00
				<b>Sub-Total</b>	<b>\$65,200.00</b>

GRADING					
Item No.	Description	Quantity	Unit	Unit Price	TOTAL
1	*Earthwork (fill)	0	CY	\$10.00	\$0.00
2	*Export CUT	390	CY	\$20.00	\$7,800.00
				<b>Sub-Total</b>	<b>\$7,800.00</b>

CIVIL ENGINEERING AND PERMITTING FEES					
Item No.	Description	Quantity	Unit	Unit Price	TOTAL
1	Engineering Design & Services Fee	1	LS	\$182,800.00	\$182,800.00
2	Construction Phase Services	1	LS	\$20,000.00	\$20,000.00
				<b>Sub-Total</b>	<b>\$202,800.00</b>

<b>TOTAL</b>	<b>\$650,512.82</b>
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<b>CONTINGENCY (20%)</b>	<b>\$130,102.56</b>
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<b>GRAND TOTAL</b>	<b>\$780,615.39</b>
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\*NOTE: The earthwork quantities listed above are an estimate based on available information at the time of completion and are subject to change based on engineering design, agency permitting, master developer coordination, and site plan revisions. Earthwork above assumes that fill needed on-site will be hauled to the site.

Jarod C. Stubbs, P.E.  
FL P.E. # 89387

Digitally signed by Jarod Stubbs  
Date: 2025.03.11 08:37:06-04'00'

