### Estimate EC2/3 - Alt C

Estimated Cost:\$110,886,625.00

Contingency: 0.00%

#### Estimated Total: \$110,886,625.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative C

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Estimate: EC2/3 - Alt C <u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	, 10.000	CY	\$4.00000	\$40.00
				Total for Group 0001:\$40.00
Group 0002: Fill - Embankment	t			
0002 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	1,429,406.000 ,	CY	\$3.00000	\$4,288,218.00
			Total fo	r Group 0002:\$4,288,218.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$30.00000	\$0.00
				Total for Group 0003:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY Guardrail	3,200.000	FT	\$12.00000	\$38,400.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	58,680.000	SF	\$4.00000	\$234,720.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY <i>Curb</i>	11,736.000	FT	\$12.00000	\$140,832.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	11,736.000	SF	\$14.00000	\$164,304.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with o			\$1,100.00000	\$29,700.00
0009 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$1,650.00000	\$0.00
Clearing & Grubbing; medium clearing 0010 A-OC-RDWY		<i>ake</i> ACRE	\$2,200.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; heavy clearing v				
v			Total	for Group 0010:\$607,956.00
Group 0020: Seeding & Mulchi	ng / Soddir	ng		
0011 B-MC-ERCO MAJOR COST DRIVERS, EROSION Seeding & Mulching	130,400.000 CONTROL	SY	\$2.00000	\$260,800.00
			Total	for Group 0020:\$260,800.00
Group 0021: Erosion Control -	Item 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION Conceptual Est: Earthwork Cost \$4,00	1.000 CONTROL		\$120,000.00000	\$120,000.00
5 <sup>.</sup> 09 <sup>.</sup> 10PM				

Estimate: EC2/3 - Alt C	Quertitu	11	Unit Dais s		ENTRAN
<u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>		<u>Extension</u>
				Total for Group 0021:\$120	,000.00
Group 0030: Underdrains					
0013 C-MC-DRNG 2 MAJOR COST DRIVERS, DRAINAGE	23,472.000	FT	\$6.00000		\$140,832.00
				Total for Group 0030:\$140	,832.00
Group 0031: Culverts - Type A: <	5'				
0014 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	268.000	FT	\$375.0000	0	\$100,500.00
				Total for Group 0031:\$100	500.00
Group 0032: Culverts, Type A: 5'	- 10'				
0015 C-MC-DRNG	280.000	FT	\$825.0000	0	\$231,000.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0032:\$231	000 00
• • • • • • • • • • • •					000.00
Group 0033: Culverts, Type A: 10			¢4 500 000	200	<b><b><b><b><b><b></b></b></b></b></b></b>
0016 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	340.000	FT	\$1,500.000		\$510,000.00
				Total for Group 0033:\$510	,000.00
Group 0034: Closed Storm System	m				
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	1.000	LS	\$281,664.0	00000	\$281,664.00
				Total for Group 0034:\$281	664.00
Group 0040: Mainline Lanes					
1	4,336.000	SY	\$41.00000	9	51,817,776.00
MAJOR COST DRIVERS, PAVEMENT			т	otal for Group 0040:\$1,817	776 00
			•		110.00
Group 0041: Ramps		0)(	<b>*</b> 4.4 00000		<b>*</b> •••••
0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	0.000	SY	\$41.00000		\$0.00
				Total for Group 004	1:\$0.00
Group 0042: Non - Mainline Lane	S				
0020 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	0.000	SY	\$41.00000		\$0.00
WASON COST DIVIVENS, PAVEIVIENT				Total for Group 0042	2:\$0.00
Group 0050: Utilities					
0021 E-MC-WATR	1.000	LS	\$16,000.00	0000	\$16,000.00
MAJOR COST DRIVERS, WATER LINE 0022 F-MC-SANI	1.000	LS	\$25,000.00		\$25,000.00
5:09:10PM			+======================================		+==,000,000

Estimate: EC2/3 - Alt C				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
MAJOR COST DRIVERS, SANITARY SEV 0023 N-OC-DEMO MAJOR COST DRIVERS, BUILDING DEN Electric Transmission Tower Relocation	6.000	EACH	\$1,000,000.00000	\$6,000,000.00
			Total for Grou	up 0050:\$6,041,000.00
Group 0060: Lighting - Continuous	s Roadw	/ay		
0024 G-MC-LTNG 7 MAJOR COST DRIVERS, LIGHTING	7,668.000	FT	\$35.00000 Total for Gr	\$268,380.00 oup 0060:\$268,380.00
Group 0070: Signs				
0025 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON	1.450 TROL	MILE	\$250,000.00000	\$362,500.00
	-		Total for Gr	oup 0070:\$362,500.00
Group 0071: Pavement Marking				
0026 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Edge Line	5.800 TROL	MILE	\$500.00000	\$2,900.00
0027 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Lane Line	2.900 TROL	MILE	\$300.00000	\$870.00
0028 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Center Line	0.000 TROL	MILE	\$1,200.00000	\$0.00
0029 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Channelizing Line	400.000 TROL	FT	\$1.25000	\$500.00
0030 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Stop Line	24.000 TROL	FT	\$6.00000	\$144.00
0031 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Transverse Line	0.000 TROL	FT	\$2.00000	\$0.00
0032 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Dotted Line	0.000 TROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Lane Arrow	6.000 TROL	EACH	\$80.00000	\$480.00
0034 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Word on Pavement	4.000 TROL	EACH	\$100.00000	\$400.00
			Total for	Group 0071:\$5,294.00
Group 0072: Signals - Intersection	IS			

0035 K-MC-SGNL MAJOR COST DRIVERS, SIGNALS	0.000	EACH	\$200,000.00000		\$0.00
				T ( ) ( O	0070 00 00

Total for Group 0072:\$0.00

## Group 0080: Retaining Walls

5:09:10PM Friday, January 13, 2012

Estimate: EC2/3 - Alt C				ENTRAN
Line # Item Number	<b>Quantity</b>	<u>Units</u>	Unit Price	Extension
Description Supplemental Description				
	0.000	05	<b>\$</b> 400,0000	<b>*</b> 0.00
0036 M-MC-WALL MAJOR COST DRIVERS, RETAINING	0.000 G WALLS	SF	\$100.00000	\$0.00
				Total for Group 0080:\$0.00
Crown 0000, Ruilding Domolitic				
Group 0090: Building Demolitic			<b>*</b> ( <b>* * * * * * * * * *</b>	<b>1</b> 0.00
0037 N-MC-DEMO MAJOR COST DRIVERS, BUILDING	0.000 DEMOLITION	EACH	\$10,000.00000	\$0.00
Residential		FAOL	<b>#</b> =0.000.00000	<b>\$0.00</b>
0038 N-MC-DEMO MAJOR COST DRIVERS, BUILDING	0.000 DEMOLITION	EACH	\$50,000.00000	\$0.00
Service Station Island & Tanks		FAOL		<b>#F0</b> 000 00
0039 N-MC-DEMO MAJOR COST DRIVERS, BUILDING	2.000 DEMOLITION	EACH	\$25,000.00000	\$50,000.00
Commercial		FACU	¢750 00000	¢750.00
0040 N-MC-DEMO MAJOR COST DRIVERS, BUILDING	1.000 DEMOLITION	EACH	\$750.00000	\$750.00
Sheds			¢2 500 00000	¢0,500,00
0041 N-MC-DEMO MAJOR COST DRIVERS, BUILDING	1.000 DEMOLITION	EACH	\$2,500.00000	\$2,500.00
Garages			Tatal	fan Onaun 0000 ¢52 050 00
			Iotai	for Group 0090:\$53,250.00
Group 0100: New Structures				
0042 R-MC-STRC	20,000.000	SF	\$150.00000	\$3,000,000.00
MAJOR COST DRIVERS, STRUCTU		0.	\$100100000	\$0,000,000.00
New Structure: Over US 50 0043 R-MC-STRC	25,000.000	SF	\$150.00000	\$3,750,000.00
MAJOR COST DRIVERS, STRUCTU	· ·	•	<b>•</b> ·····	¢0,1.00,000.00
New Structure: Over Railroad 0044 R-MC-STRC	20,000.000	SF	\$150.00000	\$3,000,000.00
MAJOR COST DRIVERS, STRUCTU		-		÷-,
New Structure: Over Wooster 0045 R-MC-STRC	25,000.000	SF	\$200.00000	\$5,000,000.00
MAJOR COST DRIVERS, STRUCTU				
New Structure: Over Railroad 0046 R-MC-STRC	114,000.000	SF	\$250.00000	\$28,500,000.00
MAJOR COST DRIVERS, STRUCTU				
New Structure: Over Little Miami Rive 0047 R-MC-STRC	45,600.000	SF	\$350.00000	\$15,960,000.00
MAJOR COST DRIVERS, STRUCTU New Structure: Over Little Miami Rive				
0048 R-MC-STRC	0.000	SF	\$150.00000	\$0.00
MAJOR COST DRIVERS, STRUCTU New Structure: Over LMR Floodway (				
0049 R-MC-STRC	0.000	SF	\$300.00000	\$0.00
MAJOR COST DRIVERS, STRUCTU New Structure: Over LMR Floodway (				
Now Chaldre. Over Emilt Hoodway (	rany		Total for (	Group 0100:\$59,210,000.00
				• • • • •
Group 0110: Rail Transit				
0050 U-MC-MISC	5,868.000		\$875.00000	\$5,134,500.00
MAJOR COST DRIVERS, MISCELLA At Grade Ballasted Track (DMU)		3		
0051 U-MC-MISC	1,800.000	FT	\$935.00000	\$1,683,000.00
5:09:10PM				

Estimate: EC2/3 - Alt C Line # Item Number	Quantity	Unite	Unit Price	ENTRAN Extension
<u>Description</u> <u>Supplemental Description</u>	<u>wuantity</u>	<u>omis</u>	<u>Omt File</u>	Extension
MAJOR COST DRIVERS, MISCELLANE Aerial Direct Fixation Track on Bridges (I		S		
0052 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Grade Crossing	1.000	EACH S	\$250,000.00000	\$250,000.00
0053 U-MC-MIŠC MAJOR COST DRIVERS, MISCELLANE Transit Station	1.000 OUS COST		\$3,069,160.00000	\$3,069,160.00
			Total for Group 011	0:\$10,136,660.00
Group 0120: Wetland Construction	on			
0054 T-MC-WTLD MAJOR COST DRIVERS, WETLAND CO			\$60,000.00000	\$0.00
0055 T-OC-WTLD OTHER COSTS, WETLAND CONSTRU Stream Restoration	195.000		\$600.00000	\$117,000.00
			Total for Group (	0120:\$117,000.00
Group 0130: Misc. Costs				
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Performance Bond: 0.5% of total project		S	\$423,215.00000	\$423,215.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Railroad Insurance Bond	1.000	LS	\$35,000.00000	\$35,000.00
0058 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Field Office Type C	36.000 OUS COST		\$2,500.00000	\$90,000.00
0059 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Mobilization: from CMS Item 624 for tota		S	\$2,000,000.00000	\$2,000,000.00
0060 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Construction Layout Stakes: 0.5% of tota		S	\$423,215.00000 12,870)	\$423,215.00
0061 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Maintaining Traffic: 1.4% of total project of	1.000 OUS COST	ÈS S	\$1,185,000.00000	\$1,185,000.00
5 , , ,		, ,	Total for Group 01	30:\$4,156,430.00
Group 0140: Design Contingency	/ Costs			
0062 V-MC-CNTG MAJOR COST DRIVERS, CONTINGEN PDP Design Contingency (step 5): 25%			\$22,177,325.00000 ost (\$88,709,300)	\$22,177,325.00
			Total for Group 014	0:\$22,177,325.00

### Estimate EC2/3 - Alt D

Estimated Cost:\$616,901,195.00

Contingency: 0.00%

#### Estimated Total: \$616,901,195.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative D

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Estimate: EC2/3 - Alt D <u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	3,302.000	CY	\$4.00000	\$13,208.00
			Tota	al for Group 0001:\$13,208.00
Group 0002: Fill - Embankment				
0002 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	391,336.000	CY	\$3.00000	\$1,174,008.00
			Total fo	or Group 0002:\$1,174,008.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY	0.000	CY	\$30.00000	\$0.00
MAJOR COST DRIVERS, ROADWAY				Total for Group 0003:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY	1,700.000	FT	\$12.00000	\$20,400.00
OTHER COSTS, ROADWAY Guardrail				
0005 A-OC-RDWY OTHER COSTS, ROADWAY	8,500.000	SF	\$4.00000	\$34,000.00
10' Sidewalk/Bike 0006 A-OC-RDWY	1,700.000	FT	\$12.00000	\$20,400.00
OTHER COSTS, ROADWAY <i>Curb</i>				
0007 A-OC-RDWY OTHER COSTS, ROADWAY	1,700.000	FT	\$14.00000	\$23,800.00
Curb & Gutter 0008 A-OC-RDWY	4.000	ACRE	\$1,100.00000	\$4,400.00
OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with de	ozer, ball & ch	nain		
0009 A-OC-RDWY OTHER COSTS, ROADWAY	0.000	ACRE	\$1,650.00000	\$0.00
Clearing & Grubbing; medium clearing 0010 A-OC-RDWY		ake ACRE	\$2,200.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; heavy clearing wi				
			Total	for Group 0010:\$103,000.00
Group 0020: Seeding & Mulchin	g / Soddir	ng		
0011 B-MC-ERCO MAJOR COST DRIVERS, EROSION C	18,889.000	-	\$2.00000	\$37,778.00
Seeding & Mulching	ONTROL			
			Iota	al for Group 0020:\$37,778.00
Group 0021: Erosion Control - It	em 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION C	1.000 ONTROL	LS	\$35,000.00000	\$35,000.00
Conceptual Est: Earthwork Cost \$1,000		000		
4:51:52PM				

Estimate: EC2/3 - Alt D				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	Extension
			Tota	al for Group 0021:\$35,000.00
Group 0030: Underdrains				
0013 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	3,400.000	FT	\$6.00000	\$20,400.00
			Tota	al for Group 0030:\$20,400.00
Group 0031: Culverts - Type A:	< 5'			
0014 C-MC-DRNG	0.000	FT	\$375.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0031:\$0.00
Group 0032: Culverts, Type A: 5	s' - 10'			
0015 C-MC-DRNG	0.000	FT	\$825.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0032:\$0.00
One was 00000 Outbrante. Trus e Ar 4				
Group 0033: Culverts, Type A: 1 0016 C-MC-DRNG	348.000	FT	\$1,500.00000	\$522,000.00
MAJOR COST DRIVERS, DRAINAGE	340.000			
			Iotai	l for Group 0033:\$522,000.00
Group 0034: Closed Storm Syst				
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	1.000	LS	\$40,800.00000	\$40,800.00
			Tota	al for Group 0034:\$40,800.00
Group 0040: Mainline Lanes				
0018 D-MC-PVMT	6,423.000	SY	\$41.00000	\$263,343.00
•	6,423.000	SY		\$263,343.00 I for Group 0040:\$263,343.00
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	6,423.000	SY		
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT	6,423.000			
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps			Total	l for Group 0040:\$263,343.00 \$0.00
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	0.000		Total	l for Group 0040:\$263,343.00
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0042: Non - Mainline Lan	0.000 N <b>ES</b>	SY	Total \$41.00000	l for Group 0040:\$263,343.00 \$0.00 Total for Group 0041:\$0.00
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	0.000	SY	Total	l for Group 0040:\$263,343.00 \$0.00 Total for Group 0041:\$0.00 \$0.00
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0042: Non - Mainline Lan 0020 D-MC-PVMT	0.000 N <b>ES</b>	SY	Total \$41.00000	l for Group 0040:\$263,343.00 \$0.00 Total for Group 0041:\$0.00
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0042: Non - Mainline Lan 0020 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0050: Utilities	0.000 Nes 0.000	SY SY	Total \$41.00000 \$41.00000	۱ for Group 0040:\$263,343.00 ۵.00 Total for Group 0041:\$0.00 ۵.00 Total for Group 0042:\$0.00
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0042: Non - Mainline Lan 0020 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0050: Utilities 0021 E-MC-WATR MAJOR COST DRIVERS, WATER LINE	0.000 nes 0.000 E	SY SY LS	Total \$41.00000 \$41.00000 \$16,000.00000	۱ for Group 0040:\$263,343.00 ۵.00 Total for Group 0041:\$0.00 ۵.00 Total for Group 0042:\$0.00
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0042: Non - Mainline Lan 0020 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0050: Utilities 0021 E-MC-WATR	0.000 Nes 0.000 1.000	SY SY	Total \$41.00000 \$41.00000	۱ for Group 0040:\$263,343.00 ۵.00 Total for Group 0041:\$0.00 ۵.00 Total for Group 0042:\$0.00

Estimate: EC2/3 - Alt D				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
MAJOR COST DRIVERS, SANITA 0023 N-OC-DEMO MAJOR COST DRIVERS, BUILDI Electric Transmission Tower Reloc	3.000 NG DEMOLITION	EACH	\$1,000,000.00000	\$3,000,000.00
			Total for Group 005	60:\$3,041,000.00
Group 0060: Lighting - Cont	inuous Roadv	vay		
0024 G-MC-LTNG MAJOR COST DRIVERS, LIGHTI	7,519.000 NG	FT	\$35.00000 Total for Group 0	\$263,165.00 060:\$263,165.00
Group 0070: Signs				
0025 J-MC-TRAF MAJOR COST DRIVERS, TRAFF	1.400 IC CONTROL	MILE	\$250,000.00000	\$350,000.00
			Total for Group 0	070:\$350,000.00
Group 0071: Pavement Mar	king			
0026 J-MC-TRAF MAJOR COST DRIVERS, TRAFF Edge Line	5.600 IC CONTROL	MILE	\$500.00000	\$2,800.00
0027 J-MC-TRAF MAJOR COST DRIVERS, TRAFF Lane Line	2.800 IC CONTROL	MILE	\$300.00000	\$840.00
0028 J-MC-TRAF MAJOR COST DRIVERS, TRAFF Center Line	0.000 IC CONTROL	MILE	\$1,200.00000	\$0.00
0029 J-MC-TRAF MAJOR COST DRIVERS, TRAFF Channelizing Line	400.000 IC CONTROL	FT	\$1.25000	\$500.00
0030 J-MC-ŤRAF MAJOR COST DRIVERS, TRAFF Stop Line	24.000 IC CONTROL	FT	\$6.00000	\$144.00
0031 J-MC-TRAF MAJOR COST DRIVERS, TRAFF Transverse Line	0.000 IC CONTROL	FT	\$2.00000	\$0.00
0032 J-MC-TRAF MAJOR COST DRIVERS, TRAFF Dotted Line	0.000 IC CONTROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, TRAFF Lane Arrow	6.000 IC CONTROL	EACH	\$80.00000	\$480.00
0034 J-MC-TRAF MAJOR COST DRIVERS, TRAFF Word on Pavement	4.000 IC CONTROL	EACH	\$100.00000	\$400.00
			Total for Group	0071:\$5,164.00
Group 0072: Signals - Inters	ections			
			¢000,000,00000	<b>\$</b> 2.22

0035 K-MC-SGNL 0	0.000	L/ (011	\$200,000.00000			\$0.00
MAJOR COST DRIVERS, SIGNALS						

Total for Group 0072:\$0.00

## Group 0080: Retaining Walls

4:51:52PM Friday, January 13, 2012

Estimate: EC2/3 - Alt D			ENTRAN
Line # Item Number Quantity	<u>Units</u>	Unit Price	Extension
Description Supplemental Description			
0036 M-MC-WALL 0.000	SF	\$100.00000	\$0.00
MAJOR COST DRIVERS, RETAINING WALLS			
		TOLAI	for Group 0080:\$0.00
Group 0090: Building Demolition			
0037 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Residential	EACH	\$10,000.00000	\$0.00
0038 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Service Station Island & Tanks	EACH	\$50,000.00000	\$0.00
0039 N-MC-DEMO 2.000 MAJOR COST DRIVERS, BUILDING DEMOLITION <i>Commercial</i>	EACH	\$25,000.00000	\$50,000.00
0040 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds	EACH	\$750.00000	\$0.00
0041 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Garages	EACH	\$2,500.00000	\$0.00
Garages		Total for G	roup 0090:\$50,000.00
Group 0100: New Structures			
0042 R-MC-STRC 20,000.000	SF	\$150.00000	\$3,000,000.00
MAJOR COST DRIVERS, STRUCTURES New Structure: Over US 50			
0043 R-MC-STRC 35,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad & Wooster	SF	\$150.00000	\$5,250,000.00
0044 R-MC-STRC 15,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad	SF	\$150.00000	\$2,250,000.00
0045 R-MC-STRC 354,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Little Miami River (highway)	SF	\$750.00000	\$265,500,000.00
0046 R-MC-STRC 141,600.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Little Miami River (rail)	SF	\$900.00000	\$127,440,000.00
0047 R-MC-STRC 243,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over LMR Floodway (highway)	SF	\$150.00000	\$36,450,000.00
0048 R-MC-STRC 97,200.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over LMR Floodway (rail)	SF	\$300.00000	\$29,160,000.00
Now Gradiano. Over Ennis Hoodway (rail)		Total for Group (	0100:\$469,050,000.00
Group 0110: Rail Transit			
0049 U-MC-MISC 850.000	FT	\$875.00000	\$743,750.00
MAJOR COST DRIVERS, MISCELLANEOUS COST At Grade Ballasted Track (DMU)			¢0,. 00.00
0050 U-MC-MISC 6,670.000 MAJOR COST DRIVERS, MISCELLANEOUS COST Aerial Direct Fixation Track on Bridges (DMU)		\$935.00000	\$6,236,450.00
	EACH	\$250,000.00000	\$250,000.00

Estimate: EC2/3 - Alt D <u>Line # Item Number</u> <u>Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Supplemental Description				
MAJOR COST DRIVERS, MISCELLANE Grade Crossing	OUS COST	S		
0052 U-MC-MIŠC MAJOR COST DRIVERS, MISCELLANE Transit Station	1.000 OUS COST		\$3,069,160.00000	\$3,069,160.00
			Total for	Group 0110:\$10,299,360.00
Group 0120: Wetland Construction	n			
0053 T-MC-WTLD MAJOR COST DRIVERS, WETLAND CO			\$60,000.00000	\$0.00
0054 T-OC-WTLD OTHER COSTS, WETLAND CONSTRUC Stream Restoration	0.000		\$600.00000	\$0.00
				Total for Group 0120:\$0.00
Croup 0120: Miss. Costs				
Group 0130: Misc. Costs	1 0 0 0			
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE	1.000 OUS COST		\$2,427,092.00000	\$2,427,092.00
Performance Bond: 0.5% of total project	1. /	, ,	•	
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE	1.000 OUS COST		\$35,000.00000	\$35,000.00
Railroad Insurance Bond			<b>*</b> 0 <b>=</b> 00 00000	<b>A</b> 150 000 00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE		MNTH S	\$2,500.00000	\$150,000.00
Field Office Type C 0058 U-MC-MISC	1.000	LS	\$2,000,000.00000	\$2,000,000.00
MAJOR COST DRIVERS, MISCELLANE				
Mobilization: from CMS Item 624 for total 0059 U-MC-MISC	project cost 1.000		\$2,427,092.00000	\$2,427,092.00
MAJOR COST DRIVERS, MISCELLANE Construction Layout Stakes: 0.5% of tota	OUS COST	S		ψ2,427,032.00
0060 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Maintaining Traffic: 0.25% of total project	1.000 OUS COST	ÈS S	\$1,213,546.00000	\$1,213,546.00
	του (φ+00,	,,0,220)		Group 0130:\$8,252,730.00

Group 0140: Design Contingency Costs

0061 V-MC-CNTG	1.000	LS	\$123,380,239.00000	\$123,380,239.00				
MAJOR COST DRIVERS, CONTINGENCY COSTS								
PDP Design Contingency (step 5): 25% of total construction cost (\$493,520,956)								

Total for Group 0140:\$123,380,239.00

### Estimate EC2/3 - Alt E

Estimated Cost:\$371,309,832.00

Contingency: 0.00%

#### Estimated Total: \$371,309,832.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative E

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Estimate: EC2/3 - Alt E				ENTRAN
Line # Item Number Description	<u>Quantity</u>	<u>Units</u>	Unit Price	<b>Extension</b>
Supplemental Description				
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	59.000	CY	\$4.00000	\$236.00
			Total for Group 000	1:\$236.00
Group 0002: Fill - Embankment				
0002 A-MC-RDWY 1,	293,798.000	CY	\$3.00000	\$3,881,394.00
MAJOR COST DRIVERS, ROADWAY			Total for Group 0002:\$3,88	31.394.00
			·····	- ,
Group 0003: Fill - Granular	0.000	CV	\$30.00000	\$0.00
MAJOR COST DRIVERS, ROADWAY	0.000	CT		
			Total for Group 00	003:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY	3,000.000	FT	\$12.00000	\$36,000.00
Guardrail 0005 A-OC-RDWY	36,580.000	SF	\$4.00000	\$146,320.00
OTHER COSTS, ROADWAY 10' Sidewalk/Bike	00,0001000	0.		¢110,020100
0006 A-OC-RDWY OTHER COSTS, ROADWAY	7,316.000	FT	\$12.00000	\$87,792.00
Curb	7 040 000	FT	¢44,0000	¢400,404,00
0007 A-OC-RDWY OTHER COSTS, ROADWAY	7,316.000	FT	\$14.00000	\$102,424.00
Curb & Gutter 0008 A-OC-RDWY	17.000	ACRE	\$1,100.00000	\$18,700.00
OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with de				
0009 A-OC-RDWY OTHER COSTS, ROADWAY	0.000	ACRE	\$1,650.00000	\$0.00
Clearing & Grubbing; medium clearing 0010 A-OC-RDWY		ake ACRE	\$2,200.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; heavy clearing wi	ith dozer			
			Total for Group 0010:\$39	91,236.00
Group 0020: Seeding & Mulchin	iq / Soddir	ng		
0011 B-MC-ERCO	81,289.000	•	\$2.00000	\$162,578.00
MAJOR COST DRIVERS, EROSION C Seeding & Mulching	ONTROL			
			Total for Group 0020:\$16	62,578.00
Group 0021: Erosion Control - If	tem 832			
0012 B-MC-ERCO	1.000	LS	\$85,000.00000	\$85,000.00
MAJOR COST DRIVERS, EROSION C Conceptual Est: Earthwork Cost \$3,000		000		
4:53:29PM				

Estimate: EC2/3 - Alt E				ENTRAN
	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
Description Supplemental Description				
			Tota	l for Group 0021:\$85,000.00
				·····
Group 0030: Underdrains	. 400 000		¢c 00000	¢00.700.00
0013 C-MC-DRNG 15 MAJOR COST DRIVERS, DRAINAGE	5,120.000	FT	\$6.00000	\$90,720.00
			Tota	l for Group 0030:\$90,720.00
Group 0031: Culverts - Type A: < 5	5'			
0014 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	0.000	FT	\$375.00000	\$0.00
				Total for Group 0031:\$0.00
Group 0032: Culverts, Type A: 5' -	10'			
0015 C-MC-DRNG	0.000	FT	\$825.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0032:\$0.00
Group 0033: Culverts, Type A: 10'				
0016 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	0.000	FT	\$1,500.00000	\$0.00
				Total for Group 0033:\$0.00
Group 0034: Closed Storm System	า			
0017 C-MC-DRNG	1.000	LS	\$181,440.00000	\$181,440.00
MAJOR COST DRIVERS, DRAINAGE			Total	for Group 0034:\$181,440.00
Group 0040: Mainline Lanes				
•	,639.000	SY	\$41.00000	\$1,133,199.00
MAJOR COST DRIVERS, PAVEMENT	,			r Group 0040:\$1,133,199.00
			Total To	1 Gloup 0040.\$1,133,199.00
Group 0041: Ramps				
0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	0.000	SY	\$41.00000	\$0.00
				Total for Group 0041:\$0.00
Group 0042: Non - Mainline Lanes	5			
0020 D-MC-PVMT	0.000	SY	\$41.00000	\$0.00
MAJOR COST DRIVERS, PAVEMENT				Total for Group 0042:\$0.00
				· · ·
Group 0050: Utilities	1.000	LS	\$16,000.00000	\$16,000.00
MAJOR COST DRIVERS, WATER LINE				
0022 F-MC-SANI	1.000	LS	\$25,000.00000	\$25,000.00
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Estimate: EC2/3 - Alt E				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	Extension
MAJOR COST DRIVERS, SAN 0023 N-OC-DEMO MAJOR COST DRIVERS, BUIL Electric Transmission Tower Re	1.000 DING DEMOLITION	EACH	\$1,000,000.00000	\$1,000,000.00
			Total for Group 00	050:\$1,041,000.00
Group 0060: Lighting - Cor	ntinuous Roadw	vay		
0024 G-MC-LTNG MAJOR COST DRIVERS, LIGH	8,137.000 ITING	FT	\$35.00000 Total for Group	\$284,795.00 0060:\$284,795.00
Group 0070: Signs				
0025 J-MC-TRAF MAJOR COST DRIVERS, TRA	1.500 FFIC CONTROL	MILE	\$250,000.00000	\$375,000.00
			Total for Group	0070:\$375,000.00
Group 0071: Pavement Ma	arking			
0026 J-MC-TRAF MAJOR COST DRIVERS, TRA <i>Edge Line</i>	6.000 FFIC CONTROL	MILE	\$500.00000	\$3,000.00
0027 J-MC-TRAF MAJOR COST DRIVERS, TRA Lane Line	3.000 FFIC CONTROL	MILE	\$300.00000	\$900.00
0028 J-MC-TRAF MAJOR COST DRIVERS, TRA <i>Center Line</i>	0.000 FFIC CONTROL	MILE	\$1,200.00000	\$0.00
0029 J-MC-TRAF MAJOR COST DRIVERS, TRA Channelizing Line	400.000 FFIC CONTROL	FT	\$1.25000	\$500.00
0030 J-MC-TRAF MAJOR COST DRIVERS, TRA Stop Line		FT	\$6.00000	\$144.00
0031 J-MC-TRAF MAJOR COST DRIVERS, TRAI Transverse Line	0.000 FFIC CONTROL	FT	\$2.00000	\$0.00
0032 J-MC-TRAF MAJOR COST DRIVERS, TRA Dotted Line	0.000 FFIC CONTROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, TRA Lane Arrow	6.000 FFIC CONTROL	EACH	\$80.00000	\$480.00
0034 J-MC-TRAF MAJOR COST DRIVERS, TRA Word on Pavement	4.000 FFIC CONTROL	EACH	\$100.00000	\$400.00
			Total for Grou	up 0071:\$5,424.00
Group 0072: Signals - Inte	rsections			
		=	<b>*</b>	<b>Aa aa</b>

0035 K-MC-SGNL	0.000	EACH	\$200,000.00000		\$0.00
MAJOR COST DRIVERS, SIGNALS					
				$\mathbf{T}$	

Total for Group 0072:\$0.00

## Group 0080: Retaining Walls

4:53:29PM Friday, January 13, 2012

Estimate: EC2/3 - Alt E				ENTRAN
<u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
0036 M-MC-WALL MAJOR COST DRIVERS, RETAINING WA	0.000 ALLS	SF	\$100.00000	\$0.00 Total for Group 0080:\$0.00
Group 0090: Building Demolition				
0037 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEM Residential	0.000 IOLITION	EACH	\$10,000.00000	\$0.00
0038 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEM Service Station Island & Tanks	0.000 IOLITION	EACH	\$50,000.00000	\$0.00
0039 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEM Commercial	0.000 IOLITION	EACH	\$25,000.00000	\$0.00
0040 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEN Sheds	0.000 IOLITION	EACH	\$750.00000	\$0.00
0041 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEM Garages	0.000 IOLITION	EACH	\$2,500.00000	\$0.00
				Total for Group 0090:\$0.00
Group 0100: New Structures				
MAJOR COST DRIVERS, STRUCTURES New Structure: Over US 50	),000.000		\$150.00000	\$3,000,000.00
0043 R-MC-STRC 20 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad & Wooster	),000.000	SF	\$150.00000	\$3,000,000.00
0044 R-MC-STRC 30 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad	),000.000	SF	\$150.00000	\$4,500,000.00
0045 R-MC-STRC 252 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Little Miami River (hig	2,800.000 ahwav)	SF	\$600.00000	\$151,680,000.00
	,120.000	SF	\$750.00000	\$75,840,000.00
	5,200.000	SF	\$150.00000	\$18,780,000.00
	),080.000	SF	\$300.00000	\$15,024,000.00
			Total for G	roup 0100:\$271,824,000.00
Group 0110: Rail Transit				
0049 U-MC-MISC 3 MAJOR COST DRIVERS, MISCELLANEO At Grade Ballasted Track (DMU)	3,658.000 US COST		\$875.00000	\$3,200,750.00
			\$935.00000	\$4,188,800.00
0051 U-MC-MISC	1.000	EACH	\$250,000.00000	\$250,000.00

Estimate: EC2/3 - Alt E <u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>	Quantity		<u>Unit Price</u>	ENTRAN <u>Extension</u>
MAJOR COST DRIVERS, MISCELLANE Grade Crossing	OUS COST	5		
0052 U-MC-MIŠC MAJOR COST DRIVERS, MISCELLANE Transit Station	1.000 OUS COST		\$3,069,160.00000 Total for Group 0110:\$10,70	\$3,069,160.00 08,710.00
Group 0120: Wetland Construction	n			
0053 T-MC-WTLD MAJOR COST DRIVERS, WETLAND CO			\$60,000.00000	\$1,200.00
0054 T-OC-WTLD OTHER COSTS, WETLAND CONSTRUC Stream Restoration	0.000	FT	\$600.00000	\$0.00
			Total for Group 0120:	\$1,200.00
Group 0130: Misc. Costs				
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Performance Bond: 0.5% of total project		S	\$1,451,430.00000	\$1,451,430.00
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Railroad Insurance Bond	1.000 OUS COST		\$35,000.00000	\$35,000.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Field Office Type C		MNTH S	\$2,500.00000	\$120,000.00
0058 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Mobilization: from CMS Item 624 for total		S	\$2,000,000.00000	\$2,000,000.00
0059 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Construction Layout Stakes: 0.5% of tota	1.000 OUS COST	LS S	\$1,451,430.00000 285,932)	\$1,451,430.00
0060 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Maintaining Traffic: 0.41% of total project	1.000 OUS COST	ÈS S	\$1,190,173.00000	\$1,190,173.00
	(,,		Total for Group 0130:\$6,24	48,033.00
Group 0140: Design Contingency	v Costs			
0061 V-MC-CNTG	1.000	LS	\$792,375.00000	\$792,375.00
MAJOR COST DRIVERS, CONTINGEN Constructible Risk Contingency: Hafner L Embankment \$10/CY)		ect = 350'	" @ 15' depth = 31,695CY * (Excavation \$15/C)	<b>/</b> +
0062 V-MC-CNTG		LS	\$74,103,492.00000	\$74,103,492.00

MAJOR COST DRIVERS, CONTINGENCY COSTS

PDP Design Contingency (step 5): 25% of total construction cost (\$296,413,965) Total for Group 0140:\$74,895,867.00

### Estimate EC2/3 - Alt F

Estimated Cost:\$296,468,618.00

Contingency: 0.00%

#### Estimated Total: \$296,468,618.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative F

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Estimate: EC2/3 - Alt F				ENTRAN
Line # Item Number	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
Description Supplemental Description				
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	164,058.000	CY	\$4.00000	\$656,232.00
			Total for Group 0001:\$656	6,232.00
Group 0002: Fill Embonisment				
Group 0002: Fill - Embankment	412,917.000	CV	\$3.00000	\$4,238,751.00
MAJOR COST DRIVERS, ROADWAY	412,917.000	01		
			Total for Group 0002:\$4,238	8,751.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY	0.000	CY	\$30.00000	\$0.00
MAJOR COST DRIVERS, ROADWAY			Total for Group 000	03:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY Guardrail	3,000.000	FT	\$12.00000	\$36,000.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY	59,780.000	SF	\$4.00000	\$239,120.00
10' Sidewalk/Bike				<b>A</b>
0006 A-OC-RDWY OTHER COSTS, ROADWAY <i>Curb</i>	11,956.000	FT	\$12.00000	\$143,472.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	11,956.000	FT	\$14.00000	\$167,384.00
0008 A-OC-RDWY	28.000	ACRE	\$1,100.00000	\$30,800.00
OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with de	ozer, ball & ch	ain		
0009 A-OC-RDWY OTHER COSTS, ROADWAY	0.000	ACRE	\$1,650.00000	\$0.00
Clearing & Grubbing; medium clearing			¢2 200 00000	¢0.00
0010 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$2,200.00000	\$0.00
Clearing & Grubbing; heavy clearing w	ith dozer		Total for Group 0010:\$616	5776.00
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Group 0020: Seeding & Mulchin	•	•		
0011 B-MC-ERCO MAJOR COST DRIVERS, EROSION C Seeding & Mulching	132,845.000 ONTROL	SY	\$2.00000	\$265,690.00
			Total for Group 0020:\$265	5,690.00
Group 0021: Eropian Control 14	om 020			
Group 0021: Erosion Control - If	1.000	19	\$120,000.00000	\$120,000.00
MAJOR COST DRIVERS, EROSION C Conceptual Est: Earthwork Cost \$4,000	ONTROL		ψτ20,000.00000	φ ι 20,000.00
4:55:22PM				

Estimate: EC2/3 - Alt F				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	Extension
			٦	Total for Group 0021:\$120,000.00
Group 0030: Underdrains				
0013 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	23,912.000	FT	\$6.00000	\$143,472.00
			٦	Total for Group 0030:\$143,472.00
Group 0031: Culverts - Type A: <	< 5'			
0014 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	0.000	FT	\$375.00000	\$0.00
WAJOR COST DRIVERS, DRAINAGE				Total for Group 0031:\$0.00
Group 0032: Culverts, Type A: 5	' - 10'			
0015 C-MC-DRNG	0.000	FT	\$825.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0032:\$0.00
Group 0033: Culverts, Type A: 10	0' - 20'			
0016 C-MC-DRNG	308.000	FT	\$1,500.0000	0 \$462,000.00
MAJOR COST DRIVERS, DRAINAGE			-	Total for Group 0033:\$462,000.00
Croup 0024: Closed Storm Syst	- m			
Group 0034: Closed Storm Syste	1.000	LS	\$286,944.00	000 \$286,944.00
MAJOR COST DRIVERS, DRAINAGE			7	Total for Group 0034:\$286,944.00
Group 0040: Mainline Lanes	45,167.000	SV	\$41.00000	\$1,851,847.00
MAJOR COST DRIVERS, PAVEMENT	43,107.000	01		
			IO	tal for Group 0040:\$1,851,847.00
Group 0041: Ramps			• • • • • • • • •	
0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	0.000	SY	\$41.00000	\$0.00
				Total for Group 0041:\$0.00
Group 0042: Non - Mainline Land	es			
0020 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	0.000	SY	\$41.00000	\$0.00
				Total for Group 0042:\$0.00
Group 0050: Utilities				
0021 E-MC-WATR MAJOR COST DRIVERS, WATER LINE	1.000	LS	\$16,000.000	00 \$16,000.00
0022 F-MC-SANI	1.000	LS	\$25,000.000	00 \$25,000.00
4:55:22PM Friday, January 13, 2012				Page 3 of 6

Estimate: EC2/3 - Alt F				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
MAJOR COST DRIVERS, 0023 N-OC-DEMO MAJOR COST DRIVERS, Electric Transmission Tow	0.000 BUILDING DEMOLITION	EACH	\$1,000,000.00000	\$0.00
			Total for Group	0050:\$41,000.00
Group 0060: Lighting -	Continuous Roadw	vay		
0024 G-MC-LTNG MAJOR COST DRIVERS,	9,778.000 LIGHTING	FT	\$35.00000 Total for Group 0	\$342,230.00 060:\$342,230.00
Group 0070: Signs			·	
0025 J-MC-TRAF MAJOR COST DRIVERS,	1.850 TRAFFIC CONTROL	MILE	\$250,000.00000	\$462,500.00
,			Total for Group 0	070:\$462,500.00
Group 0071: Pavemen	t Marking			
0026 J-MC-TRAF MAJOR COST DRIVERS, <i>Edge Line</i>	7.400 TRAFFIC CONTROL	MILE	\$500.00000	\$3,700.00
0027 J-MC-TRAF MAJOR COST DRIVERS, Lane Line	3.700 TRAFFIC CONTROL	MILE	\$300.00000	\$1,110.00
0028 J-MC-TRAF MAJOR COST DRIVERS, Center Line	0.000 TRAFFIC CONTROL	MILE	\$1,200.00000	\$0.00
0029 J-MC-TRAF MAJOR COST DRIVERS, Channelizing Line	400.000 TRAFFIC CONTROL	FT	\$1.25000	\$500.00
0030 J-MC-TRAF MAJOR COST DRIVERS, Stop Line	24.000 TRAFFIC CONTROL	FT	\$6.00000	\$144.00
0031 J-MC-TRAF MAJOR COST DRIVERS, Transverse Line	0.000 TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0032 J-MC-TRAF MAJOR COST DRIVERS, Dotted Line	0.000 TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, Lane Arrow	6.000 TRAFFIC CONTROL	EACH	\$80.00000	\$480.00
0034 J-MC-TRAF MAJOR COST DRIVERS, Word on Pavement	4.000 TRAFFIC CONTROL	EACH	\$100.00000	\$400.00
			Total for Group	0071:\$6,334.00
Group 0072: Signals -	Intersections			
	0.000	=	<b>A</b> AAAA AAAAAA	<b>Aa aa</b>

0035 K-MC-SGNL MAJOR COST DRIVERS, SIGNALS	0.000	EACH	\$200,000.00000	\$0.00
				Total for Group 0072:\$0.00

## Group 0080: Retaining Walls

4:55:22PM Friday, January 13, 2012

Estimate: EC2/3 - Alt F			ENTRAN
Line # Item Number Quantity	<u>Units</u>	Unit Price	Extension
<u>Description</u> <u>Supplemental Description</u>			
0036 M-MC-WALL 0.000 MAJOR COST DRIVERS, RETAINING WALLS	SF	\$100.00000	\$0.00
			Total for Group 0080:\$0.00
Group 0090: Building Demolition			
0037 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Residential	EACH	\$10,000.00000	\$0.00
0038 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Service Station Island & Tanks	EACH	\$50,000.00000	\$0.00
0039 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION <i>Commercial</i>	EACH	\$25,000.00000	\$0.00
0040 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds	EACH	\$750.00000	\$0.00
0041 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Garages	EACH	\$2,500.00000	\$0.00
Ŭ			Total for Group 0090:\$0.00
Group 0100: New Structures			
0042 R-MC-STRC 20,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over US 50	SF	\$150.00000	\$3,000,000.00
0043 R-MC-STRC 20,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad	SF	\$150.00000	\$3,000,000.00
0044 R-MC-STRC 30,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Wooster & Railroad	SF	\$150.00000	\$4,500,000.00
0045 R-MC-STRC 230,300.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Little Miami River (highway)	SF	\$500.00000	\$115,150,000.00
0046 R-MC-STRC 92,120.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Little Miami River (rail)	SF	\$650.00000	\$59,878,000.00
0047 R-MC-STRC 79,700.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over LMR Floodway (highway)	SF	\$150.00000	\$11,955,000.00
0048 R-MC-STRC 31,880.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over LMR Floodway (rail)	SF	\$300.00000	\$9,564,000.00
		Total for Gro	oup 0100:\$207,047,000.00
Group 0110: Rail Transit			
0049 U-MC-MISC 5,978.000	FT	\$875.00000	\$5,230,750.00
MAJOR COST DRIVERS, MISCELLANEOUS COST At Grade Ballasted Track (DMU)			
0050 U-MC-MISC 3,800.000 MAJOR COST DRIVERS, MISCELLANEOUS COST Aerial Direct Fixation Track on Bridges (DMU)		\$935.00000	\$3,553,000.00
	EACH	\$250,000.00000	\$250,000.00

Estimate: EC2/3 - Alt F <u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>		<u>Unit Price</u>	ENTRAN <u>Extension</u>
MAJOR COST DRIVERS, MISCELLANE Grade Crossing	OUS COST	S		
0052 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Transit Station	1.000 OUS COST		\$3,069,160.00000 Total for Group 0110:\$12	\$3,069,160.00 , <b>102,910.00</b>
Group 0120: Wetland Construction	n			
0053 T-MC-WTLD MAJOR COST DRIVERS, WETLAND CO		ACRE	\$60,000.00000	\$1,200.00
0054 T-OC-WTLD OTHER COSTS, WETLAND CONSTRUC Stream Restoration	0.000	FT	\$600.00000	\$0.00
			Total for Group 012	0:\$1,200.00
Group 0130: Misc. Costs				
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Performance Bond: 0.5% of total project of		S	\$1,143,825.00000	\$1,143,825.00
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Railroad Insurance Bond	1.000	LS	\$35,000.00000	\$35,000.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Field Office Type C		MNTH S	\$2,500.00000	\$120,000.00
0058 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Mobilization: from CMS Item 624 for total		S	\$2,000,000.00000	\$2,000,000.00
0059 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Construction Layout Stakes: 0.5% of tota	1.000 OUS COST	LS S	\$1,143,825.00000 764.886)	\$1,143,825.00
0060 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Maintaining Traffic: 0.52% of total project	1.000 OUS COST	ÈS S	\$1,189,578.00000	\$1,189,578.00
		,	Total for Group 0130:\$5	,632,228.00
Group 0140: Design Contingency	Costs			
0061 V-MC-CNTG	1.000	LS	\$3,622,225.00000	\$3,622,225.00
MAJOR COST DRIVERS, CONTINGENC Constructible Risk Contingency: Hafner L + Embankment \$10/CY)		ct = 1,60	00' @ 15' depth = 144,889CY * (Excavation	\$15/CY
0062 V-MC-CNTG	1.000	LS	\$58,569,279.00000	\$58,569,279.00

0062 V-MC-CNTG 1.000 LS MAJOR COST DRIVERS, CONTINGENCY COSTS

PDP Design Contingency (step 5): 25% of total construction cost (\$234,277,114)

Total for Group 0140:\$62,191,504.00

### Estimate EC2/3 - Alt G

Estimated Cost:\$29,359,655.00

Contingency: 0.00%

#### Estimated Total: \$29,359,655.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative G

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Estimate: EC2/3 - Alt G <u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$4.00000	\$0.00
				Total for Group 0001:\$0.00
Group 0002: Fill - Embankmen	t			
0002 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	, 954,333.000 ,	CY	\$3.00000	\$2,862,999.00
			Total for	Group 0002:\$2,862,999.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	, 0.000	CY	\$30.00000	\$0.00
				Total for Group 0003:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY Guardrail	1,200.000	FT	\$12.00000	\$14,400.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	54,740.000	SF	\$4.00000	\$218,960.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY <i>Curb</i>	11,948.000	FT	\$12.00000	\$143,376.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	10,948.000	FT	\$14.00000	\$153,272.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with			\$1,100.00000	\$27,500.00
0009 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$1,650.00000	\$0.00
Clearing & Grubbing; medium clearing 0010 A-OC-RDWY		ake ACRE	\$2,200.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; heavy clearing v	vith dozer			
			Total fo	or Group 0010:\$557,508.00
Group 0020: Seeding & Mulchi	ng / Soddir	ng		
0011 B-MC-ERCO MAJOR COST DRIVERS, EROSION Seeding & Mulching	121,645.000 CONTROL	SY	\$2.00000	\$243,290.00
			Total fo	or Group 0020:\$243,290.00
Group 0021: Erosion Control -	Item 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION Conceptual Est: Earthwork Cost \$2,00			\$42,000.00000	\$42,000.00
4·59·47PM				

Estimate: EC2/3 - Alt G	Quantity	Unito	Unit Drice	ENTRAN
<u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	Units	Unit Price	<u>Extension</u>
			Total for Group 0021:\$42	2,000.00
Group 0030: Underdrains				
0013 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	21,896.000	FT	\$6.00000	\$131,376.00
			Total for Group 0030:\$131	,376.00
Group 0031: Culverts - Type A: <	5'			
0014 C-MC-DRNG	456.000	FT	\$375.00000	\$171,000.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group 0031:\$171	,000.00
Group 0022: Culvorte, Type A: 5'	10'			
Group 0032: Culverts, Type A: 5' 0015 C-MC-DRNG	0.000	FT	\$825.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group 003	2.80.00
• ···· • · · · ·				2.00.00
Group 0033: Culverts, Type A: 10			¢4 500 00000	¢070.000.00
0016 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	248.000	FT	\$1,500.00000	\$372,000.00
			Total for Group 0033:\$372	2,000.00
Group 0034: Closed Storm Syste	m			
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	1.000	LS	\$262,752.00000	\$262,752.00
			Total for Group 0034:\$262	2,752.00
Group 0040: Mainline Lanes				
0018 D-MC-PVMT	41,360.000	SY	\$41.00000	\$1,695,760.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 0040:\$1,695	5,760.00
Group 0041: Ramps				
0019 D-MC-PVMT	0.000	SY	\$41.00000	\$0.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 004	1.\$0.00
				Π.ψ0.00
Group 0042: Non - Mainline Lane		<b>0</b> )/	A / / 00000	<b>*</b> ~~ ~~ ~~ ~~
0020 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	2,000.000	SY	\$41.00000	\$82,000.00
			Total for Group 0042:\$82	2,000.00
Group 0050: Utilities				
0021 E-MC-WATR MAJOR COST DRIVERS, WATER LINE	1.000	LS	\$8,000.00000	\$8,000.00
0022 F-MC-SANI	1.000	LS	\$12,500.00000	\$12,500.00
4:59:47PM Friday, January 13, 2012				Page 3 of 6

Estimate: EC2/3 - Alt G				ENTRAN
Line # Item Number Description Supplemental Description		<u>Units</u>	Unit Price	<u>Extension</u>
MAJOR COST DRIVERS, 0023 N-OC-DEMO MAJOR COST DRIVERS, Electric Transmission Tow	0.000 BUILDING DEMOLITION	EACH	\$1,000,000.00000	\$0.00
			Total for Group 00	50:\$20,500.00
Group 0060: Lighting -	Continuous Roadw	/ay		
0024 G-MC-LTNG MAJOR COST DRIVERS,	5,824.000 LIGHTING	FT	\$35.00000	\$203,840.00
			Total for Group 006	0:\$203,840.00
Group 0070: Signs				
0025 J-MC-TRAF MAJOR COST DRIVERS,	1.100 TRAFFIC CONTROL	MILE	\$250,000.00000	\$275,000.00
			Total for Group 007	0:\$275,000.00
Group 0071: Pavemen	t Marking			
0026 J-MC-TRAF MAJOR COST DRIVERS, <i>Edge Line</i>	4.400 TRAFFIC CONTROL	MILE	\$500.00000	\$2,200.00
0027 J-MC-TRAF MAJOR COST DRIVERS, Lane Line	2.200 TRAFFIC CONTROL	MILE	\$300.00000	\$660.00
0028 J-MC-TRAF MAJOR COST DRIVERS, Center Line	0.100 TRAFFIC CONTROL	MILE	\$1,200.00000	\$120.00
0029 J-MC-TRAF MAJOR COST DRIVERS, Channelizing Line	200.000 TRAFFIC CONTROL	FT	\$1.25000	\$250.00
0030 J-MC-TRAF MAJOR COST DRIVERS, Stop Line	24.000 TRAFFIC CONTROL	FT	\$6.00000	\$144.00
0031 J-MC-TRAF MAJOR COST DRIVERS, Transverse Line	0.000 TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0032 J-MC-TRAF MAJOR COST DRIVERS, Dotted Line	0.000 TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, Lane Arrow	2.000 TRAFFIC CONTROL	EACH	\$80.00000	\$160.00
0034 J-MC-TRAF MAJOR COST DRIVERS, Word on Pavement	1.000 TRAFFIC CONTROL	EACH	\$100.00000	\$100.00
word on r dvomont			Total for Group 0	071:\$3,634.00
Group 0072. Signals -	Intersections			

### Group 0072: Signals - Intersections

0035 K-MC-SGNL	1.000	EACH	\$200,000.00000	\$200,000.00
MAJOR COST DRIVERS, SIGNALS				
			Total for	Group 0072:\$200,000.00

### Group 0080: Retaining Walls

4:59:47PM Friday, January 13, 2012

Estimate: EC2/3 - Alt G			ENTRAN
Line # Item Number Quantity	<u>Units</u>	Unit Price	Extension
<u>Description</u> Supplemental Description			
Supplemental Description			
0036 M-MC-WALL 0.000 MAJOR COST DRIVERS, RETAINING WALLS	SF	\$100.00000	\$0.00
WAJOR COST DRIVERS, RETAINING WALLS			Total for Group 0080:\$0.00
			·····
Group 0090: Building Demolition			
0037 N-MC-DEMO 4.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Residential	EACH	\$10,000.00000	\$40,000.00
0038 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Service Station Island & Tanks	EACH	\$50,000.00000	\$0.00
0039 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Commercial	EACH	\$25,000.00000	\$0.00
0040 N-MC-DEMO 4.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds	EACH	\$750.00000	\$3,000.00
0041 N-MC-DEMO 4.000 MAJOR COST DRIVERS, BUILDING DEMOLITION	EACH	\$2,500.00000	\$10,000.00
Garages		Total	for Group 0090:\$53,000.00
		iotai	
Group 0100: New Structures			
0042 R-MC-STRC 20,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad (highway)	SF	\$150.00000	\$3,000,000.00
0043 R-MC-STRC 8,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad (rail)	SF	\$300.00000	\$2,400,000.00
0044 R-MC-STRC 15,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Moore (highway)	SF	\$150.00000	\$2,250,000.00
0045 R-MC-STRC 6,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Moore (rail)	SF	\$300.00000	\$1,800,000.00
		Total for	Group 0100:\$9,450,000.00
Group 0110: Rail Transit			
0046 U-MC-MISC 5,474.000 MAJOR COST DRIVERS, MISCELLANEOUS COST At Grade Ballasted Track (DMU)		\$875.00000	\$4,789,750.00
0047 U-MC-MISC 350.000 MAJOR COST DRIVERS, MISCELLANEOUS COST Aerial Direct Fixation Track on Bridges (DMU)		\$935.00000	\$327,250.00
	EACH S	\$250,000.00000	\$250,000.00
0049 U-MC-MISC 0.000 MAJOR COST DRIVERS, MISCELLANEOUS COST Transit Station		\$0.00000	\$0.00
		Total for	Group 0110:\$5,367,000.00

# Group 0120: Wetland Construction

4:59:47PM Friday, January 13, 2012

Estimate: EC2/3 - Alt G			ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u> <u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
0050 T-MC-WTLD MAJOR COST DRIVERS, WETLAND	0.000 ACRE CONSTRUCTION	\$60,000.00000	\$0.00
0051 T-OC-WTLD OTHER COSTS, WETLAND CONSTR Stream Restoration	0.000 FT	\$600.00000	\$0.00
		Total	for Group 0120:\$0.00
Group 0130: Misc. Costs			
0052 U-MC-MISC MAJOR COST DRIVERS, MISCELLAI Performance Bond: 0.5% of total proje		\$110,194.00000	\$110,194.00
0053 U-MC-MISC MAJOR COST DRIVERS, MISCELLAI Railroad Insurance Bond	1.000 LS NEOUS COSTS	\$35,000.00000	\$35,000.00
0054 U-MC-MISC MAJOR COST DRIVERS, MISCELLAI Field Office Type C	18.000 MNTH NEOUS COSTS	\$2,500.00000	\$45,000.00
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELLAI Mobilization: from CMS Item 624 for to		\$800,000.00000	\$800,000.00
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELLAI Construction Layout Stakes: 0.5% of to		\$110,194.00000 38,659)	\$110,194.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELLAI Maintaining Traffic: 1.75% of total proje	1.000 LS NEOUS COSTS	\$385,677.00000	\$385,677.00
		Total for Group	0130:\$1,486,065.00
Group 0140: Design Contingen	cy Costs		
0058 V-MC-CNTG MAJOR COST DRIVERS, CONTINGE PDP Design Contingency (step 5): 259		\$5,879,931.00000	\$5,879,931.00
			0140:\$5,879,931.00

### Estimate EC2/3 - Alt H

Estimated Cost:\$28,141,280.00

Contingency: 0.00%

#### Estimated Total: \$28,141,280.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative H

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Estimate: EC2/3 - Alt H <u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$4.00000	\$0.00
				Total for Group 0001:\$0.00
Group 0002: Fill - Embankment	I			
0002 A-MC-RDWY 1 MAJOR COST DRIVERS, ROADWAY	,141,205.000	CY	\$3.00000	\$3,423,615.00
			Total for	Group 0002:\$3,423,615.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$30.00000	\$0.00
				Total for Group 0003:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY Guardrail	1,200.000	FT	\$12.00000	\$14,400.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	55,570.000	SF	\$4.00000	\$222,280.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY <i>Curb</i>	12,114.000	FT	\$12.00000	\$145,368.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	11,114.000	FT	\$14.00000	\$155,596.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY			\$1,100.00000	\$28,600.00
Clearing & Grubbing; light brush with a 0009 A-OC-RDWY		ACRE	\$1,650.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; medium clearing 0010 A-OC-RDWY		ake ACRE	\$2,200.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; heavy clearing w		ACINE	φ2,200.00000	ψ0.00
clouming a crubbining, neavy oleaning v	10201		Total for	or Group 0010:\$566,244.00
Group 0020: Seeding & Mulchi	ng / Soddir	ng		
0011 B-MC-ERCO MAJOR COST DRIVERS, EROSION Seeding & Mulching	123,489.000 CONTROL	SY	\$2.00000	\$246,978.00
			Total fo	or Group 0020:\$246,978.00
Group 0021: Erosion Control -	tem 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION Conceptual Est: Earthwork Cost \$3,00	1.000 CONTROL		\$85,000.00000	\$85,000.00
5:01:10PM				

Estimate: EC2/3 - Alt H	•			ENTRAN
<u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	Unit Price	<u>Extension</u>
			Total for Grou	p 0021:\$85,000.00
Group 0030: Underdrains				
0013 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	22,228.000	FT	\$6.00000	\$133,368.00
			Total for Group	0030:\$133,368.00
Group 0031: Culverts - Type A: <	5'			
0014 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	208.000	FT	\$375.00000	\$78,000.00
MAJOR COST DRIVERS, DRAINAGE			Total for Grou	p 0031:\$78,000.00
Group 0032: Culverts, Type A: 5'	- 10'			
0015 C-MC-DRNG	0.000	FT	\$825.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE			Total for	Group 0032:\$0.00
Group 0033: Culverts, Type A: 10	)' - 20'			
0016 C-MC-DRNG	252.000	FT	\$1,500.00000	\$378,000.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group	0033:\$378,000.00
Crown 0024: Closed Storm Syste	-			
Group 0034: Closed Storm Syste 0017 C-MC-DRNG	1.000	LS	\$266,736.00000	\$266,736.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group	0034:\$266,736.00
				0001.0200,700.00
Group 0040: Mainline Lanes	41,986.000	SY	\$41.00000	\$1,721,426.00
MAJOR COST DRIVERS, PAVEMENT	41,000.000	01		
			Total for Group 0	040:\$1,721,426.00
Group 0041: Ramps	0.000	0)(	<b>.</b>	<b>#</b> 2.22
0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	0.000	SY	\$41.00000	\$0.00
			Total for	Group 0041:\$0.00
Group 0042: Non - Mainline Lane	es			
0020 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	2,000.000	SY	\$41.00000	\$82,000.00
			Total for Grou	p 0042:\$82,000.00
Group 0050: Utilities				
0021 E-MC-WATR MAJOR COST DRIVERS, WATER LINE	1.000	LS	\$8,000.00000	\$8,000.00
0022 F-MC-SANI	1.000	LS	\$12,500.00000	\$12,500.00
5:01:10PM Friday, January 13, 2012				Page 3 of 6

Estimate: EC2/3 - Alt H				ENTRAN
Line # Item Number Description Supplemental Description		<u>Units</u>	Unit Price	<u>Extension</u>
MAJOR COST DRIVERS, 0023 N-OC-DEMO MAJOR COST DRIVERS, Electric Transmission Tow	0.000 BUILDING DEMOLITION	EACH	\$1,000,000.00000	\$0.00
			Total for Group 0050	):\$20,500.00
Group 0060: Lighting -	Continuous Roadw	/ay		
0024 G-MC-LTNG MAJOR COST DRIVERS,	5,857.000 LIGHTING	FT	\$35.00000	\$204,995.00
			Total for Group 0060:	\$204,995.00
Group 0070: Signs				
0025 J-MC-TRAF MAJOR COST DRIVERS,	1.100 TRAFFIC CONTROL	MILE	\$250,000.00000	\$275,000.00
			Total for Group 0070:	\$275,000.00
Group 0071: Pavemen	t Marking			
0026 J-MC-TRAF MAJOR COST DRIVERS, <i>Edge Line</i>	4.400 TRAFFIC CONTROL	MILE	\$500.00000	\$2,200.00
0027 J-MC-TRAF MAJOR COST DRIVERS, Lane Line	2.200 TRAFFIC CONTROL	MILE	\$300.00000	\$660.00
0028 J-MC-TRAF MAJOR COST DRIVERS, Center Line	0.100 TRAFFIC CONTROL	MILE	\$1,200.00000	\$120.00
0029 J-MC-TRAF MAJOR COST DRIVERS, Channelizing Line	200.000 TRAFFIC CONTROL	FT	\$1.25000	\$250.00
0030 J-MC-TRAF MAJOR COST DRIVERS, Stop Line	24.000 TRAFFIC CONTROL	FT	\$6.00000	\$144.00
0031 J-MC-TRAF MAJOR COST DRIVERS, Transverse Line	0.000 TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0032 J-MC-TRAF MAJOR COST DRIVERS, Dotted Line	0.000 TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, Lane Arrow	2.000 TRAFFIC CONTROL	EACH	\$80.00000	\$160.00
0034 J-MC-TRAF MAJOR COST DRIVERS, Word on Pavement	1.000 TRAFFIC CONTROL	EACH	\$100.00000	\$100.00
Word on Pavement			Total for Group 007	71:\$3,634.00
Group 0072. Signals -	Intersections			

### Group 0072: Signals - Intersections

0035 K-MC-SGNL	1.000	EACH	\$200,000.00000	\$200,000.00
MAJOR COST DRIVERS, SIGNALS				
			Total for	Group 0072:\$200,000.00

### Group 0080: Retaining Walls

5:01:10PM Friday, January 13, 2012

Estimate: EC2/3 - Alt H			ENTRAN
Line # Item Number Quantit	<u>y Units</u>	Unit Price	Extension
Description Supplemental Description			
0036 M-MC-WALL 0.00 MAJOR COST DRIVERS, RETAINING WALLS	0 SF	\$100.00000	\$0.00
			Total for Group 0080:\$0.00
Group 0090: Building Demolition			
0037 N-MC-DEMO 0.00 MAJOR COST DRIVERS, BUILDING DEMOLITIO Residential		\$10,000.00000	\$0.00
0038 N-MC-DEMO 0.00 MAJOR COST DRIVERS, BUILDING DEMOLITIO Service Station Island & Tanks		\$50,000.00000	\$0.00
0039 N-MC-DEMO 0.00 MAJOR COST DRIVERS, BUILDING DEMOLITIO Commercial		\$25,000.00000	\$0.00
0040 N-MC-DEMO 1.00 MAJOR COST DRIVERS, BUILDING DEMOLITIO Sheds		\$750.00000	\$750.00
0041 N-MC-DEMO 1.00 MAJOR COST DRIVERS, BUILDING DEMOLITIO		\$2,500.00000	\$2,500.00
Garages		Tot	tal for Group 0090:\$3,250.00
Group 0100: New Structures			
0042 R-MC-STRC 15,000.00 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad (highway)	0 SF	\$150.00000	\$2,250,000.00
0043 R-MC-STRC 6,000.00 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad (rail)	0 SF	\$300.00000	\$1,800,000.00
0044 R-MC-STRC 15,000.00 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Moore (highway)	0 SF	\$150.00000	\$2,250,000.00
0045 R-MC-STRC 6,000.00 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Moore (rail)	0 SF	\$300.00000	\$1,800,000.00
		Total fo	r Group 0100:\$8,100,000.00
Crown 0110, Doll Transit			
Group 0110: Rail Transit	0 FT	<b>4075</b> 00000	
0046 U-MC-MISC 5,557.00 MAJOR COST DRIVERS, MISCELLANEOUS COS At Grade Ballasted Track (DMU)		\$875.00000	\$4,862,375.00
0047 U-MC-MISC 30.00 MAJOR COST DRIVERS, MISCELLANEOUS COS Aerial Direct Fixation Track on Bridges (DMU)	0 FT STS	\$935.00000	\$28,050.00
	0 EACH STS	\$250,000.00000	\$250,000.00
	0 LS STS	\$0.00000	\$0.00
		Total fo	or Group 0110:\$5,140,425.00

# Group 0120: Wetland Construction

5:01:10PM Friday, January 13, 2012

Estimate: EC2/3 - Alt H				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	Extension
0050 T-MC-WTLD MAJOR COST DRIVERS, WETLAN		ACRE ON	\$60,000.00000	\$1,200.00
0051 T-OC-WTLD OTHER COSTS, WETLAND CONS Stream Restoration	187.000		\$600.00000	\$112,200.00
	Total for Group 0120:\$113,400.00			
Group 0130: Misc. Costs				
0052 U-MC-MISC MAJOR COST DRIVERS, MISCEL Performance Bond: 0.5% of total pr		S	\$105,438.00000	\$105,438.00
0053 U-MC-MISC MAJOR COST DRIVERS, MISCEL Railroad Insurance Bond	1.000 LANEOUS COST		\$35,000.00000	\$35,000.00
0054 U-MC-MISC MAJOR COST DRIVERS, MISCEL Field Office Type C	18.000 LANEOUS COST	MNTH S	\$2,500.00000	\$45,000.00
0055 U-MC-MISC MAJOR COST DRIVERS, MISCEL Mobilization: from CMS Item 624 fo		S	\$800,000.00000	\$800,000.00
0056 U-MC-MISC MAJOR COST DRIVERS, MISCEL Construction Layout Stakes: 0.5% (		S	\$105,438.00000 87,571)	\$105,438.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCEL Maintaining Traffic: 1.8% of total pro	1.000 LANEOUS COST	LS S	\$379,577.00000	\$379,577.00
Total for Group 0130:\$1,470,4			\$1,470,453.00	
Group 0140: Design Continge	ency Costs			
0058 V-MC-CNTG MAJOR COST DRIVERS, CONTIN		-	\$5,628,256.00000	\$5,628,256.00
PDP Design Contingency (step 5): 25% of total construction cost (\$22,513,024) Total for Group 0140:\$5,628,256.00				\$5,628,256.00

### Estimate EC2/3 - Alt I

Estimated Cost:\$49,079,173.00

Contingency: 0.00%

#### Estimated Total: \$49,079,173.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative I

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/29/11 Checked by Steven Shadix on 01/13/12

Estimate: EC2/3 - Alt I <u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	Quantity	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$4.00000	\$0.00
				Total for Group 0001:\$0.00
Group 0002: Fill - Embankmen	t			
0002 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	1,145,468.000 /	CY	\$3.00000	\$3,436,404.00
			Total for	Group 0002:\$3,436,404.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$30.00000	\$0.00
				Total for Group 0003:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY <i>Guardrail</i>	5,000.000	FT	\$12.00000	\$60,000.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	47,620.000	SF	\$4.00000	\$190,480.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY Curb	10,524.000	FT	\$12.00000	\$126,288.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	9,524.000	FT	\$14.00000	\$133,336.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with			\$1,100.00000	\$0.00
0009 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$1,650.00000	\$36,300.00
Clearing & Grubbing; medium clearing 0010 A-OC-RDWY		<i>ake</i> ACRE	\$2,200.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; heavy clearing v	with dozer			
			Total fo	or Group 0010:\$546,404.00
Group 0020: Seeding & Mulchi	ng / Soddir	ng		
0011 B-MC-ERCO MAJOR COST DRIVERS, EROSION Seeding & Mulching	105,822.000 CONTROL	SY	\$2.00000	\$211,644.00
			Total fo	or Group 0020:\$211,644.00
Group 0021: Erosion Control -	Item 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION Conceptual Est: Earthwork Cost \$3,00	1.000 CONTROL		\$85,000.00000	\$85,000.00
5:02:45PM				

Estimate: EC2/3 - Alt I				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
			Total for Group 0021:\$8	5,000.00
Group 0030: Underdrains				
0013 C-MC-DRNG	19,048.000	FT	\$6.00000	\$114,288.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group 0030:\$114	4,288.00
Group 0031: Culverts - Type A: <	: 5'			
0014 C-MC-DRNG	208.000	FT	\$375.00000	\$78,000.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group 0031:\$78	3,000.00
Group 0032: Culverts, Type A: 5'	- 10'			
0015 C-MC-DRNG	340.000	FT	\$825.00000	\$280,500.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group 0032:\$280	0,500.00
Group 0033: Culverts, Type A: 10	)' - 20'			
0016 C-MC-DRNG	264.000	FT	\$1,500.00000	\$396,000.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group 0033:\$396	6,000.00
Group 0034: Closed Storm Syste	m			
0017 C-MC-DRNG	1.000	LS	\$228,576.00000	\$228,576.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group 0034:\$228	8,576.00
Group 0040: Mainline Lanes				
0018 D-MC-PVMT	35,980.000	SY	\$41.00000	\$1,475,180.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 0040:\$1,47	5,180.00
Group 0041: Ramps				
0019 D-MC-PVMT	0.000	SY	\$41.00000	\$0.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 004	41:\$0.00
Group 0042: Non - Mainline Lane	20			
0020 D-MC-PVMT	2,000.000	SY	\$41.00000	\$82,000.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 0042:\$82	2,000.00
Group 0050: Utilities				
0021 E-MC-WATR	1.000	LS	\$8,000.00000	\$8,000.00
MAJOR COST DRIVERS, WATER LINE 0022 F-MC-SANI	1.000	LS	\$12,500.00000	\$12,500.00
5:02:45PM Friday, January 13, 2012				Page 3 of 6

Friday, January 13, 2012

Estimate: EC2/3 - Alt I Line # Item Number	Quantity	<u>Units</u>	Unit Price	ENTRAN <u>Extension</u>
<u>Description</u> Supplemental Description	1			
MAJOR COST DRIVERS, S 0023 N-OC-DEMO MAJOR COST DRIVERS, E Electric Transmission Towe	0.000 BUILDING DEMOLITION	EACH	\$1,000,000.00000	\$0.00
			Total for Group 0	050:\$20,500.00
Group 0060: Lighting -	Continuous Roadw	/ay		
0024 G-MC-LTNG MAJOR COST DRIVERS, L	5,761.000 LIGHTING	FT	\$35.00000	\$201,635.00
			Total for Group 00	60:\$201,635.00
Group 0070: Signs				
0025 J-MC-TRAF MAJOR COST DRIVERS, 1	1.090 FRAFFIC CONTROL	MILE	\$250,000.00000	\$272,500.00
			Total for Group 00	70:\$272,500.00
Group 0071: Pavement	Marking			
0026 J-MC-TRAF MAJOR COST DRIVERS, 1 <i>Edge Line</i>	4.360 IRAFFIC CONTROL	MILE	\$500.00000	\$2,180.00
0027 J-MC-TRAF MAJOR COST DRIVERS, 1 Lane Line	2.180 IRAFFIC CONTROL	MILE	\$300.00000	\$654.00
0028 J-MC-TRAF MAJOR COST DRIVERS, 1 <i>Center Line</i>	0.100 IRAFFIC CONTROL	MILE	\$1,200.00000	\$120.00
0029 J-MC-TRAF MAJOR COST DRIVERS, 1 Channelizing Line	200.000 TRAFFIC CONTROL	FT	\$1.25000	\$250.00
0030 J-MC-TRAF MAJOR COST DRIVERS, 1 Stop Line	24.000 FRAFFIC CONTROL	FT	\$6.00000	\$144.00
0031 J-MC-TRAF MAJOR COST DRIVERS, 1 Transverse Line	0.000 FRAFFIC CONTROL	FT	\$2.00000	\$0.00
0032 J-MC-TRAF MAJOR COST DRIVERS, 1 Dotted Line	0.000 FRAFFIC CONTROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, 1 Lane Arrow	2.000 FRAFFIC CONTROL	EACH	\$80.00000	\$160.00
0034 J-MC-TRAF MAJOR COST DRIVERS, 1 Word on Pavement	1.000 FRAFFIC CONTROL	EACH	\$100.00000	\$100.00
			Total for Group	0071:\$3,608.00
Group 0072: Signals - I	ntersections			

#### Group 0072: Signals - Intersections

0035 K-MC-SGNL	1.000	EACH	\$200,000.00000	\$200,000.00
MAJOR COST DRIVERS, SIGNALS				
			Total for	Group 0072:\$200,000.00

# Group 0080: Retaining Walls

5:02:45PM Friday, January 13, 2012

Estimate: EC2/3 - Alt I			ENTRAN
Line # Item Number Quantity	<u>Units</u>	Unit Price	<b>Extension</b>
Description Supplemental Description			
0036 M-MC-WALL 0.000 S MAJOR COST DRIVERS, RETAINING WALLS	SF	\$100.00000 Total for Group 008	\$0.00
			0.ψ0.00
Group 0090: Building Demolition			
0037 N-MC-DEMO 0.000 E MAJOR COST DRIVERS, BUILDING DEMOLITION Residential	EACH	\$10,000.00000	\$0.00
0038 N-MC-DEMO 0.000 E MAJOR COST DRIVERS, BUILDING DEMOLITION Service Station Island & Tanks	EACH	\$50,000.00000	\$0.00
0039 N-MC-DEMO 0.000 E MAJOR COST DRIVERS, BUILDING DEMOLITION <i>Commercial</i>	EACH	\$25,000.00000	\$0.00
0040 N-MC-DEMO 1.000 E MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds	EACH	\$750.00000	\$750.00
0041 N-MC-DEMO 1.000 E MAJOR COST DRIVERS, BUILDING DEMOLITION Garages	EACH	\$2,500.00000	\$2,500.00
		Total for Group 0090:\$3	,250.00
Group 0100: New Structures			
	SF	\$150.00000	\$3,750,000.00
	SF	\$300.00000	\$3,000,000.00
	SF )	\$150.00000	\$7,500,000.00
0045 R-MC-STRC 10,000.000 S MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad & Clear Creek (rail)		\$300.00000	\$3,000,000.00
/ /	SF	\$150.00000	\$3,750,000.00
0047 R-MC-STRC 10,000.000 S MAJOR COST DRIVERS, STRUCTURES New Structure: Over Clear Creek & Debolt (rail)	SF	\$300.00000	\$3,000,000.00
		Total for Group 0100:\$24,000	,000.00
Group 0110: Rail Transit			
0048 U-MC-MISC 4,762.000 F MAJOR COST DRIVERS, MISCELLANEOUS COSTS At Grade Ballasted Track (DMU)		\$875.00000	\$4,166,750.00
0049 U-MC-MISC 1,000.000 F MAJOR COST DRIVERS, MISCELLANEOUS COSTS Aerial Direct Fixation Track on Bridges (DMU)		\$935.00000	\$935,000.00
0050 U-MC-MISC 1.000 E MAJOR COST DRIVERS, MISCELLANEOUS COSTS Grade Crossing		\$250,000.00000	\$250,000.00
0051 U-MC-MIŠC 0.000 L	LS	\$0.00000	\$0.00

Line #       Item Number       Quantity       Units       Unit Price       Extension         Description       Supplemental Description       MAJOR COST DRIVERS, MISCELLANEOUS COSTS       Transit Station       Total for Group 0110:\$5,351,750.00	AN
Transit Station Total for Group 0110:\$5,351,750.00	<u>on</u>
Total for Group 0110:\$5,351,750.00	
Group 0120: Wetland Construction	
0052 T-MC-WTLD 0.140 ACRE \$60,000.00000 \$8,400 MAJOR COST DRIVERS, WETLAND CONSTRUCTION	.00
0053 T-OC-WTLD 1,057.000 FT \$600.00000 \$634,200. OTHER COSTS, WETLAND CONSTRUCTION Stream Restoration	00
Total for Group 0120:\$642,600.00	
Group 0130: Misc. Costs	
0054 U-MC-MISC 1.000 LS \$188,375.00000 \$188,375. MAJOR COST DRIVERS, MISCELLANEOUS COSTS Performance Bond: 0.5% of total project cost (\$37,674,839)	.00
0055 U-MC-MISC 1.000 LS \$35,000.00000 \$35,000 MAJOR COST DRIVERS, MISCELLANEOUS COSTS Railroad Insurance Bond	.00
0056 U-MC-MISC 18.000 MNTH \$2,500.00000 \$45,000 MAJOR COST DRIVERS, MISCELLANEOUS COSTS Field Office Type C	00
0057 U-MC-MISC 1.000 LS \$800,000.00000 \$800,000 MAJOR COST DRIVERS, MISCELLANEOUS COSTS Mobilization: from CMS Item 624 for total project cost	00
0058 U-MC-MISC 1.000 LS \$188,375.00000 \$188,375. MAJOR COST DRIVERS, MISCELLANEOUS COSTS Construction Layout Stakes: 0.5% of total project cost (\$37,674,839)	.00
0059 U-MC-MISC 1.000 LS \$376,749.00000 \$376,749 MAJOR COST DRIVERS, MISCELLANEOUS COSTS Maintaining Traffic: 1.0% of total project cost (\$37,674,839)	.00
Total for Group 0130:\$1,633,499.00	
Group 0140: Design Contingency Costs	
0060 V-MC-CNTG 1.000 LS \$9,815,835.00000 \$9,815,835. MAJOR COST DRIVERS, CONTINGENCY COSTS PDP Design Contingency (step 5): 25% of total construction cost (\$39,263,338) Total for Group 01/0:\$9,815,835.00	.00

Total for Group 0140:\$9,815,835.00

### Estimate EC2/3 - Alt J

Estimated Cost:\$33,623,972.00

Contingency: 0.00%

#### Estimated Total: \$33,623,972.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative J

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/29/11 Checked by Steven Shadix on 01/13/12

Estimate: EC2/3 - Alt J <u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$4.00000	\$0.00
				Total for Group 0001:\$0.00
Group 0002: Fill - Embankment	I			
0002 A-MC-RDWY 1 MAJOR COST DRIVERS, ROADWAY	,195,532.000	CY	\$3.00000	\$3,586,596.00
			Total for	Group 0002:\$3,586,596.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$30.00000	\$0.00
				Total for Group 0003:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY <i>Guardrail</i>	3,500.000	FT	\$12.00000	\$42,000.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	60,740.000	SF	\$4.00000	\$242,960.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY <i>Curb</i>	13,148.000	FT	\$12.00000	\$157,776.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	12,148.000	FT	\$14.00000	\$170,072.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with o			\$1,100.00000	\$0.00
0009 A-OC-RDWY OTHER COSTS, ROADWAY Clearing & Grubbing; medium clearing	28.000	ACRE	\$1,650.00000	\$46,200.00
0010 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$2,200.00000	\$0.00
Clearing & Grubbing; heavy clearing w	vith dozer		Total f	or Group 0010:\$659,008.00
Croup 0020, Sooding & Mulahi	a. / Caddi-			
Group 0020: Seeding & Mulchin 0011 B-MC-ERCO	134,978.000	•	\$2.00000	\$269,956.00
MAJOR COST DRIVERS, EROSION ( Seeding & Mulching		01	¢2.00000	\$200,000.00
			Total f	or Group 0020:\$269,956.00
Group 0021: Erosion Control -	tem 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION Conceptual Est: Earthwork Cost \$3,00			\$85,000.00000	\$85,000.00
5:04:18PM				

Estimate: EC2/3 - Alt J Line # Item Number	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
<u>Description</u> Supplemental Description				
				Total for Group 0021:\$85,000.00
				10tal 101 G10up 0021.903,000.00
Group 0030: Underdrains				
0013 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	24,296.000	FT	\$6.00000	\$145,776.00
			-	Total for Group 0030:\$145,776.00
Group 0031: Culverts - Type A: <	< 5'			
0014 C-MC-DRNG	208.000	FT	\$375.00000	\$78,000.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0031:\$78,000.00
Croup 0022: Culverte Turce A: 5	' 10'			
Group 0032: Culverts, Type A: 5 0015 C-MC-DRNG	0.000	FT	\$825.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE	0.000	••	<i><b>Q</b></i> <b>QZOOOOOOOOOOOOO</b>	
				Total for Group 0032:\$0.00
Group 0033: Culverts, Type A: 1				
0016 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	248.000	FT	\$1,500.0000	0 \$372,000.00
			-	Total for Group 0033:\$372,000.00
Group 0034: Closed Storm Syste	em			
0017 C-MC-DRNG	1.000	LS	\$291,552.00	000 \$291,552.00
MAJOR COST DRIVERS, DRAINAGE			-	Total for Group 0034:\$291,552.00
Group 0040: Mainling Lange				
Group 0040: Mainline Lanes	45,892.000	SY	\$41.00000	\$1,881,572.00
MAJOR COST DRIVERS, PAVEMENT	-,			
			10	tal for Group 0040:\$1,881,572.00
Group 0041: Ramps				
0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	0.000	SY	\$41.00000	\$0.00
				Total for Group 0041:\$0.00
Group 0042: Non - Mainline Lan	es			
0020 D-MC-PVMT	2,000.000	SY	\$41.00000	\$82,000.00
MAJOR COST DRIVERS, PAVEMENT				Total for Group 0042:\$82,000.00
				• • •
Group 0050: Utilities	1.000	LS	\$8,000.0000	0 \$8,000.00
MAJOR COST DRIVERS, WATER LINE 0022 F-MC-SANI		LS	\$12,500.000	
5:04:18PM	1.000	10	φτ2,500.000	φτ2,500.00
5.04.16PM Friday, January 13, 2012				Page 3 of 6

Estimate: EC2/3 - Alt J <u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>		<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
MAJOR COST DRIVERS, 0023 N-OC-DEMO MAJOR COST DRIVERS, Electric Transmission Tow	0.000 BUILDING DEMOLITION	EACH	\$1,000,000.00000	\$0.00
			Total for Group 00	50:\$20,500.00
Group 0060: Lighting -	Continuous Roadw	/ay		
0024 G-MC-LTNG MAJOR COST DRIVERS,	6,074.000 LIGHTING	FT	\$35.00000 Total for Group 006	\$212,590.00
				0.9212,090.00
Group 0070: Signs				
0025 J-MC-TRAF MAJOR COST DRIVERS,	1.150 TRAFFIC CONTROL	MILE	\$250,000.00000	\$287,500.00
,			Total for Group 007	0:\$287,500.00
Group 0071: Pavemen	t Marking			
0026 J-MC-TRAF MAJOR COST DRIVERS, Edge Line	4.600	MILE	\$500.00000	\$2,300.00
0027 J-MC-TRAF MAJOR COST DRIVERS, Lane Line	2.300 TRAFFIC CONTROL	MILE	\$300.00000	\$690.00
0028 J-MC-TRAF MAJOR COST DRIVERS, Center Line	0.100 TRAFFIC CONTROL	MILE	\$1,200.00000	\$120.00
0029 J-MC-TRAF MAJOR COST DRIVERS, Channelizing Line	200.000 TRAFFIC CONTROL	FT	\$1.25000	\$250.00
0030 J-MC-TRAF MAJOR COST DRIVERS, Stop Line	24.000 TRAFFIC CONTROL	FT	\$6.00000	\$144.00
0031 J-MC-TRAF MAJOR COST DRIVERS, Transverse Line	0.000 TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0032 J-MC-TRAF MAJOR COST DRIVERS, Dotted Line	0.000 TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, Lane Arrow	2.000 TRAFFIC CONTROL	EACH	\$80.00000	\$160.00
0034 J-MC-TRAF MAJOR COST DRIVERS, Word on Pavement	1.000 TRAFFIC CONTROL	EACH	\$100.00000	\$100.00
			Total for Group 0	071:\$3,764.00
Group 0072: Signals	Intersections			

# Group 0072: Signals - Intersections

0035 K-MC-SGNL MAJOR COST DRIVERS, SIGNALS	1.000	EACH	\$200,000.00000	\$200,000.00
			Total for Group 0	072:\$200,000.00

### Group 0080: Retaining Walls

5:04:18PM Friday, January 13, 2012

Line # tern Number         Quantity         Units         Units         Units         Price         Extension           0036         M-MC-WALL         0.000         SF         \$100.0000         S0.00           MAUOR COST DRIVERS, RETAINING WALLS         0.000         SF         \$100.0000         S0.00           Group 0090:         Building Demolition         EACH         \$10,000.00000         \$0.00           MAUOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$50,000.00000         \$0.00           NAUOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$25,000.0000         \$25,000.000           NAUOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$25,000.0000         \$25,000.000           NAUOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$25,000.0000         \$5,000.00           Od40         NAUC-DEMO         2.000         EACH         \$25,000.0000         \$5,000.00           NAUOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$25,000.0000         \$5,000.00         \$5,000.00           Od40         NAUC-DEMO         2.000         EACH         \$25,000.0000         \$5,000.00           MAUOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$25,000.0000         \$5,000.00         \$5,000.00           MAUOR COST	Estimate: EC2/3 - Alt J				ENTRAM	٧
Supplemental Description           0335         M-MC-WALL         0.000         SF         \$100.00000         \$0.00           Total for Group 0080:\$0.00           Group 0090: Building Demolition           0037         N-MC-DEMO         0.000         EACH         \$10,000.00000         \$0.00           0038         N-MC-DEMO         0.000         EACH         \$50,000.00000         \$0.00           0038         N-MC-DEMO         0.000         EACH         \$50,000.00000         \$50.00           0038         N-MC-DEMO         0.000         EACH         \$50,000.0000         \$50.00           0038         N-MC-DEMO         0.000         EACH         \$50,000.0000         \$50.00           0038         N-MC-DEMO         1.000         EACH         \$50,000.0000         \$51,500.00           0040         N-MC-DEMO         2.000         EACH         \$750,000.000         \$1,500.00           0041         N-MC-DEMO         2.000         EACH         \$2,500.00000         \$1,500.00           0041         N-MC-DEMO         2.000         EACH         \$2,500.00000         \$1,800.000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Sagarages         Total for Group 0090:\$31,500		<u>Quantity</u>	<u>Units</u>	Unit Price	Extension	<u>1</u>
036         M-MC-WALL         0.000         SF         \$100.00000         \$0.00           Total for Group 0080:\$0.00           Group 0090: Building Demolition           0037         N-MC-DEMO         0.000         EACH         \$10,000.00000         \$0.00           0038         N-MC-DEMO         0.000         EACH         \$10,000.00000         \$0.00           0038         N-MC-DEMO         0.000         EACH         \$50,000.00000         \$0.00           0039         N-MC-DEMO         0.000         EACH         \$50,000.00000         \$25,000.00           0039         N-MC-DEMO         1.000         EACH         \$25,000.0000         \$25,000.00           0040         N-MC-DEMO         2.000         EACH         \$2,500.0000         \$1,500.00           0041         N-MC-DEMO         2.000         EACH         \$2,500.0000         \$2,250,000.00           041         N-MC-DEMO         2.000         EACH         \$2,500.0000         \$2,250,000.00           042         R-MC-STRC         15,000.000         \$5         \$150.0000         \$2,250,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         \$6,000.000         \$5         \$300.00000         \$1,800,000.00						
Total for Group 0080:\$0.00           Group 0090: Building Demolition           0037         NMC-DEMO         0.000         EACH         \$10,000.00000         \$0.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Residential         \$0.00         \$0.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Service Station Island & Tanks         \$0.00         \$0.00           Service Station Island & Tanks         \$0.00         EACH         \$25,000.0000         \$25,000.00           Odds         N-MC-DEMO         1.000         EACH         \$25,000.0000         \$1,500.00           Odd N-MC-DEMO         2.000         EACH         \$25,000.0000         \$1,500.00           Odd N-MC-DEMO         2.000         EACH         \$25,000.000         \$1,500.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Sheds         \$2,250,000.00         \$3,500.000           MAJOR COST DRIVERS, BUILDING DEMOLITION         Sheds         \$2,250,000.00         \$3,600.000           MAJOR COST DRIVERS, BUILDING DEMOLITION         Sheds         \$2,250,000.00         \$3,500.000           MAJOR COST DRIVERS, STRUCTURES         \$0.000.00         \$5         \$300.0000         \$1,800.000.00           MaJOR COST DRIVERS, STRUCTURES         \$300.00000         \$5		0.000	٩E	¢100.0000	0.04	<b>`</b>
Group 0090: Building Demolition           0037         N-MC-DEMO         0.000         EACH         \$10,000.00000         \$0.00           MaJOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$50,000.00000         \$0.00           MaJOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$50,000.00000         \$0.00           Service Station Island & Tanks         0.000         £0.00         \$0.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$25,000.000         \$25,000.00           Odd N-MC-DEMO         2.000         EACH         \$25,000.000         \$1,500.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$25,000.000         \$1,500.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$2,500.00000         \$1,500.00           Garages         Total for Group 00901;\$31,500.00         Garages         Garages         Garages           0042         R-MC-STRC         15,000.000         \$F         \$150.00000         \$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES         MAJOR COST DRIVERS, STRUCTURES         S000000         \$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES         S00.0000         \$F         \$300.0000.00         \$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES			55	\$100.00000	\$0.00	)
0037         N-MC-DEMO         0.000         EACH         \$10,000.00000         \$0.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Residential         \$0.000         \$0.000         \$0.000           0038         N-MC-DEMO         0.000         EACH         \$50,000.00000         \$0.000           MaJOR COST DRIVERS, BUILDING DEMOLITION         50.000.00000         \$25,000.00         \$0.00           0039         N-MC-DEMO         1.000         EACH         \$25,000.00000         \$25,000.00           0040         N-MC-DEMO         2.000         EACH         \$750.00000         \$1,500.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Commonical         \$750.00000         \$1,500.00           0041         N-MC-DEMO         2.000         EACH         \$2,500.00000         \$5,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Commonical         \$50.0000         \$2,250.000.00         \$5,000.00           MAJOR COST DRIVERS, STRUCTURES         \$100.0000         \$5         \$100.0000         \$2,250.000.00           MAJOR COST DRIVERS, STRUCTURES         \$300.00000         \$1,800.000.00         \$1,800.000.00           MAJOR COST DRIVERS, STRUCTURES         \$300.00000         \$3,750.000.00         \$3,750.000.00           MAJOR COST					Total for Group 0080:\$0.00	
0037         N-MC-DEMO         0.000         EACH         \$10,000.00000         \$0.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Residential         \$0.000         \$0.000         \$0.000           0038         N-MC-DEMO         0.000         EACH         \$50,000.00000         \$0.000           MaJOR COST DRIVERS, BUILDING DEMOLITION         50.000.00000         \$25,000.00         \$0.00           0039         N-MC-DEMO         1.000         EACH         \$25,000.00000         \$25,000.00           0040         N-MC-DEMO         2.000         EACH         \$750.00000         \$1,500.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Commonical         \$750.00000         \$1,500.00           0041         N-MC-DEMO         2.000         EACH         \$2,500.00000         \$5,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Commonical         \$50.0000         \$2,250.000.00         \$5,000.00           MAJOR COST DRIVERS, STRUCTURES         \$100.0000         \$5         \$100.0000         \$2,250.000.00           MAJOR COST DRIVERS, STRUCTURES         \$300.00000         \$1,800.000.00         \$1,800.000.00           MAJOR COST DRIVERS, STRUCTURES         \$300.00000         \$3,750.000.00         \$3,750.000.00           MAJOR COST	Group 0090: Building Der	molition				
MAJOR COST DRIVERS, BUILDING DEMOLITION Residential         0.033         N.MC-DEMO         0.000         EACH         \$50,000.00000         \$0.00           MAJOR COST DRIVERS, BUILDING DEMOLITION Service Station Island & Tanks         1.000         EACH         \$25,000.00000         \$25,000.00           033         N.MC-DEMO         1.000         EACH         \$25,000.00000         \$25,000.00           039         N.MC-DEMO         2.000         EACH         \$25,000.0000         \$1,500.00           040         N.MC-DEMO         2.000         EACH         \$750.00000         \$1,500.00           041         N.MC-DEMO         2.000         EACH         \$2,500.0000         \$5,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds         2.000         EACH         \$2,500.0000         \$5,000.00           041         N.MC-DEMO         2.000         EACH         \$2,500.0000         \$5,000.00           Garages         Total for Group 0090:\$31,500.00         S         \$2,250,000.00         \$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES         \$300.0000         \$1,800,000.00         \$3,750,000.00         \$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         \$000.000         \$\$         \$300.00000         \$3,000,000.00           New Structure: O			EACH	\$10.000.00000	\$0.00	)
MAJOR COST DRIVERS, BUILDING DEMOLITION Service Station Island & Tanks         1000         EACH         \$25,000.000         \$25,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION Commercial         2.000         EACH         \$750.00000         \$1,500.00           0040         N-MC-DEMO         2.000         EACH         \$750.00000         \$1,500.00           MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds         2.000         EACH         \$25,000.000         \$5,000.00           041         N-MC-DEMO         2.000         EACH         \$2,500.00000         \$5,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds         2.000         EACH         \$2,500.0000         \$5,000.00           O41         N-MC-DEMO         2.000         EACH         \$2,500.0000         \$5,000.00           Garages         Total for Group 00901\$31,500.00         SF         \$150.00000         \$2,250,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (highway)         \$300.00000         \$1,800,000.00           044         R-MC-STRC         1.000.000         SF         \$350.00000         \$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (rail)         New Structure: Over Clear Creek & Debolt (rail)         Nout Cost DRIVERS, STRUCTURES         \$300.00000	MAJOR COST DRIVERS, BU Residential					
0039         N-MC-DEMO         1.000         EACH         \$25,000.000         \$25,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         2.000         EACH         \$750.00000         \$1,500.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Sheds         \$5,000.00         \$5,000.00           Sheds         044         N-MC-DEMO         2.000         EACH         \$2,500.0000         \$5,000.00           Garages         Total for Group 0090:\$31,500.00         S5,000.00         MAJOR COST DRIVERS, BUILDING DEMOLITION         S6,000.00         \$2,250,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Garages         Total for Group 0090:\$31,500.00         S6,000.00           0042         R-MC-STRC         15,000.000         SF         \$150.00000         \$2,250,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (highway)         S00.000         \$3,750,000.00           0043         R-MC-STRC         6,000.000         SF         \$150.00000         \$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debot (highway)         S00.00000         \$3,000,000.00           0044         R-MC-STRC         1,000.000         SF         \$300.00000         \$3,000,000.00           MAJOR COST DRIVERS, STRUCTU	MAJOR COST DRIVERS, BU	ILDING DEMOLITION	EACH	\$50,000.00000	\$0.00	)
MAJOR COST DRIVERS, BUILDING DEMOLITION Commercial         2.000         EACH         \$750.00000         \$1,500.00           MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds         2.000         EACH         \$2,500.00000         \$5,000.00           0041         N-MC-DEMO         2.000         EACH         \$2,500.00000         \$5,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION Garages         2000         EACH         \$2,500.00000         \$5,000.00           Od42         R-MC-STRC         15,000.000         SF         \$150.00000         \$2,250,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (highway)         6,000.0000         SF         \$300.00000         \$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (rail)         5000.000         SF         \$150.00000         \$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Deboli (highway)         Total for Group 0100:\$10,800,000.00         MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Deboli (highway)         Total for Group 0100:\$10,800,000.00         \$3,500,000.00         \$3,500,000.00         \$3,000,000.00         \$3,300,000.00         \$3,300,000.00         \$3,300,000.00         \$3,300,000.00         \$3,300,000.00         \$3,300,000.00         \$3,000,000.00         \$3,000,000.00			FACH	\$25,000,00000	\$25,000,00	)
MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds         MALOR COST DRIVERS, BUILDING DEMOLITION         EACH         \$2,500.0000         \$5,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION Garages         Total for Group 0090:\$31,500.00         \$5,000.00           Group 0100: New Structures         Total for Group 0090:\$31,500.00         \$2,250,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (highway)         \$2,250,000.00         \$1,800,000.00           0042         R-MC-STRC         15,000.000         \$5         \$150.00000         \$2,250,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (rail)         \$300.00000         \$1,800,000.00           0043         R-MC-STRC         25,000.000         \$5         \$150.00000         \$3,750.000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (rail)         Total for Group 0100:\$10,800,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (rail)         Total for Group 0100:\$10,800,000.00           MAJOR COST DRIVERS, STRUCTURES         S300.00000         \$3,000,000.00         \$3,000,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (rail)         Total for Group 0100:\$10,800,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         \$300.00000	MAJOR COST DRIVERS, BU		E/(OII	φ20,000.00000	φ20,000.00	
Sheds         Sheds           0041         N-MC-DEMO         2.000         EACH         \$2,500.0000         \$5,000.00           MAJOR COST DRIVERS, BUILDING DEMOLITION         Garages         Total for Group 0090:\$31,500.00           Group 0100: New Structures          0042         R-MC-STRC         15,000.000         \$5         \$150.00000         \$2,250,000.00           MAJOR COST DRIVERS, STRUCTURES          6,000.000         \$5         \$300.00000         \$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES          6,000.000         \$5         \$300.00000         \$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES          New Structure: Over Railroad (rail)         New Structure: Over Calizated (rail)         New Structure: Over Clear Creek & Debolt (highway)         Nod4         \$3,750,000.00         \$3,000,000.00         \$3,000,000.00         MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (rail)         Total for Group 0100:\$10,800,000.00         MAJOR COST DRIVERS, MISCELLANEOUS COSTS         \$4675.00000         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,750.00         \$5,314,75			EACH	\$750.00000	\$1,500.00	)
MAJOR COST DRIVERS, BUILDING DEMOLITION Garages         Total for Group 0090:\$31,500.00           Group 0100: New Structures         0042         R-MC-STRC         15,000.000         \$2,250,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (highway)         \$300.0000         \$1,800,000.00           0043         R-MC-STRC         6,000.000         \$5         \$300.00000         \$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (rail)         \$300.00000         \$3,750,000.00           0044         R-MC-STRC         25,000.000         \$5         \$300.00000         \$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (highway)         \$300.00000         \$3,750,000.00           0045         R-MC-STRC         10,000.000         \$300.00000         \$3,000,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (rail)         Total for Group 0100:\$10,800,000.00           Group 0110: Rail Transit         0046         U-MC-MISC         6,074.000         \$875.00000         \$5,314,750.00         \$374,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         At Grade Baliasted Track (DMU)         \$935.00000         \$374,000.00         \$374,000.00         \$374,000.00         \$374,000.00         \$3	Sheds			<b>.</b>		
Total for Group 0090:\$31,500.00           Group 0100: New Structures         15,000.000 SF         \$150.00000         \$2,250,000.00           MAJOR COST DRIVERS, STRUCTURES         6,000.000 SF         \$300.00000         \$1,800,000.00           Mew Structure: Over Railroad (highway)         0043 R.MC.STRC         6,000.000 SF         \$300.00000         \$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (rail)         \$300.00000         \$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (highway)         \$300.00000         \$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (highway)         \$300.00000         \$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (rail)         \$300.00000         \$3,000,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         At Grade Balasted Track (DMU)         \$374,000.00         \$374,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         1.000 EACH         \$250,000.000         \$250,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         6,0000 LS         \$0.00000         \$250,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         50.000.000         \$250,000.00         \$0.00	MAJOR COST DRIVERS, BU		EACH	\$2,500.00000	\$5,000.00	)
Group 0100: New Structures           0042         R-MC-STRC         15,000.000         \$\$         \$150.00000         \$2,250,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (highway)         \$300.00000         \$\$1,800,000.00           0043         R-MC-STRC         6,000.000         \$\$         \$300.00000         \$\$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (rail)         \$\$0044         \$\$1,800,000.00         \$\$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (highway)         \$\$0045         \$\$150.00000         \$\$3,750,000.00           0045         R-MC-STRC         10,000.000         \$\$         \$\$300.00000         \$\$3,000,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (rail)         \$\$300.00000         \$\$3,000,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         A Grade Bailasted Track (DMU)         \$\$35,0000         \$\$374,000.00           046         U-MC-MISC         6,074.000         \$\$1         \$\$935.0000         \$\$374,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         A Grade Bailasted Track (DMU)         \$\$046         \$\$250,000.000         \$\$250,000.00           047         U-MC-MISC         400.000	Garages			Tota	for Group 0090:\$31 500 00	
0042         R-MC-STRC         15,000.00         \$\$         \$150.00000         \$2,250,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (highway)         \$043         R-MC-STRC         6,000.000         \$\$         \$300.0000         \$\$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (rail)         \$\$150.0000         \$\$1,800,000.00           044         R-MC-STRC         25,000.00         \$\$         \$\$150.00000         \$\$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (highway)         \$\$300.00000         \$\$3,750,000.00           044         R-MC-STRC         10,000.000         \$\$         \$\$300.00000         \$\$3,000,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (rail)         Total for Group 0100:\$10,800,000.00           Group 0110: Rail Transit         0046         U-MC-MISC         6,074.000         \$\$75,314,750.00           045         U-MC-MISC         400.000         FT         \$\$875.00000         \$\$374,000.00           046         U-MC-MISC         400.000         FT         \$\$935.0000         \$\$374,000.00           047         U-MC-MISC         1.000         EACH         \$\$250,000.000         \$\$250,000.00 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad (fighway)       6,000.000       \$F       \$300.0000       \$1,800,000.00         MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad (rail)       6,000.000       \$F       \$300.0000       \$1,800,000.00         044       R-MC-STRC       25,000.000       \$F       \$150.00000       \$3,750,000.00         MAJOR COST DRIVERS, STRUCTURES New Structure: Over Clear Creek & Debolt (nighway)       \$300.0000       \$3,000,000.00         045       R-MC-STRC       25,000.000       \$300.0000       \$3,000,000.00         MAJOR COST DRIVERS, STRUCTURES New Structure: Over Clear Creek & Debolt (rail)       Total for Group 0100:\$10,800,000.00         Coup 0110: Rail Transit         0046       U-MC-MISC       6,074.000       FT       \$875.00000       \$5,314,750.00         May Structure: Over Clear Creek & Debolt (rail)         Total for Group 0100:\$10,800,000.00         Group 0110: Rail Transit         0046       U-MC-MISC       6,074.000       FT       \$875.00000       \$5,314,750.00         May Structure: Over Clear Creek & Debolt (rail)         Od46       U-MC-MISC       6,074.000       FT       \$935.00000       \$250,000.00         May Structure: Over Clear Creek & Debolt       \$2	Group 0100: New Structu	ires				
0043         R-MC-STRC         6,000.000         SF         \$300.00000         \$1,800,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Railroad (rail)         \$150.00000         \$3,750,000.00           0044         R-MC-STRC         25,000.000 SF         \$150.00000         \$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (highway)         \$300.00000         \$3,000,000.00           0045         R-MC-STRC         10,000.000 SF         \$300.00000         \$3,000,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (rail)         Total for Group 0100:\$10,800,000.00           Group 0110: Rail Transit         0046         U-MC-MISC         6,074.000 FT         \$875.00000         \$5,314,750.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         At Grade Ballasted Track (DMU)         \$935.00000         \$374,000.00           0047         U-MC-MISC         400.000 FT         \$935.00000         \$374,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         Aerial Direct Fixation Track on Bridges (DMU)         \$250,000.00         \$250,000.00           0048         U-MC-MISC         1.000         EACH         \$250,000.00         \$250,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         Grade Crossing <td>MAJOR COST DRIVERS, ST</td> <td>RUCTURES</td> <td>SF</td> <td>\$150.00000</td> <td>\$2,250,000.00</td> <td>)</td>	MAJOR COST DRIVERS, ST	RUCTURES	SF	\$150.00000	\$2,250,000.00	)
0044         R-MC-STRC         25,000.000         \$\$150.00000         \$\$3,750,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (highway)         \$\$300.00000         \$\$3,000,000.00           0045         R-MC-STRC         10,000.000         \$\$         \$\$300.00000         \$\$3,000,000.00           MAJOR COST DRIVERS, STRUCTURES         New Structure: Over Clear Creek & Debolt (rail)         \$\$300.0000         \$\$3,000,000.00           Total for Group 0100:\$10,800,000.00           Group 0110: Rail Transit         \$\$0046         U-MC-MISC         6,074.000         \$\$\$75,314,750.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         \$\$\$00000         \$\$\$374,000.00         \$\$\$374,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         \$\$\$00000         \$\$374,000.00         \$\$\$374,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         \$\$\$00000         \$\$\$374,000.00         \$\$\$374,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         \$\$\$0000.00000         \$\$\$250,000.00         \$\$\$250,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         \$\$\$0.00000         \$\$\$0.00         \$\$\$0.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         \$\$\$0.00000         \$\$0.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         \$\$\$0.00000         \$\$0.00     <	0043 R-MC-STRC	6,000.000	SF	\$300.00000	\$1,800,000.00	)
MAJOR COST DRIVERS, STRUCTURES New Structure: Over Clear Creek & Debolt (highway) 0045 R-MC-STRC 10,000.000 SF New Structure: Over Clear Creek & Debolt (rail) Total for Group 0100:\$10,800,000.00 Group 0110: Rail Transit 0046 U-MC-MISC 6,074.000 FT \$875.0000 \$5,314,750.00 MAJOR COST DRIVERS, MISCELLANEOUS COSTS At Grade Ballasted Track (DMU) 0047 U-MC-MISC 400.000 FT \$935.0000 \$374,000.00 MAJOR COST DRIVERS, MISCELLANEOUS COSTS At Grade Ballasted Track (DMU) 0048 U-MC-MISC 1.000 EACH \$250,000.00000 \$250,000.00 MAJOR COST DRIVERS, MISCELLANEOUS COSTS <i>Aerial Direct Fixation Track on Bridges (DMU)</i> 0048 U-MC-MISC 1.000 EACH \$250,000.00000 \$250,000.00 MAJOR COST DRIVERS, MISCELLANEOUS COSTS <i>Grade Crossing</i> 0049 U-MC-MISC 0.000 LS \$0.0000 \$0.00		. ,	<u>۹</u> ۲	¢150,0000	¢2 750 000 00	
0045         R-MC-STRC         10,000.000         SF         \$300.00000         \$3,000,000.00           MAJOR COST DRIVERS, STRUCTURES New Structure: Over Clear Creek & Debolt (rail)         Total for Group 0100:\$10,800,000.00           Total for Group 0100:\$10,800,000.00           Group 0110: Rail Transit           0046         U-MC-MISC         6,074.000         FT         \$875.00000         \$5,314,750.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS At Grade Ballasted Track (DMU)         \$935.00000         \$374,000.00           0047         U-MC-MISC         400.000         FT         \$935.00000         \$374,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS Aerial Direct Fixation Track on Bridges (DMU)         \$250,000.00000         \$250,000.00         \$250,000.00           0048         U-MC-MISC         1.000         EACH         \$250,000.0000         \$250,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         Grade Crossing         \$0.00         \$0.00         \$0.00           0049         U-MC-MISC         0.000         LS         \$0.0000         \$0.00         \$0.00	MAJOR COST DRIVERS, ST	RUCTURES		\$120.00000	\$3,750,000.00	,
New Structure: Over Clear Creek & Debolt (rail)           Total for Group 0100:\$10,800,000.00           Group 0110: Rail Transit         0046         U-MC-MISC         6,074.000         FT         \$875.00000         \$5,314,750.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         At Grade Ballasted Track (DMU)         \$935.00000         \$374,000.00           0047         U-MC-MISC         400.000         FT         \$935.00000         \$374,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         Aerial Direct Fixation Track on Bridges (DMU)         \$250,000.00000         \$250,000.00           0048         U-MC-MISC         1.000         EACH         \$250,000.00000         \$250,000.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         Grade Crossing         \$0.000         \$20,000         \$0.00           0049         U-MC-MISC         0.000         LS         \$0.00000         \$0.00           MAJOR COST DRIVERS, MISCELLANEOUS COSTS         Transit Station         \$0.000         \$0.00         \$0.00	0045 R-MC-STRC	10,000.000		\$300.00000	\$3,000,000.00	)
Total for Group 0100:\$10,800,000.00         Group 0110: Rail Transit         0046       U-MC-MISC       6,074.000       FT       \$875.00000       \$5,314,750.00         MAJOR COST DRIVERS, MISCELLANEOUS COSTS       At Grade Ballasted Track (DMU)       \$935.00000       \$374,000.00         0047       U-MC-MISC       400.000       FT       \$935.00000       \$374,000.00         MAJOR COST DRIVERS, MISCELLANEOUS COSTS       Aerial Direct Fixation Track on Bridges (DMU)       \$250,000.00000       \$250,000.00         0048       U-MC-MISC       1.000       EACH       \$250,000.00000       \$250,000.00         MAJOR COST DRIVERS, MISCELLANEOUS COSTS       Grade Crossing       \$0.000       \$0.00       \$0.00         0049       U-MC-MISC       0.000       LS       \$0.00000       \$0.00         MAJOR COST DRIVERS, MISCELLANEOUS COSTS       Transit Station       \$0.00       \$0.00						
0046U-MC-MISC6,074.000FT\$875.00000\$5,314,750.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS At Grade Ballasted Track (DMU)400.000FT\$935.00000\$374,000.000047U-MC-MISC400.000FT\$935.00000\$374,000.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Aerial Direct Fixation Track on Bridges (DMU)\$250,000.00000\$250,000.000048U-MC-MISC1.000EACH\$250,000.00000\$250,000.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Grade Crossing0.000LS\$0.00000\$0.000049U-MC-MISC0.000LS\$0.00000\$0.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Transit Station\$0.000\$0.000\$0.00				Total for	Group 0100:\$10,800,000.00	
0046U-MC-MISC6,074.000FT\$875.00000\$5,314,750.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS At Grade Ballasted Track (DMU)400.000FT\$935.00000\$374,000.000047U-MC-MISC400.000FT\$935.00000\$374,000.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Aerial Direct Fixation Track on Bridges (DMU)\$250,000.00000\$250,000.000048U-MC-MISC1.000EACH\$250,000.00000\$250,000.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Grade Crossing0.000LS\$0.00000\$0.000049U-MC-MISC0.000LS\$0.00000\$0.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Transit Station\$0.000\$0.000\$0.00	Group 0110. Poil Trapait					
MAJOR COST DRIVERS, MISCELLANEOUS COSTS At Grade Ballasted Track (DMU)400.000 FT \$935.0000\$374,000.000047U-MC-MISC400.000 FT 400.000 FT\$935.00000\$374,000.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Aerial Direct Fixation Track on Bridges (DMU)5250,000.00000\$250,000.000048U-MC-MISC1.000 EACH 1.000 EACH\$250,000.00000\$250,000.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Grade Crossing0.000 LS\$0.00000\$0.000049U-MC-MISC0.000 LS\$0.000000\$0.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Transit Station\$0.000 LS\$0.00000000000000000000000000000000000	•	0.074.000		<b>4075</b> 00000		
0047U-MC-MISC400.000FT\$935.00000\$374,000.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Aerial Direct Fixation Track on Bridges (DMU)1.000EACH\$250,000.00000\$250,000.000048U-MC-MISC1.000EACH\$250,000.00000\$250,000.00\$250,000.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Grade Crossing0.000LS\$0.00000\$0.00\$0.000049U-MC-MISC0.000LS\$0.00000\$0.00\$0.00MAJOR COST DRIVERS, MISCELLANEOUS COSTS Transit StationTransit Station\$0.00000\$0.00	MAJOR COST DRIVERS, MIS	SCELLANEOUS COST		\$875.00000	\$5,314,750.00	)
0048U-MC-MISC1.000EACH\$250,000.00000\$250,000.00MAJOR COST DRIVERS, MISCELLANEOUS COSTSGrade Crossing0049U-MC-MISC0.000LS\$0.00000\$0.00MAJOR COST DRIVERS, MISCELLANEOUS COSTSTransit Station\$0.000\$0.000\$0.00	0047 U-MC-MISC MAJOR COST DRIVERS, MIS	400.000 SCELLANEOUS COST		\$935.00000	\$374,000.00	)
0049 U-MC-MIŠC 0.000 LS \$0.00000 \$0.00 MAJOR COST DRIVERS, MISCELLANEOUS COSTS <i>Transit Station</i>	0048 U-MC-MISC MAJOR COST DRIVERS, MIS	1.000		\$250,000.00000	\$250,000.00	)
	0049 U-MC-MIŠC MAJOR COST DRIVERS, MIS			\$0.00000	\$0.00	)
				Total fo	r Group 0110:\$5,938,750.00	

# Group 0120: Wetland Construction

5:04:18PM Friday, January 13, 2012

Estimate: EC2/3 - Alt J				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
0050 T-MC-WTLD MAJOR COST DRIVERS, WETLAN		ACRE ON	\$60,000.00000	\$7,800.00
0051 T-OC-WTLD OTHER COSTS, WETLAND CONS Stream Restoration	716.000 TRUCTION	FT	\$600.00000	\$429,600.00
			Total for Group 0120:\$4	37,400.00
Group 0130: Misc. Costs				
0052 U-MC-MISC MAJOR COST DRIVERS, MISCELL Performance Bond: 0.5% of total pro		S	\$127,143.00000	\$127,143.00
0053 U-MC-MISC MAJOR COST DRIVERS, MISCELL Railroad Insurance Bond	1.000 ANEOUS COST		\$35,000.00000	\$35,000.00
0054 U-MC-MISC MAJOR COST DRIVERS, MISCELL Field Office Type C	18.000 ANEOUS COST		\$2,500.00000	\$45,000.00
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELL Mobilization: from CMS Item 624 for		S	\$800,000.00000	\$800,000.00
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELL Construction Layout Stakes: 0.5% of	1.000 ANEOUS COST	LS S	\$127,143.00000 28,464)	\$127,143.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELL Maintaining Traffic: 1.5% of total pro	1.000 ANEOUS COST	LS S	\$381,427.00000	\$381,427.00
		. ,	Total for Group 0130:\$1,5	515,713.00
Group 0140: Design Continge	ency Costs			
0058 V-MC-CNTG MAJOR COST DRIVERS, CONTING BDB Decign Contingency (ctop 5): 2		-	\$6,724,795.00000	\$6,724,795.00
PDP Design Contingency (step 5): 2	.5 % UI 10181 CONSt	ruction c	Total for Group 0140:\$6,7	24,795.00

### Estimate EC2/3 - Alt K

Estimated Cost:\$27,273,359.00

Contingency: 0.00%

#### Estimated Total: \$27,273,359.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative K

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/29/11 Checked by Steven Shadix on 01/13/12

Estimate: EC2/3 - Alt K <u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$4.00000	\$0.00
				Total for Group 0001:\$0.00
Group 0002: Fill - Embankmen	t			
0002 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	1,077,997.000 ,	CY	\$3.00000	\$3,233,991.00
			Total for	Group 0002:\$3,233,991.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	, 0.000	CY	\$30.00000	\$0.00
				Total for Group 0003:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY <i>Guardrail</i>	3,500.000	FT	\$12.00000	\$42,000.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	60,260.000	SF	\$4.00000	\$241,040.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY <i>Curb</i>	13,052.000	FT	\$12.00000	\$156,624.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	12,052.000	FT	\$14.00000	\$168,728.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY			\$1,100.00000	\$30,800.00
Clearing & Grubbing; light brush with a 0009 A-OC-RDWY		ACRE	\$1,650.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; medium clearing 0010 A-OC-RDWY		<i>ake</i> ACRE	\$2,200.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; heavy clearing v		ACINE	φ2,200.00000	ψ0.00
croaning a crabbing, neavy bloaning v			Total f	or Group 0010:\$639,192.00
Group 0020: Seeding & Mulchi	ng / Soddir	ng		
0011 B-MC-ERCO MAJOR COST DRIVERS, EROSION Seeding & Mulching	133,911.000 CONTROL	SY	\$2.00000	\$267,822.00
			Total f	or Group 0020:\$267,822.00
Group 0021: Erosion Control -	Item 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION Conceptual Est: Earthwork Cost \$3,00	1.000 CONTROL		\$85,000.00000	\$85,000.00
5:06:56PM				

Estimate: EC2/3 - Alt K				ENTRAN
Line # Item Number Description	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
Supplemental Description				
			Total for Group 0021:\$85	5,000.00
Group 0030: Underdrains				
•	24,104.000	FT	\$6.00000	\$144,624.00
MAJOR COST DRIVERS, DRAINAGE	,		Total for Group 0030:\$144	
				r,024.00
Group 0031: Culverts - Type A: <			<b></b>	<b>•</b> ·
0014 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	424.000	FT	\$375.00000	\$159,000.00
			Total for Group 0031:\$159	9,000.00
Group 0032: Culverts, Type A: 5'	- 10'			
0015 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	0.000	FT	\$825.00000	\$0.00
			Total for Group 003	82:\$0.00
Group 0033: Culverts, Type A: 10	)' - 20'			
0016 C-MC-DRNG	0.000	FT	\$1,500.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group 003	33:\$0.00
Group 0034: Closed Storm Syste 0017 C-MC-DRNG	e <b>m</b> 1.000	LS	\$289,248.00000	\$289,248.00
MAJOR COST DRIVERS, DRAINAGE	1.000	LS		
			Total for Group 0034:\$289	9,248.00
Group 0040: Mainline Lanes				
0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	45,530.000	SY	\$41.00000	\$1,866,730.00
			Total for Group 0040:\$1,866	6,730.00
Group 0041: Ramps				
0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	0.000	SY	\$41.00000	\$0.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 004	1:\$0.00
Group 0042: Non - Mainline Lane	20			
0020 D-MC-PVMT	2,000.000	SY	\$41.00000	\$82,000.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 0042:\$82	2 000 00
				.,
Group 0050: Utilities	1 000	10	\$9,000,0000	00 000 92
MAJOR COST DRIVERS, WATER LINE	1.000	LS	\$8,000.00000	\$8,000.00
0022 F-MC-SANI	1.000	LS	\$12,500.00000	\$12,500.00
5:06:56PM Friday, January 13, 2012				Page 3 of 6

Estimate: EC2/3 - Alt K				ENTRAN
Line # Item Number Description Supplemental Description		<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
MAJOR COST DRIVERS, 0023 N-OC-DEMO MAJOR COST DRIVERS, Electric Transmission Tow	0.000 BUILDING DEMOLITION	EACH	\$1,000,000.00000	\$0.00
			Total for Group	0050:\$20,500.00
Group 0060: Lighting -	Continuous Roadw	/ay		
0024 G-MC-LTNG MAJOR COST DRIVERS,	6,276.000	FT	\$35.00000	\$219,660.00
			Total for Group 0	060:\$219,660.00
Group 0070: Signs				
0025 J-MC-TRAF MAJOR COST DRIVERS,	1.180	MILE	\$250,000.00000	\$295,000.00
			Total for Group 0	070:\$295,000.00
Group 0071: Pavemen	t Marking			
0026 J-MC-TRAF MAJOR COST DRIVERS, Edge Line	4.720	MILE	\$500.00000	\$2,360.00
0027 J-MC-TRAF MAJOR COST DRIVERS, Lane Line	2.360 TRAFFIC CONTROL	MILE	\$300.00000	\$708.00
0028 J-MC-TRAF MAJOR COST DRIVERS, Center Line	0.100 TRAFFIC CONTROL	MILE	\$1,200.00000	\$120.00
0029 J-MC-TRAF MAJOR COST DRIVERS, Channelizing Line	200.000 TRAFFIC CONTROL	FT	\$1.25000	\$250.00
0030 J-MC-TRAF MAJOR COST DRIVERS, Stop Line	24.000 TRAFFIC CONTROL	FT	\$6.00000	\$144.00
0031 J-MC-TRAF MAJOR COST DRIVERS, Transverse Line	0.000 TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0032 J-MC-TRAF MAJOR COST DRIVERS, Dotted Line	0.000 TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, Lane Arrow	2.000 TRAFFIC CONTROL	EACH	\$80.00000	\$160.00
0034 J-MC-TRAF MAJOR COST DRIVERS, Word on Pavement	1.000 TRAFFIC CONTROL	EACH	\$100.00000	\$100.00
			Total for Group	0071:\$3,842.00
Group 0072: Signals	Intersections			

# Group 0072: Signals - Intersections

0035 K-MC-SGNL	1.000	EACH	\$200,000.00000	\$200,000.00
MAJOR COST DRIVERS, SIGNALS				
			Total for	Group 0072:\$200,000.00

### Group 0080: Retaining Walls

5:06:56PM Friday, January 13, 2012

Estimate: EC2/3 - Alt K					ENTRAN
Line # Item Number	<u>Quantity</u>	<u>Units</u>	Unit Price		Extension
<u>Description</u> Supplemental Description					
Supplemental Description					
0036 M-MC-WALL	0.000	SF	\$100.00000		\$0.00
MAJOR COST DRIVERS, RETAIN	NG WALLS			Total for Group 008	30.\$0.00
					0.00.00
Group 0090: Building Demoli	tion				
0037 N-MC-DEMO	0.000	EACH	\$10,000.00000		\$0.00
MAJOR COST DRIVERS, BUILDIN Residential	IG DEMOLITION				
0038 N-MC-DEMO	0.000	EACH	\$50,000.00000		\$0.00
MAJOR COST DRIVERS, BUILDIN Service Station Island & Tanks	IG DEMOLITION				
0039 N-MC-DEMO	0.000	EACH	\$25,000.00000		\$0.00
MAJOR COST DRIVERS, BUILDIN Commercial	IG DEMOLITION				
0040 N-MC-DEMO	0.000	EACH	\$750.00000		\$0.00
MAJOR COST DRIVERS, BUILDIN Sheds	G DEMOLITION				
0041 N-MC-DEMO	0.000	EACH	\$2,500.00000		\$0.00
MAJOR COST DRIVERS, BUILDIN	G DEMOLITION				
Garages				Total for Group 009	90·\$0 00
					0.00.00
Group 0100: New Structures					
0042 R-MC-STRC	15,000.000	SF	\$150.00000		\$2,250,000.00
MAJOR COST DRIVERS, STRUCT New Structure: Over Railroad (high					
0043 R-MC-STRC	6,000.000	SF	\$300.00000		\$1,800,000.00
MAJOR COST DRIVERS, STRUCT New Structure: Over Railroad (rail)	URES				
0044 R-MC-STRC	10,000.000	SF	\$150.00000		\$1,500,000.00
MAJOR COST DRIVERS, STRUCT New Structure: Over Debolt (highw					
0045 R-MC-STRC	4,000.000	SF	\$300.00000		\$1,200,000.00
MAJOR COST DRIVERS, STRUCT New Structure: Over Debolt (rail)	URES				
			Total for	r Group 0100:\$6,750	0.000.00
					,
Group 0110: Rail Transit					
0046 U-MC-MISC	6,026.000		\$875.00000		\$5,272,750.00
MAJOR COST DRIVERS, MISCEL At Grade Ballasted Track (DMU)	LANEOUS COST	5			
0047 U-MC-MISC	250.000		\$935.00000		\$233,750.00
MAJOR COST DRIVERS, MISCEL Aerial Direct Fixation Track on Bridg		5			
0048 U-MC-MISC	1.000	EACH	\$250,000.00000		\$250,000.00
MAJOR COST DRIVERS, MISCEL Grade Crossing	LANEOUS COST	5			
0049 U-MC-MIŠC	0.000		\$0.00000		\$0.00
MAJOR COST DRIVERS, MISCEL Transit Station	LANEOUS COST	S			
			Total fo	r Group 0110:\$5,756	6,500.00

# Group 0120: Wetland Construction

5:06:56PM Friday, January 13, 2012

Estimate: EC2/3 - Alt K				ENTRAN
Line # <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
0050 T-MC-WTLD MAJOR COST DRIVERS, WETLAN		ACRE ON	\$60,000.00000	\$0.00
0051 T-OC-WTLD OTHER COSTS, WETLAND CONS Stream Restoration	557.000 TRUCTION	FT	\$600.00000	\$334,200.00
			Total for Group 0120	):\$334,200.00
Group 0130: Misc. Costs				
0052 U-MC-MISC MAJOR COST DRIVERS, MISCELL Performance Bond: 0.5% of total pro		S	\$101,962.00000	\$101,962.00
0053 U-MC-MISC MAJOR COST DRIVERS, MISCELL Railroad Insurance Bond	1.000 ANEOUS COSTS		\$35,000.00000	\$35,000.00
0054 U-MC-MISC MAJOR COST DRIVERS, MISCELL Field Office Type C	18.000 ANEOUS COSTS		\$2,500.00000	\$45,000.00
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELL Mobilization: from CMS Item 624 for		S	\$800,000.00000	\$800,000.00
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELL Construction Layout Stakes: 0.5% o		5	\$101,962.00000 92,309)	\$101,962.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELL Maintaining Traffic: 1.9% of total pro	1.000 ANEOUS COSTS	ÈS S	\$387,454.00000	\$387,454.00
			Total for Group 0130:	\$1,471,378.00
Group 0140: Design Continge	ency Costs			
0058 V-MC-CNTG MAJOR COST DRIVERS, CONTING			\$5,454,672.00000	\$5,454,672.00
PDP Design Contingency (step 5): 2	'Ə% 0⊺ total const	UCTION C	Total for Group 0140:	\$5,454,672.00

### Estimate EC2/3 - Alt L

Estimated Cost:\$19,353,252.00

Contingency: 0.00%

#### Estimated Total: \$19,353,252.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative L

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/29/11 Checked by Steven Shadix on 01/13/12

Estimate: EC2/3 - Alt L <u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	16.000	CY	\$4.00000	\$64.00
				Total for Group 0001:\$64.00
Group 0002: Fill - Embankment				
0002 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	476,768.000	CY	\$3.00000	\$1,430,304.00
			Total for	r Group 0002:\$1,430,304.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$30.00000	\$0.00
				Total for Group 0003:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY Guardrail	600.000	FT	\$12.00000	\$7,200.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	52,080.000	SF	\$4.00000	\$208,320.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY <i>Curb</i>	11,416.000	FT	\$12.00000	\$136,992.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	10,416.000	FT	\$14.00000	\$145,824.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with c			\$1,100.00000	\$0.00
0009 A-OC-RDWY OTHER COSTS, ROADWAY Clearing & Grubbing; medium clearing	24.000	ACRE	\$1,650.00000	\$39,600.00
0010 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$2,200.00000	\$0.00
Clearing & Grubbing; heavy clearing w	vith dozer		Total	for Group 0010:\$537,936.00
			Total	
Group 0020: Seeding & Mulchir 0011 B-MC-ERCO	ng / Soddir 115,734.000	•	\$2.00000	\$231,468.00
MAJOR COST DRIVERS, EROSION ( Seeding & Mulching		51	φ2.00000	φ231,400.00
			Total	for Group 0020:\$231,468.00
Group 0021: Erosion Control - I	tem 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION ( Conceptual Est: Earthwork Cost \$1,00	1.000 CONTROL		\$35,000.00000	\$35,000.00
5:08:25PM				

Estimate: EC2/3 - Alt L				ENTRAN
<u>Line # Item Number</u> <u>C</u> <u>Description</u> <u>Supplemental Description</u>	Quantity	<u>Units</u>	<u>Unit Price</u>	Extension
				Total for Group 0021:\$35,000.00
Group 0030: Underdrains				
0013 C-MC-DRNG 20,	832.000	FT	\$6.00000	\$124,992.00
MAJOR COST DRIVERS, DRAINAGE			-	Total for Group 0030:\$124,992.00
Group 0031: Culverts - Type A: < 5	ı			
0014 C-MC-DRNG	0.000	FT	\$375.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0031:\$0.00
Group 0032: Culverts, Type A: 5' - 2	10'			
	252.000	FT	\$825.00000	\$207,900.00
MAJOR COST DRIVERS, DRAINAGE			-	Total for Group 0032:\$207,900.00
Group 0033: Culverts, Type A: 10' -	· 20'			
0016 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	0.000	FT	\$1,500.0000	0 \$0.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0033:\$0.00
Group 0034: Closed Storm System				
0017 C-MC-DRNG	1.000	LS	\$249,984.00	000 \$249,984.00
		LS		000 \$249,984.00 Total for Group 0034:\$249,984.00
0017 C-MC-DRNG		LS		
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE Group 0040: Mainline Lanes 0018 D-MC-PVMT 39,				
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE Group 0040: Mainline Lanes	1.000		\$41.00000	Total for Group 0034:\$249,984.00
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE Group 0040: Mainline Lanes 0018 D-MC-PVMT 39,	1.000		\$41.00000	Total for Group 0034:\$249,984.00 \$1,613,350.00
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE Group 0040: Mainline Lanes 0018 D-MC-PVMT 39, MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT	1.000	SY	\$41.00000	Total for Group 0034:\$249,984.00 \$1,613,350.00
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE Group 0040: Mainline Lanes 0018 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps	1.000	SY	\$41.00000 <b>To</b>	Total for Group 0034:\$249,984.00 \$1,613,350.00 tal for Group 0040:\$1,613,350.00
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE Group 0040: Mainline Lanes 0018 D-MC-PVMT 39, MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT	1.000	SY	\$41.00000 <b>To</b>	Total for Group 0034:\$249,984.00 \$1,613,350.00 tal for Group 0040:\$1,613,350.00 \$0.00
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE Group 0040: Mainline Lanes 0018 D-MC-PVMT 39, MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0042: Non - Mainline Lanes	1.000	SY	\$41.00000 <b>To</b>	Total for Group 0034:\$249,984.00 \$1,613,350.00 tal for Group 0040:\$1,613,350.00 \$0.00
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE Group 0040: Mainline Lanes 0018 D-MC-PVMT 39, MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0042: Non - Mainline Lanes 0020 D-MC-PVMT 2,	1.000 350.000 0.000	SY	\$41.00000 To \$41.00000	Total for Group 0034:\$249,984.00 \$1,613,350.00 tal for Group 0040:\$1,613,350.00 \$0.00 Total for Group 0041:\$0.00
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE Group 0040: Mainline Lanes 0018 D-MC-PVMT 39, MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0042: Non - Mainline Lanes 0020 D-MC-PVMT 2,	1.000 350.000 0.000	SY	\$41.00000 To \$41.00000	Fotal for Group 0034:\$249,984.00 \$1,613,350.00 tal for Group 0040:\$1,613,350.00 \$0.00 Total for Group 0041:\$0.00 \$82,000.00
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE Group 0040: Mainline Lanes 0018 D-MC-PVMT 39, MAJOR COST DRIVERS, PAVEMENT Group 0041: Ramps 0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT Group 0042: Non - Mainline Lanes 0020 D-MC-PVMT 2, MAJOR COST DRIVERS, PAVEMENT Group 0050: Utilities 0021 E-MC-WATR	1.000 350.000 0.000	SY SY	\$41.00000 To \$41.00000	Fotal for Group 0034:\$249,984.00 \$1,613,350.00 tal for Group 0040:\$1,613,350.00 \$0.00 Total for Group 0041:\$0.00 \$82,000.00 Total for Group 0042:\$82,000.00
0017       C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         Group 0040: Mainline Lanes       0018         0018       D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT       39,7         Group 0041: Ramps       0019       D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT         O019       D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT       2,7         Group 0042: Non - Mainline Lanes       0020       D-MC-PVMT         0020       D-MC-PVMT       2,7         MAJOR COST DRIVERS, PAVEMENT       2,7         MAJOR COST DRIVERS, PAVEMENT       2,7         Group 0050: Utilities       39,7	1.000 350.000 0.000 000.000	SY SY	\$41.00000 To \$41.00000 \$41.00000	Total for Group 0034:\$249,984.00 \$1,613,350.00 tal for Group 0040:\$1,613,350.00 \$0.00 Total for Group 0041:\$0.00 \$82,000.00 Total for Group 0042:\$82,000.00 0 \$8,000.00

Friday, January 13, 2012

Estimate: EC2/3 - Alt L				ENTRAN
Line # Item Number Description Supplemental Description		<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
MAJOR COST DRIVERS, 0023 N-OC-DEMO MAJOR COST DRIVERS, Electric Transmission Tow	0.000 BUILDING DEMOLITION	EACH	\$1,000,000.00000	\$0.00
			Total for Group 0050:\$	20,500.00
Group 0060: Lighting -	Continuous Roadw	/ay		
0024 G-MC-LTNG MAJOR COST DRIVERS	5,358.000 , LIGHTING	FT	\$35.00000	\$187,530.00
			Total for Group 0060:\$1	87,530.00
Group 0070: Signs				
0025 J-MC-TRAF MAJOR COST DRIVERS	1.020 TRAFFIC CONTROL	MILE	\$250,000.00000	\$255,000.00
			Total for Group 0070:\$2	55,000.00
Group 0071: Pavemer	nt Marking			
0026 J-MC-TRAF MAJOR COST DRIVERS Edge Line	4.080 TRAFFIC CONTROL	MILE	\$500.00000	\$2,040.00
0027 J-MC-TRAF MAJOR COST DRIVERS Lane Line	2.040 TRAFFIC CONTROL	MILE	\$300.00000	\$612.00
0028 J-MC-TRAF MAJOR COST DRIVERS Center Line	0.100 TRAFFIC CONTROL	MILE	\$1,200.00000	\$120.00
0029 J-MC-TRAF MAJOR COST DRIVERS Channelizing Line	200.000 TRAFFIC CONTROL	FT	\$1.25000	\$250.00
0030 J-MC-TRAF MAJOR COST DRIVERS Stop Line	24.000 TRAFFIC CONTROL	FT	\$6.00000	\$144.00
0031 J-MC-TRAF MAJOR COST DRIVERS Transverse Line	0.000 , TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0032 J-MC-TRAF MAJOR COST DRIVERS Dotted Line	0.000 , TRAFFIC CONTROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS Lane Arrow	2.000 , TRAFFIC CONTROL	EACH	\$80.00000	\$160.00
0034 J-MC-TRAF MAJOR COST DRIVERS Word on Pavement	1.000 , TRAFFIC CONTROL	EACH	\$100.00000	\$100.00
			Total for Group 0071:	\$3,426.00
Group 0072: Signals -	Intersections			

# Group 0072: Signals - Intersections

0035 K-MC-SGNL MAJOR COST DRIVERS, SIGNALS	1.000	EACH	\$200,000.00000	\$200,000.00
			Total for Group 0072:\$200	),000.00

### Group 0080: Retaining Walls

5:08:25PM Friday, January 13, 2012

Estimate: EC2/3 - Alt L				ENTRAN
Line # Item Number	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
Description Supplemental Description				
0036 M-MC-WALL MAJOR COST DRIVERS, RETAI	0.000 NING WALLS	SF	\$100.00000	\$0.00
				Total for Group 0080:\$0.00
Group 0090: Building Demo	lition			
0037 N-MC-DEMO	10.000	EACH	\$10,000.00000	\$100,000.00
MAJOR COST DRIVERS, BUILD Residential	ING DEMOLITION			
0038 N-MC-DEMO MAJOR COST DRIVERS, BUILD Service Station Island & Tanks	0.000 ING DEMOLITION	EACH	\$50,000.00000	\$0.00
0039 N-MC-DEMO MAJOR COST DRIVERS, BUILD Commercial	6.000 ING DEMOLITION	EACH	\$25,000.00000	\$150,000.00
0040 N-MC-DEMO MAJOR COST DRIVERS, BUILD	12.000 ING DEMOLITION	EACH	\$750.00000	\$9,000.00
Sheds 0041 N-MC-DEMO MAJOR COST DRIVERS, BUILD	12.000 ING DEMOLITION	EACH	\$2,500.00000	\$30,000.00
Garages			Total f	for Group 0090:\$289,000.00
			Total	
Group 0100: New Structures				
0042 R-MC-STRC MAJOR COST DRIVERS, STRU( New Structure: Over Debolt (high		SF	\$150.00000	\$2,250,000.00
0043 R-MC-STRC MAJOR COST DRIVERS, STRU( New Structure: Over Debolt (rail)	6,000.000 CTURES	SF	\$300.00000	\$1,800,000.00
			Total for	r Group 0100:\$4,050,000.00
Group 0110: Rail Transit				
0044 U-MC-MISC	5,208.000	FT	\$875.00000	\$4,557,000.00
MAJOR COST DRIVERS, MISCE At Grade Ballasted Track (DMU)	LLANEOUS COST	S		
0045 U-MC-MISC MAJOR COST DRIVERS, MISCE Aerial Direct Fixation Track on Bri			\$935.00000	\$140,250.00
0046 U-MC-MISC MAJOR COST DRIVERS, MISCE Grade Crossing		EACH S	\$250,000.00000	\$250,000.00
0047 U-MC-MISC MAJOR COST DRIVERS, MISCE	0.000 ELLANEOUS COST		\$0.00000	\$0.00
Transit Station			Total fo	r Group 0110:\$4,947,250.00
			-	
Group 0120: Wetland Const			¢60.000.00000	<b>#</b> 0.00
0048 T-MC-WTLD MAJOR COST DRIVERS, WETL/	AND CONSTRUCT		\$60,000.00000	\$0.00
0049 T-OC-WTLD OTHER COSTS, WETLAND CON Stream Restoration	0.000 NSTRUCTION	FT	\$600.00000	\$0.00

<u>Line #</u> <u>Item Number</u> Description	Quantity	<u>Units</u>	Unit Price	Extension
Supplemental Description				
				Total for Group 0120:\$0.00
Group 0130: Misc. Costs				
0050 U-MC-MISC MAJOR COST DRIVERS, MISCEL Performance Bond: 0.5% of total p		S	\$72,554.00000	\$72,554.00
0051 U-MC-MISC MAJOR COST DRIVERS, MISCEL Railroad Insurance Bond	1.000	LS	\$35,000.00000	\$35,000.00
0052 U-MC-MISC MAJOR COST DRIVERS, MISCEL Field Office Type C	18.000 LANEOUS COST		\$2,500.00000	\$45,000.00
0053 U-MC-MISC MAJOR COST DRIVERS, MISCEL Mobilization: from CMS Item 624 fc		S	\$400,000.00000	\$400,000.00
0054 U-MC-MISC MAJOR COST DRIVERS, MISCEL Construction Layout Stakes: 0.5%		S	\$72,554.00000 10,704)	\$72,554.00
0055 U-MC-MISC MAJOR COST DRIVERS, MISCEL Maintaining Traffic: 2.7% of total pro	1.000 LANEOUS COST	LS S	\$391,789.00000	\$391,789.00
			Total for	Group 0130:\$1,016,897.00
Group 0140: Design Conting	ency Costs			
0056 V-MC-CNTG MAJOR COST DRIVERS, CONTIN			\$3,870,651.00000	\$3,870,651.00
PDP Design Contingency (step 5):	25% of total const	ruction c	,	Group 0140:\$3,870,651.00

Estimate: EC2/3 - Alt L

ENTRAN

### Estimate EC2/3 - Alt M5%

Estimated Cost:\$78,852,154.10

Contingency: 0.00%

#### Estimated Total: \$78,852,154.10

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative M - Light Rail Profile

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/30/11 Checked by Steven Shadix on 01/18/12

Estimate: EC2/3 - Alt M5%	Quantity	Unito	Unit Price		ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>onns</u>	<u>Unit Price</u>		<u>Extension</u>
Group 0001: Excavation					
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	214.000	CY	\$4.00000		\$856.00
				Total for Group 0001:	\$856.00
Group 0002: Fill - Embankment					
0002 A-MC-RDWY	902,653.000	CY	\$3.00000		\$2,707,959.00
MAJOR COST DRIVERS, ROADWAY			То	tal for Group 0002:\$2,707	959 00
					,000100
Group 0003: Fill - Granular		<u></u>	<b>*</b> ~~~~~~~		
0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	720,519.000	CY	\$30.00000	\$	21,615,570.00
Item 203 Granular Material, Type E 0004 A-MC-RDWY	94,524.000	SY	\$1.40000		\$132,333.60
MAJOR COST DRIVERS, ROADWAY Item 204 Geotextile, Type D					
			Tota	al for Group 0003:\$21,747	,903.60
Group 0010: Roadway Costs					
0005 A-OC-RDWY OTHER COSTS, ROADWAY Guardrail	4,000.000	FT	\$12.00000		\$48,000.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	98,890.000	SF	\$4.00000		\$395,560.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb	14,878.000	FT	\$12.00000		\$178,536.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	14,878.000	FT	\$14.00000		\$208,292.00
0009 A-OC-RDWY	34.000	ACRE	\$1,100.0000	00	\$37,400.00
OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with a			<b>A</b> 4 <b>C T C T C C C C C C C C C C</b>		A
0010 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$1,650.0000	JU	\$0.00
Clearing & Grubbing; medium clearing 0011 A-OC-RDWY		ake ACRE	\$2,200.0000	00	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; heavy clearing w			. ,		·
	111 00201			Total for Group 0010:\$867	,788.00
Group 0020: Seeding & Mulchir	na / Soddir	ומ			
0012 B-MC-ERCO	165,311.000	•	\$2.00000		\$330,622.00
MAJOR COST DRIVERS, EROSION C Seeding & Mulching	CONTROL				
, ,			-	Total for Group 0020:\$330	,622.00
Group 0021: Erosion Control - I	tem 832				
0013 B-MC-ERCO	1.000	LS	\$42,000.000	000	\$42,000.00
4:03:48PM Wednesday January 18, 2012					Page 2 of 6

Line #         term Number Description         Quantity         Units         Unit Price         Extension           Description         Supplemental Description         Malor COST DRIVERS, EROSION CONTROL Conceptual Est Earthwork Cost \$2,000,000 - 3,000,000         Total for Group 0021:\$42,000.00           Group 0030: Underdrains 0014 - C-MC-DRIVERS, DRAINAGE         34,656.000         FT         \$6,0000         \$207,936.00           Group 0031: Culverts - Type A: < 5'         Total for Group 0031;\$167,250.00         Total for Group 0031;\$167,250.00           Group 0032: Culverts, Type A: 5' - 10'         Total for Group 0031;\$167,250.00         \$0.00           Group 0032: Culverts, Type A: 5' - 10'         Total for Group 0032;\$0.00         \$0.00           Group 0032: Culverts, Type A: 10' - 20'         Total for Group 0032;\$0.00         \$0.00           Group 0033: Culverts, Type A: 10' - 20'         Total for Group 0033;\$0.00         \$0.00           Group 0034: Closed Storm System 0018         0.000         FT         \$1,500.0000         \$357,072.00           MALOR COST DRIVERS, DRAINAGE         1.000         LS         \$357,072.000         \$357,072.00           MALOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.0000         \$42,800.00           O119         C-MC-DRNG MALOR COST DRIVERS, DRAINAGE         1.000         LS         \$41,0000	Estimate: EC2/3 - Alt M5%				ENTRAN
Conceptual Est: Earthwork Cost \$2,000,000 - 3,000,000           Total for Group 0021:\$42,000.00           Group 0030: Underdrains           0014         C-MC-DRNG         34,656.000         FT         \$6.0000         S207,936.00           Total for Group 0030:\$207,936.00           Group 0031: Culverts - Type A: < 5'           0015         C-MC-DRNG         \$167,250.00         \$167,250.00           MAJOR COST DRIVERS, DRAINAGE           Outs C-MC-DRNG         \$167,250.00           MAJOR COST DRIVERS, DRAINAGE         \$10'         \$375,00000         \$167,250.00           Group 0032: Culverts, Type A: 5' - 10'         Outs C-MC-DRNG         \$167,250.00           Group 0032: Culverts, Type A: 10' - 20'         Outs for Group 0032: S0.00           Group 0033: Culverts, Type A: 10' - 20'         Outs for Group 0033: S0.00           MAJOR COST DRIVERS, DRAINAGE         Note Saf, 072.0000         \$367,072.00           MAJOR COST DRIVERS, DRAINAGE         1.000         \$537,072.0000         \$367,072.00           MAJOR COST DRIVERS, DRAINAGE         Total for Group 0033: \$\$0.00           MAJOR COST DRI	Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
Total for Group 0021:\$42,000.00           Group 0030: Underdrains           014         C-MC-DRNG         34,656.000         FT         \$6.00000         \$207,936.00           Total for Group 0030:\$207,936.00           Group 0031: Culverts - Type A: < 5'           0015         C-MC-DRNG         446.000         FT         \$375.00000         \$167,250.00           Total for Group 0031: \$167,250.00           Group 0032: Culverts, Type A: < 5'           0016         C-MC-DRNG         0.000         FT         \$825.0000         \$0.00           Total for Group 0031: \$167,250.00           Group 0032: Culverts, Type A: 5' - 10'           0016         C-MC-DRNG         0.000         FT         \$825.0000         \$0.00           Total for Group 0031: \$167,250.00           Group 0033: Culverts, Type A: 10' - 20'           0017         C-MC-DRNG         0.000         FT         \$1,500.00000         \$0.00           Total for Group 0033: \$0.00           Group 0034: Closed Storm System           0018         C-MC-DRNG         1.000         LS         \$357,072.00000         \$42,800.000           MAJOR COST DRIVERS, DRAINAGE			000		
0014         C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         34,656.000         FT         \$60000         \$207,936.00           Group 0031:         Culverts - Type A: < 5'		000 - 0,000,	000	Total for Group 0021:\$42	2,000.00
MAJOR COST DRIVERS, DRAINAGE         Total for Group 0030:\$207,936.00           Group 0031: Culverts - Type A: < 5'	Group 0030: Underdrains				
Total for Group 0030:\$207,936.00           Group 0031: Culverts - Type A: < 5'           0015 C-MC-DRNG 000 FT \$375,00000 FT \$375,00000 \$167,250.00           Total for Group 0031:\$167,250.00           Group 0032: Culverts, Type A: 5' - 10'           0016 C-MC-DRNG 0.000 FT \$325,0000           MAJOR COST DRIVERS, DRAINAGE           0017 C-MC-DRNG 0.000 FT \$150,0000           MAJOR COST DRIVERS, DRAINAGE           OUTO C-MC-DRNG 0.000 FT \$150,00000           MAJOR COST DRIVERS, DRAINAGE           OUTO C-MC-DRNG 0.000 FT \$150,0000           MAJOR COST DRIVERS, DRAINAGE           OUTO C-MC-DRNG 0.000 FT \$150,00000           MAJOR COST DRIVERS, DRAINAGE           OUTO C-MC-DRNG 0.000 FT \$150,00000           MAJOR COST DRIVERS, DRAINAGE           OUTO C-MC-DRNG 0.000 \$42,800,0000           MAJOR COST DRIVERS, DRAINAGE           Total for Group 0034: \$357,072,0000           MAJOR COST DRIVERS, DRAINAGE           OUTO DRIVERS, DRAINAGE           Total for Group 0034:\$399,872.00           Group 0040: Mainline Lanes           OUZO D-MC-PVMT         S6,206,000 \$Y		34,656.000	FT	\$6.00000	\$207,936.00
0015         C-MC-DRNG         446.000         FT         \$375.00000         \$167.250.00           Total for Group 0031:\$167,250.00           Group 0032: Culverts, Type A: 5' - 10'           0016         C-MC-DRNG         0.000         FT         \$825.00000         \$0.00           MAJOR COST DRIVERS, DRAINAGE           0016         C-MC-DRNG         0.000         FT         \$825.0000         \$0.00           Group 0033: Culverts, Type A: 10' - 20'         0017         C-MC-DRNG         \$0.000         FT         \$1.500.00000         \$0.00           O017         C-MC-DRNG         0.000         FT         \$1.500.00000         \$0.00         Total for Group 0032:\$0.00           Group 0034: Closed Storm System         0.000         FT         \$1.500.00000         \$357,072.00           0018         C-MC-DRNG         1.000         LS         \$357,072.00000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.0000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$41,00000         \$2,304,446.00           Group 0040: Mainline Lanes         0020         D-MC-PVMT         \$6,206.000         \$Y         \$41,00000         \$2,304,446.00<				Total for Group 0030:\$20	7,936.00
MAJOR COST DRIVERS, DRAINAGE         Total for Group 0031:\$167,250.00           Group 0032: Culverts, Type A: 5' - 10'           0016         C-MC-DRNG         0.000         FT         \$825.00000         \$0.00           MAJOR COST DRIVERS, DRAINAGE         0.000         FT         \$825.00000         \$0.00           Group 0033: Culverts, Type A: 10' - 20'         Total for Group 0032:\$0.00         \$0.00           MAJOR COST DRIVERS, DRAINAGE         0.000         FT         \$1,500.00000         \$0.00           MAJOR COST DRIVERS, DRAINAGE         0.000         FT         \$1,500.00000         \$0.00           O017         C-MC-DRNG         0.000         FT         \$1,500.00000         \$0.00           Group 0034: Closed Storm System         0018         C-MC-DRNG         1.000         LS         \$357,072.00000         \$357,072.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.00000         \$42,800.000           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.00000         \$42,800.000           Group 0040: Mainline Lanes         0020         D-MC-PVMT         56,206.000         SY         \$41.00000         \$2,304,446.00           Group 0041: Ramps         0.000         SY         \$41.00	Group 0031: Culverts - Type A: <	: 5'			
Total for Group 0031:\$167,250.00           Group 0032: Culverts, Type A: 5' - 10'         \$825.0000         \$0.00           0016         C-MC-DRNG         0.000         FT         \$825.0000         \$0.00           Group 0033: Culverts, Type A: 10' - 20'         Total for Group 0032:\$0.00         Group 0033: Culverts, Type A: 10' - 20'         Total for Group 0032:\$0.00           0017         C-MC-DRNG         0.000         FT         \$1,500.00000         \$0.00           MAJOR COST DRIVERS, DRAINAGE         0.000         FT         \$1,500.00000         \$0.00           Oral C-MC-DRNG         0.000         FT         \$1,500.00000         \$0.00           Group 0034: Closed Storm System         1.000         LS         \$357,072.00000         \$357,072.00           0018         C-MC-DRNG         1.000         LS         \$357,072.00000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$41,00000         \$2,304,446.00           Group 0040: MajOR COST DRIVERS, PAVEMENT         56,206.000         SY         \$41,00000		446.000	FT	\$375.00000	\$167,250.00
0016         C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         0.000         FT         \$825.0000         \$0.00           Group 0033: Culverts, Type A: 10' - 20'         Total for Group 0032:\$0.00           0017         C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         0.000         FT         \$1,500.00000         \$0.00           Major Cost DRIVERS, DRAINAGE         0.000         FT         \$1,500.00000         \$0.00           Group 0034: Closed Storm System 0018         C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$357,072.00000         \$357,072.00           0018         C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.0000         \$42,800.00           0019         C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.000         \$42,800.00           0019         C-MC-DRNG MAJOR COST DRIVERS, PANEMEN         1.000         LS         \$41,0000         \$2,304,446.00           Group 0040: Mainline Lanes         0020         D-MC-PVMT         0.000         SY         \$41.0000         \$0.00           Group 0041: Ramps         0021         D-MC-PVMT         0.000         SY         \$41.0000         \$0.00           Group 0042: Non - Mainline Lanes         0022         D-MC-PVMT         14,156.000         SY				Total for Group 0031:\$16	7,250.00
MAJOR COST DRIVERS, DRAINAGE         Total for Group 0032:\$0.00           Group 0033: Culverts, Type A: 10' - 20'         Stal for Group 0032:\$0.00           MAJOR COST DRIVERS, DRAINAGE         0.000         FT         \$1,500.00000         \$0.00           MAJOR COST DRIVERS, DRAINAGE         0.000         FT         \$1,500.00000         \$0.00           Group 0034: Closed Storm System         0018         C-MC-DRNG         \$357,072.00000         \$357,072.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$357,072.00000         \$357,072.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.00000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.00000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.00000         \$42,800.00           MAJOR COST DRIVERS, PAVEMENT         56,206.000         SY         \$41.00000         \$2,304,446.00           Group 0040: Mainline Lanes         0.000         SY         \$41.00000         \$2,304,446.00           Group 0041: Ramps         0.000         SY         \$41.00000         \$0.00           MAJOR COST DRIVERS, PAVEMENT         0.000         SY         \$41.00000         \$0.	Group 0032: Culverts, Type A: 5'	- 10'			
Total for Group 0032:\$0.00           Group 0033: Culverts, Type A: 10' - 20'           0017 c-Mc-DRNG         \$0.000 FT         \$1,500.00000         \$0.00           Major Cost DRIVERS, DRAINAGE         \$0.000 FT         \$1,500.00000         \$0.00           Group 0034: Closed Storm System           0018 C-MC-DRNG         \$1.000 LS         \$357,072.00000         \$357,072.00           Major Cost DRIVERS, DRAINAGE         \$1.000 LS         \$357,072.00000         \$357,072.00           O019 C-MC-DRNG         \$357,072.00000         \$357,072.00           Major Cost DRIVERS, DRAINAGE         \$1.000 LS         \$42,800.0000           Major Cost DRIVERS, DRAINAGE         Total for Group 0034:\$399,872.00           Group 0040: Mainline Lanes           0020 D-MC-PVMT         \$56,206.000 SY         \$41.00000         \$2,304,446.00           Group 0041: Ramps           0021 D-MC-PVMT         \$0.000 SY         \$41.00000         \$2,304,446.00           Group 0041: Ramps         \$2		0.000	FT	\$825.00000	\$0.00
0017         C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         0.000         FT         \$1,500.0000         \$0.00           Total for Group 0033:\$0.00           Group 0034: Closed Storm System           0018         C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$357,072.00000         \$357,072.00           0019         C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.00000         \$42,800.00           0019         C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.00000         \$42,800.00           Other Cost DRIVERS, DRAINAGE           0020         D-MC-PVMT         56,206.000         SY         \$41.00000         \$2,304,446.00           Group 0040: Mainline Lanes           0020         D-MC-PVMT         0.000         SY         \$41.00000         \$2,304,446.00           Group 0041: Ramps           0021         D-MC-PVMT         0.000         SY         \$41.00000         \$0.00           Total for Group 0041: \$0.00           Group 0042: Non - Mainline Lanes           0022         D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT         14,156.000         SY         \$41.00000         \$580,396.00				Total for Group 003	32:\$0.00
MAJOR COST DRIVERS, DRAINAGE         Total for Group 0033:\$0.00           Group 0034: Closed Storm System         018 C-MC-DRNG         1.000 LS         \$357,072.00000         \$357,072.00           0019 C-MC-DRNG         1.000 LS         \$357,072.00000         \$42,800.000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000 LS         \$42,800.00000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000 LS         \$42,800.00000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         56,206.000 SY         Total for Group 0034:\$399,872.00         Group 0040: Mainline Lanes           0020 D-MC-PVMT         56,206.000 SY         \$41.00000         \$2,304,446.00           Group 0041: Ramps         56,206.000 SY         \$41.00000         \$2,004           0021 D-MC-PVMT         0.000 SY         \$41.00000         \$0.00           MAJOR COST DRIVERS, PAVEMENT         0.000 SY         \$41.00000         \$0.00           Group 0041: Ramps         0.000 SY         \$41.00000         \$0.00           Group 0042: Non - Mainline Lanes         0.000 SY         \$41.00000         \$0.00           0222 D-MC-PVMT         14,156.000 SY         \$41.00000         \$580,396.00	Group 0033: Culverts, Type A: 10	)' - 20'			
Total for Group 0033:\$0.00           Group 0034: Closed Storm System           0018         C-MC-DRNG         1.000         LS         \$357,072.00000         \$357,072.00           0019         C-MC-DRNG         1.000         LS         \$357,072.00000         \$42,800.00           0019         C-MC-DRNG         1.000         LS         \$42,800.00000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.00000         \$42,800.00           MAJOR COST DRIVERS, DRAINAGE         1.000         LS         \$42,800.00000         \$42,800.00           Group 0040: Mainline Lanes         0020         D-MC-PVMT         56,206.000         SY         \$41.00000         \$2,304,446.00           Group 0041: Ramps         0.000         SY         \$41.00000         \$2,304,446.00           Group 0041: Ramps         0.000         SY         \$41.00000         \$0.00           MAJOR COST DRIVERS, PAVEMENT         0.000         SY         \$41.00000         \$0.00           Group 0041: Ramps         0.000         SY         \$41.00000         \$0.00           O21         D-MC-PVMT         0.000         SY         \$41.00000         \$0.00           MAJOR COST DRIVERS, PAVEMENT		0.000	FT	\$1,500.00000	\$0.00
0018       C-MC-DRNG       1.000       LS       \$357,072.00000       \$357,072.00         MAJOR COST DRIVERS, DRAINAGE       1.000       LS       \$42,800.00000       \$42,800.00         MAJOR COST DRIVERS, DRAINAGE       1.000       LS       \$42,800.00000       \$42,800.00         MAJOR COST DRIVERS, DRAINAGE       Total for Group 0034:\$399,872.00       S42,800.00       \$42,800.00         Group 0040: Mainline Lanes       56,206.000       SY       \$41.00000       \$2,304,446.00         MAJOR COST DRIVERS, PAVEMENT       56,206.000       SY       \$41.00000       \$2,304,446.00         Group 0041: Ramps       56,206.000       SY       \$41.00000       \$2,304,446.00         MAJOR COST DRIVERS, PAVEMENT       0.000       SY       \$41.00000       \$2,304,446.00         Group 0041: Ramps       0.000       SY       \$41.00000       \$0.00         MAJOR COST DRIVERS, PAVEMENT       0.000       SY       \$41.00000       \$0.00         Group 0042: Non - Mainline Lanes       0.000       SY       \$41.00000       \$0.00         022       D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT       \$41,156.000       SY       \$41.00000       \$580,396.00				Total for Group 00	33:\$0.00
MAJOR COST DRIVERS, DRAINAGE       1.000 LS       \$42,800.00000       \$42,800.00         MAJOR COST DRIVERS, DRAINAGE       1.000 LS       \$42,800.00000       \$42,800.00         MAJOR COST DRIVERS, DRAINAGE       Total for Group 0034:\$399,872.00       Total for Group 0034:\$399,872.00         Group 0040: Mainline Lanes       56,206.000 SY       \$41.00000       \$2,304,446.00         MAJOR COST DRIVERS, PAVEMENT       56,206.000 SY       \$41.00000       \$2,304,446.00         Group 0041: Ramps       0.000 SY       \$41.00000       \$0.00         0021 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT       0.000 SY       \$41.00000       \$0.00         Group 0041: Ramps       0.000 SY       \$41.00000       \$0.00         O021 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT       14,156.000 SY       \$41.00000       \$0.00         Group 0042: Non - Mainline Lanes       14,156.000 SY       \$41.00000       \$580,396.00         0022 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT       14,156.000 SY       \$41.00000       \$580,396.00	Group 0034: Closed Storm Syste	em			
MAJOR COST DRIVERS, DRAINAGE Side Roads         Total for Group 0034:\$399,872.00           Group 0040: Mainline Lanes         56,206.000         SY         \$41.00000         \$2,304,446.00           0020         D-MC-PVMT         56,206.000         SY         \$41.00000         \$2,304,446.00           MAJOR COST DRIVERS, PAVEMENT         56,206.000         SY         \$41.00000         \$2,304,446.00           Group 0041: Ramps         0021         D-MC-PVMT         0.000         SY         \$41.00000         \$0.00           Group 0041: Ramps         0.000         SY         \$41.00000         \$0.00         \$0.00           Group 0042: Non - Mainline Lanes         0.022         D-MC-PVMT         14,156.000         SY         \$41.00000         \$580,396.00           0022         D-MC-PVMT         14,156.000         SY         \$41.00000         \$580,396.00		1.000	LS	\$357,072.00000	\$357,072.00
Total for Group 0034:\$399,872.00           Group 0040: Mainline Lanes           0020 D-MC-PVMT         56,206.000 SY         \$41.00000         \$2,304,446.00           MAJOR COST DRIVERS, PAVEMENT         56,206.000 SY         \$41.00000         Total for Group 0040:\$2,304,446.00           Group 0041: Ramps         0.000 SY         \$41.00000         \$0.00           MAJOR COST DRIVERS, PAVEMENT         0.000 SY         \$41.00000         \$0.00           Group 0042: Non - Mainline Lanes         0022 D-MC-PVMT         14,156.000 SY         \$41.00000         \$580,396.00           MAJOR COST DRIVERS, PAVEMENT         14,156.000 SY         \$41.00000         \$580,396.00		1.000	LS	\$42,800.00000	\$42,800.00
Group 0040: Mainline Lanes       56,206.000       SY       \$41.0000       \$2,304,446.00         MAJOR COST DRIVERS, PAVEMENT       56,206.000       SY       \$41.0000       Total for Group 0040:\$2,304,446.00         Group 0041: Ramps         0021       D-MC-PVMT       0.000       SY       \$41.00000       \$0.00         MAJOR COST DRIVERS, PAVEMENT       0.000       SY       \$41.00000       \$0.00         Total for Group 0041: \$0.00         Group 0042: Non - Mainline Lanes         0022       D-MC-PVMT       14,156.000       \$Y       \$41.00000       \$580,396.00	Side Roads			Total for Group 0034:\$39	9,872.00
0020         D-MC-PVMT         56,206.000         \$Y         \$41.00000         \$2,304,446.00           Total for Group 0040:\$2,304,446.00           Group 0041: Ramps           0021         D-MC-PVMT         0.000         \$Y         \$41.00000         \$0.000           MAJOR COST DRIVERS, PAVEMENT         0.000         \$Y         \$41.00000         \$0.000           O021         D-MC-PVMT         0.000         \$Y         \$41.00000         \$0.000           MAJOR COST DRIVERS, PAVEMENT         0.000         \$Y         \$41.00000         \$0.000           Group 0042: Non - Mainline Lanes           0022         D-MC-PVMT         14,156.000         \$Y         \$41.00000         \$580,396.00           MAJOR COST DRIVERS, PAVEMENT         14,156.000         \$Y         \$41.00000         \$580,396.00	Group 0040: Mainling Lange				,
Total for Group 0040:\$2,304,446.00         Group 0041: Ramps         0021       D-MC-PVMT       0.000       SY       \$41.00000       \$0.00         MAJOR COST DRIVERS, PAVEMENT       0.000       SY       \$41.00000       \$0.00         Total for Group 0041:\$0.00         Group 0042: Non - Mainline Lanes         0022       D-MC-PVMT       14,156.000       SY       \$41.00000       \$580,396.00         MAJOR COST DRIVERS, PAVEMENT	0020 D-MC-PVMT	56,206.000	SY	\$41.00000	\$2,304,446.00
Group 0041: Ramps         0021 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT         0.000 SY \$41.0000         Source Structure Stru	MAJOR COST DRIVERS, PAVEMENT			Total for Group 0040:\$2,30	4,446.00
0021 D-MC-PVMT       0.000 SY       \$41.00000       \$0.00         MAJOR COST DRIVERS, PAVEMENT       0.000 SY       \$41.00000       \$0.00         Total for Group 0041:\$0.00         Group 0042: Non - Mainline Lanes         0022 D-MC-PVMT       14,156.000 SY       \$41.00000       \$580,396.00         MAJOR COST DRIVERS, PAVEMENT       14,156.000 SY       \$41.00000       \$580,396.00	Group 00/11: Ramps				
Group 0042: Non - Mainline Lanes         14,156.000 SY         \$41.00000         \$580,396.00           MAJOR COST DRIVERS, PAVEMENT         \$580,396.00         \$580,396.00         \$580,396.00	0021 D-MC-PVMT	0.000	SY	\$41.00000	\$0.00
Group 0042: Non - Mainline Lanes 0022 D-MC-PVMT 14,156.000 SY \$41.00000 \$580,396.00 MAJOR COST DRIVERS, PAVEMENT	MAJOR COST DRIVERS, PAVEMENT			Total for Group 004	41:\$0.00
0022 D-MC-PVMT 14,156.000 SY \$41.00000 \$580,396.00 MAJOR COST DRIVERS, PAVEMENT	Group 0042: Non - Mainline Long	26			•
	0022 D-MC-PVMT		SY	\$41.00000	\$580,396.00
					,

4:03:48PM Wednesday, January 18, 2012

Estimate: EC2/3 - Alt M5%				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
Group 0050: Utilities				
0023 E-MC-WATR MAJOR COST DRIVERS, WATER LINE	1.000	LS	\$8,000.00000	\$8,000.00
0024 F-MC-SANI MAJOR COST DRIVERS, SANITARY SE	0.000 WER	LS	\$0.00000	\$0.00
0025 N-OC-DEMO MAJOR COST DRIVERS, BUILDING DE Electric Transmission Tower Relocation	1.000	EACH	\$1,000,000.00000	\$1,000,000.00
			Total for Group 0050:\$1,00	8,000.00
Group 0060: Lighting - Continuou	is Roadw	/ay		
0026 G-MC-LTNG MAJOR COST DRIVERS, LIGHTING	10,639.000	FT	\$35.00000	\$372,365.00
MAJOR COST DRIVERS, LIGHTING			Total for Group 0060:\$37	2,365.00
Group 0070: Signs				
0027 J-MC-TRAF	2.000	MILE	\$250,000.00000	\$500,000.00
MAJOR COST DRIVERS, TRAFFIC CON	NTROL		Total for Group 0070:\$50	0 000 00
				0,000100
Group 0071: Pavement Marking				
0028 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Edge Line	7.000 NTROL	MILE	\$500.00000	\$3,500.00
0029 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Lane Line	3.000 NTROL	MILE	\$300.00000	\$900.00
0030 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Center Line	0.500 NTROL	MILE	\$1,200.00000	\$600.00
0031 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC COI	750.000	FT	\$1.25000	\$937.50
Channelizing Line		FT	¢c 00000	¢700.00
0032 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Stop Line	120.000 NTROL	FT	\$6.00000	\$720.00
0033 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Transverse Line	0.000 NTROL	FT	\$2.00000	\$0.00
0034 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Dotted Line	0.000 NTROL	FT	\$2.00000	\$0.00
0035 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Lane Arrow	10.000 NTROL	EACH	\$80.00000	\$800.00
0036 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CON Word on Pavement	5.000 NTROL	EACH	\$100.00000	\$500.00
			Total for Group 0071:\$	7,957.50
Group 0072: Signals - Intersectio	ns			

0037 K-MC-SGNL 2.000 EACH \$200,000.00000 \$400,000.00

Estimate: EC2/3 - Alt M5%			ENTRAN
<u>Line # Item Number</u> Quantity <u>Description</u> <u>Supplemental Description</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
MAJOR COST DRIVERS, SIGNALS			
		Total for Group 00	)72:\$400,000.00
Group 0080: Retaining Walls			
0038 M-MC-WALL 0.000	SF	\$100.00000	\$0.00
MAJOR COST DRIVERS, RETAINING WALLS		Total for G	roup 0080:\$0.00
			τοαρ 0000.φ0.00
Group 0090: Building Demolition			
0039 N-MC-DEMO 6.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Residential	EACH	\$10,000.00000	\$60,000.00
0040 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Service Station Island & Tanks	EACH	\$50,000.00000	\$0.00
0041 N-MC-DEMO 8.000 MAJOR COST DRIVERS, BUILDING DEMOLITION <i>Commercial</i>	EACH	\$25,000.00000	\$200,000.00
0042 N-MC-DEMO 6.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds	EACH	\$750.00000	\$4,500.00
0043 N-MC-DEMO 6.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Garages	EACH	\$2,500.00000	\$15,000.00
		Total for Group 00	90:\$279,500.00
Group 0100: New Structures			
0044 R-MC-STRC 10,000.000	SE	\$150.00000	\$1,500,000.00
MAJOR COST DRIVERS, STRUCTURES New Structure: Over Dry Run Creek (highway)		·	
0045 R-MC-STRC 4,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Dry Run Creek (rail)	SF	\$300.00000	\$1,200,000.00
0046 R-MC-STRC 20,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Dry Run Creek (highway)	SF	\$150.00000	\$3,000,000.00
0047 R-MC-STRC 8,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Dry Run Creek (rail)	SF	\$300.00000	\$2,400,000.00
0048 R-MC-STRC 30,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad (highway)	SF	\$150.00000	\$4,500,000.00
0049 R-MC-STRC 12,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad (rail)	SF	\$300.00000	\$3,600,000.00
0050 R-MC-STRC 7,200.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Side Road Over Dry Run Creek	SF	\$150.00000	\$1,080,000.00
0051 R-MC-STRC 7,200.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Side Road Over Railroad	SF	\$150.00000	\$1,080,000.00
		Total for Group 0100	:\$18,360,000.00

4:03:48PM Wednesday, January 18, 2012

Estimate: EC2/3 - Alt M5%				ENTRAN
Line # Item Number	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
<u>Description</u> Supplemental Description				
Supplemental Description				
Group 0110: Rail Transit				
0052 U-MC-MISC	7,289.000		\$1,000.00000	\$7,289,000.00
MAJOR COST DRIVERS, MISCELLAN At Grade Ballasted Track (Light Rail)	EOUS COST	S		
0053 U-MC-MISC	600.000		\$1,085.00000	\$651,000.00
MAJOR COST DRIVERS, MISCELLAN Aerial Direct Fixation Track on Bridges		S		
0054 U-MC-MISC	1.000	EACH	\$250,000.00000	\$250,000.00
MAJOR COST DRIVERS, MISCELLAN Grade Crossing	EOUSCOST	5		
0055 U-MC-MIŠC	1.000	-	\$771,160.00000	\$771,160.00
MAJOR COST DRIVERS, MISCELLAN Transit Station	EOUSCOST	5		
			Total for Group 0110:\$8,9	61,160.00
Group 0120: Wetland Construct				
0056 T-MC-WTLD MAJOR COST DRIVERS, WETLAND C			\$60,000.00000	\$0.00
0057 T-OC-WTLD	1,261.000	FT	\$600.00000	\$756,600.00
OTHER COSTS, WETLAND CONSTRU Stream Restoration	JCTION			
			Total for Group 0120:\$7	56,600.00
			•	
Group 0130: Misc. Costs				
0058 U-MC-MISC	1.000		\$300,239.00000	\$300,239.00
MAJOR COST DRIVERS, MISCELLAN Performance Bond: 0.5% of total project				
0059 U-MC-MISC MAJOR COST DRIVERS, MISCELLAN	1.000	-	\$35,000.00000	\$35,000.00
Railroad Insurance Bond	2003 0031	3		
0060 U-MC-MISC MAJOR COST DRIVERS, MISCELLAN		MNTH	\$2,500.00000	\$45,000.00
Field Office Type C				
0061 U-MC-MISC MAJOR COST DRIVERS, MISCELLAN	1.000 FOUS COST		\$1,600,000.00000	\$1,600,000.00
Mobilization: from CMS Item 624 for tot				
0062 U-MC-MISC MAJOR COST DRIVERS, MISCELLAN	1.000 FOUS COST		\$300,239.00000	\$300,239.00
Construction Layout Stakes: 0.5% of to	tal project cos	t (\$60,04		
0063 U-MC-MISC MAJOR COST DRIVERS, MISCELLAN	1.000 FOUS COST		\$798,634.00000	\$798,634.00
Maintaining Traffic: 1.33% of total project				
			Total for Group 0130:\$3,0	79,112.00
Group 0140: Design Contingend	v Coste			
	•	10	¢15 770 424 00000	¢15 770 421 00
0064 V-MC-CNTG MAJOR COST DRIVERS, CONTINGEN	1.000 NCY COSTS	LS	\$15,770,431.00000	\$15,770,431.00
PDP Design Contingency (step 5): 25%	of total cons	truction c	. ,	70 404 00
			Total for Group 0140:\$15,7	70,431.00

### Estimate EC2/3 - Alt N5%

Estimated Cost:\$49,967,127.30

Contingency: 0.00%

#### Estimated Total: \$49,967,127.30

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative N - Light Rail Profile

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/30/11 Checked by Steven Shadix on 01/18/12

Group 0001: Excavation         35,268.000         CY         \$4.00000         \$141,072.00           MAJOR COST DRIVERS, ROADWAY         35,268.000         CY         \$4.00000         \$141,072.00           Total for Group 0001:\$141,072.00           Group 0002: Fill - Embankment           0002         A-MC-RDWY         213,991.000         CY         \$3.00000         \$641,973.00           MAJOR COST DRIVERS, ROADWAY         213,991.000         CY         \$3.00000         \$641,973.00           Group 0003: Fill - Granular           0003         A-MC-RDWY         91,852.000         CY         \$30.00000         \$2,755,560.00           MAJOR COST DRIVERS, ROADWAY         91,852.000         CY         \$30.00000         \$2,755,560.00           MAJOR COST DRIVERS, ROADWAY         91,852.000         SY         \$1.40000         \$128,592.80           MAJOR COST DRIVERS, ROADWAY         91,852.000         SY         \$1.40000         \$128,592.80           Total for Group 0003:\$2,884,152.80           Group 0010: Roadway Costs           0005         A-OC-RDWY         2,000.000         FT         \$12.00000         \$324,680.00         000           0006         A-OC-RDWY         81,170.000         SF
MAJOR COST DRIVERS, ROADWAY         Total for Group 0001:\$141,072.00           Group 0002: Fill - Embankment         213,991.000         CY         \$3.0000         \$641,973.00           MAJOR COST DRIVERS, ROADWAY         213,991.000         CY         \$3.0000         \$641,973.00           MAJOR COST DRIVERS, ROADWAY         213,991.000         CY         \$3.0000         \$641,973.00           Group 0003: Fill - Granular         0003         A-MC-RDWY         91,852.000         CY         \$30.00000         \$2,755,560.00           MAJOR COST DRIVERS, ROADWAY         91,852.000         CY         \$30.00000         \$2,755,560.00           MAJOR COST DRIVERS, ROADWAY         91,852.000         SY         \$1.40000         \$128,592.80           MAJOR COST DRIVERS, ROADWAY         91,852.000         SY         \$1.40000         \$128,592.80           MAJOR COST DRIVERS, ROADWAY         91,852.000         SY         \$1.40000         \$128,592.80           Group 0010: Roadway Costs         Total for Group 0003:\$2,884,152.80         Total for Group 0003:\$2,884,152.80         Good A-OC-RDWY         \$2,000.000         \$24,000.00         \$24,000.00         \$24,000.00         \$24,000.00         \$24,000.00         \$24,000.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00
Total for Group 0001:\$141,072.00           Group 0002: Fill - Embankment         213,991.000         CY         \$3.0000         \$641,973.00           MAJOR COST DRIVERS, ROADWAY         213,991.000         CY         \$3.00000         Total for Group 0002:\$641,973.00           Group 0003: Fill - Granular         0003         A-MC-RDWY         91,852.000         CY         \$30.00000         \$2,755,560.00           MAJOR COST DRIVERS, ROADWAY         91,852.000         CY         \$30.00000         \$2,755,560.00           MAJOR COST DRIVERS, ROADWAY         91,852.000         SY         \$1.40000         \$128,592.80           Group 0010: Roadway Costs         0005         A-OC-RDWY         2,000.000         FT         \$12,00000         \$24,000.00           OTHER COSTS, ROADWAY         00005         \$4.00000         \$324,680.00         \$324,680.00           OTHER COSTS, ROADWAY         10' Sidewaik/Bike         \$4.00000         \$324,680.00         \$324,680.00
Group 0002: Fill - Embankment         213,991.000         CY         \$3.0000         \$641,973.00           MAJOR COST DRIVERS, ROADWAY         213,991.000         CY         \$3.00000         Total for Group 0002:\$641,973.00           Group 0003: Fill - Granular         91,852.000         CY         \$30.00000         \$2,755,560.00           MAJOR COST DRIVERS, ROADWAY         91,852.000         CY         \$30.00000         \$2,755,560.00           MAJOR COST DRIVERS, ROADWAY         91,852.000         SY         \$1.40000         \$128,592.80           MAJOR COST DRIVERS, ROADWAY         91,852.000         SY         \$1.40000         \$128,592.80           MAJOR COST DRIVERS, ROADWAY         91,852.000         SY         \$1.40000         \$128,592.80           O004         A-MC-RDWY         91,852.000         SY         \$1.40000         \$128,592.80           MAJOR COST DRIVERS, ROADWAY         16,852.000         SY         \$1.40000         \$128,592.80           Group 0010: Roadway Costs         91,852.000         SY         \$1.40000         \$128,592.80           OODS         A-OC-RDWY         2,000.000         FT         \$12.00000         \$24,000.00           OTHER COSTS, ROADWAY         0005         A-OC-RDWY         \$324,680.00         \$324,680.00
0002       A-MC-RDWY MAJOR COST DRIVERS, ROADWAY       213,991.000       CY       \$3.00000       \$641,973.00         Total for Group 0002:\$641,973.00         Group 0003: Fill - Granular         0003       A-MC-RDWY MAJOR COST DRIVERS, ROADWAY Item 203 Granular Material, Type E 91,852.000       91,852.000       CY       \$30.00000       \$2,755,560.00         0004       A-MC-RDWY MAJOR COST DRIVERS, ROADWAY Item 203 Granular Material, Type E 91,852.000       91,852.000       SY       \$1.40000       \$128,592.80         Total for Group 0003:\$2,884,152.80         Group 0010: Roadway Costs         Group 0010: Roadway Costs         0005       A-OC-RDWY Guardrail       2,000.000       FT       \$12.00000       \$24,000.00         0005       A-OC-RDWY Guardrail       81,170.000       \$4.0000       \$324,680.00         0006       A-OC-RDWY Guardrail       81,170.000       \$4.00000       \$324,680.00
MAJOR COST DRIVERS, ROADWAY       Total for Group 0002:\$641,973.00         Group 0003: Fill - Granular       91,852.000       CY       \$30.00000       \$2,755,560.00         MAJOR COST DRIVERS, ROADWAY Item 203 Granular Material, Type E       91,852.000       CY       \$30.00000       \$2,755,560.00         MAJOR COST DRIVERS, ROADWAY Item 203 Granular Material, Type E       91,852.000       SY       \$1.40000       \$128,592.80         MAJOR COST DRIVERS, ROADWAY Item 204 Geotextile, Type D       91,852.000       SY       \$1.40000       \$128,592.80         Total for Group 0003:\$2,884,152.80         Group 0010: Roadway Costs         0005       A-OC-RDWY       2,000.000       FT       \$12.00000       \$24,000.00         OTHER COSTS, ROADWAY       81,170.000       \$4.00000       \$324,680.00       \$324,680.00         OTHER COSTS, ROADWAY       81,170.000       \$4.00000       \$324,680.00       \$324,680.00
Group 0003: Fill - Granular         0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY Item 203 Granular Material, Type E 0004 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY Item 204 Geotextile, Type D       91,852.000       SY       \$1.40000       \$128,592.80         Total for Group 0003:\$2,884,152.80         Group 0010: Roadway Costs         0005 A-OC-RDWY Guardrail       2,000.000       FT       \$12.0000       \$24,000.00         0006 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike       81,170.000       SF       \$4.00000       \$324,680.00
0003       A-MC-RDWY       91,852.000       \$30.0000       \$2,755,560.00         MAJOR COST DRIVERS, ROADWAY       91,852.000       SY       \$1.40000       \$128,592.80         0004       A-MC-RDWY       91,852.000       SY       \$1.40000       \$128,592.80         MAJOR COST DRIVERS, ROADWAY       91,852.000       SY       \$1.40000       \$128,592.80         MAJOR COST DRIVERS, ROADWAY       91,852.000       SY       \$1.40000       \$128,592.80         MAJOR COST DRIVERS, ROADWAY       16000       SY       \$1.40000       \$128,592.80         Total for Group 0003:\$2,884,152.80         Group 0010: Roadway Costs         0005       A-OC-RDWY       2,000.000       FT       \$12.00000       \$24,000.00         OTHER COSTS, ROADWAY       81,170.000       SF       \$4.00000       \$324,680.00         OTHER COSTS, ROADWAY       81,170.000       SF       \$4.00000       \$324,680.00         OTHER COSTS, ROADWAY       10' Sidewalk/Bike       \$324,680.00       \$324,680.00       \$324,680.00
0003       A-MC-RDWY       91,852.000       \$30.0000       \$2,755,560.00         MAJOR COST DRIVERS, ROADWAY       91,852.000       SY       \$1.40000       \$128,592.80         0004       A-MC-RDWY       91,852.000       SY       \$1.40000       \$128,592.80         MAJOR COST DRIVERS, ROADWAY       91,852.000       SY       \$1.40000       \$128,592.80         MAJOR COST DRIVERS, ROADWAY       91,852.000       SY       \$1.40000       \$128,592.80         MAJOR COST DRIVERS, ROADWAY       16000       SY       \$1.40000       \$128,592.80         Total for Group 0003:\$2,884,152.80         Group 0010: Roadway Costs         0005       A-OC-RDWY       2,000.000       FT       \$12.00000       \$24,000.00         OTHER COSTS, ROADWAY       81,170.000       SF       \$4.00000       \$324,680.00         OTHER COSTS, ROADWAY       81,170.000       SF       \$4.00000       \$324,680.00         OTHER COSTS, ROADWAY       10' Sidewalk/Bike       \$324,680.00       \$324,680.00       \$324,680.00
MAJOR COST DRIVERS, ROADWAY Item 203 Granular Material, Type E91,852.000\$1.40000\$128,592.800004A-MC-RDWY MAJOR COST DRIVERS, ROADWAY Item 204 Geotextile, Type D91,852.000\$Y\$1.40000\$128,592.80Total for Group 0003:\$2,884,152.80Group 0010: Roadway Costs0005A-OC-RDWY Guardrail2,000.000FT\$12.00000\$24,000.000THER COSTS, ROADWAY GUARDRAW81,170.000\$F\$4.00000\$324,680.000THER COSTS, ROADWAY 10' Sidewalk/Bike81,170.000\$F\$4.00000\$324,680.00
0004       A-MC-RDWY       91,852.000       \$Y       \$1.40000       \$128,592.80         MAJOR COST DRIVERS, ROADWAY       1000       \$128,592.80       \$128,592.80         MAJOR COST DRIVERS, ROADWAY       10' Sidewalk/Bike       \$1,170.000       \$Y       \$1.40000       \$128,592.80         MAJOR COST DRIVERS, ROADWAY       10' Sidewalk/Bike       \$1,170.000       \$Y       \$1,140000       \$128,592.80         O005       A-OC-RDWY       2,000.000       FT       \$12,00000       \$24,000.00         OTHER COSTS, ROADWAY       2,000.000       FT       \$12,00000       \$24,000.00         OTHER COSTS, ROADWAY       81,170.000       \$F       \$4.00000       \$324,680.00
Item 204 Geotextile, Type D Total for Group 0003:\$2,884,152.80 Group 0010: Roadway Costs 0005 A-OC-RDWY 2,000.000 FT \$12.00000 \$24,000.00 OTHER COSTS, ROADWAY <i>Guardrail</i> 0006 A-OC-RDWY 81,170.000 SF \$4.00000 \$324,680.00 OTHER COSTS, ROADWAY 10' Sidewalk/Bike
Group 0010: Roadway Costs         0005       A-OC-RDWY       2,000.000       FT       \$12.00000         OTHER COSTS, ROADWAY       2000.000       FT       \$12.00000       \$24,000.000         0006       A-OC-RDWY       81,170.000       SF       \$4.00000       \$324,680.000         0THER COSTS, ROADWAY       81,170.000       SF       \$4.00000       \$324,680.000         0THER COSTS, ROADWAY       10' Sidewalk/Bike       SF       \$4.00000       \$324,680.000
0005         A-OC-RDWY         2,000.000         FT         \$12.00000         \$24,000.00         \$324,680.00
0005         A-OC-RDWY         2,000.000         FT         \$12.00000         \$24,000.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,680.00         \$324,68
OTHER COSTS, ROADWAY <i>Guardrail</i> 0006 A-OC-RDWY 81,170.000 SF \$4.00000 OTHER COSTS, ROADWAY 10' Sidewalk/Bike
0006 A-OC-RDWY 81,170.000 SF \$4.00000 \$324,680.00 OTHER COSTS, ROADWAY <i>10' Sidewalk/Bike</i>
OTHER COSTS, ROADWAY Curb
0008 A-OC-RDWY 11,334.000 FT \$14.00000 \$158,676.00 OTHER COSTS, ROADWAY
Curb & Gutter           0009         A-OC-RDWY         26.000         ACRE \$1,100.00000         \$28,600.00
OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with dozer, ball & chain
0010 A-OC-RDWY 0.000 ACRE \$1,650.00000 \$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; medium clearing with dozer & rake
0011 A-OC-RDWY 0.000 ACRE \$2,200.00000 \$0.00 OTHER COSTS, ROADWAY
Clearing & Grubbing; heavy clearing with dozer
Total for Group 0010:\$671,964.00
Group 0020: Seeding & Mulching / Sodding
0012 B-MC-ERCO 125,934.000 SY \$2.00000 \$251,868.00 MAJOR COST DRIVERS, EROSION CONTROL Seeding & Mulching
Total for Group 0020:\$251,868.00
Group 0021: Erosion Control - Item 832
0013         B-MC-ERCO         1.000         LS         \$24,000.00000         \$24,000.00
4:06:50PM Wednesday, January 18, 2012 Page 2 of 7

Estimate: EC2/3 - Alt N5%				ENTRAN
Line # Item Number Description	<u>Quantity</u>	<u>Units</u>	Unit Price	<b>Extension</b>
Supplemental Description				
MAJOR COST DRIVERS, EROSION C Conceptual Est: Earthwork Cost \$400,0		00		
	1,000,00		Total for Group 0021:	\$24,000.00
Group 0030: Underdrains				
0014 C-MC-DRNG	27,568.000	FT	\$6.00000	\$165,408.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group 0030:\$	165,408.00
Group 0031: Culverts - Type A:	< 5'			
0015 C-MC-DRNG	0.000	FT	\$375.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group (	0031:\$0.00
Group 0032: Culverts, Type A: 5	S' - 10'			
0016 C-MC-DRNG	0.000	FT	\$825.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group (	0032:\$0.00
Crown 0022; Culturate Turne A: 1	0' 00'			
Group 0033: Culverts, Type A: 1 0017 C-MC-DRNG	0 - 20	FT	\$1,500.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE			Total for Group (	
				000.00
Group 0034: Closed Storm Syst	em 1.000	15	\$272,016.00000	\$272,016.00
MAJOR COST DRIVERS, DRAINAGE	1.000		\$42,800.00000	\$42,800.00
MAJOR COST DRIVERS, DRAINAGE Side Roads	1.000	20	ψ <del>-</del>	ψ+2,000.00
			Total for Group 0034:\$3	314,816.00
Group 0040: Mainline Lanes				
0020 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	42,818.000	SY	\$41.00000	\$1,755,538.00
WAJOR COST DRIVERS, PAVEIMENT			Total for Group 0040:\$1,7	755,538.00
Group 0041: Ramps				
0021 D-MC-PVMT	0.000	SY	\$41.00000	\$0.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group (	0041:\$0.00
Group 0042: Non - Mainline Lan	es			
0022 D-MC-PVMT	14,156.000	SY	\$41.00000	\$580,396.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 0042:\$	580,396.00
				, <u> </u>
4.00.5001				

Estimate: EC2/3 - Alt N5%				ENTRAN
Line # Item Number	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
Description Supplemental Description				
Group 0050: Utilities				
0023 E-MC-WATR MAJOR COST DRIVERS, WATER LINE	1.000	LS	\$8,000.00000	\$8,000.00
0024 F-MC-SANI	0.000	LS	\$0.00000	\$0.00
MAJOR COST DRIVERS, SANITARY SE 0025 N-OC-DEMO MAJOR COST DRIVERS, BUILDING DE Electric Transmission Tower Relocation	2.000	EACH	\$1,000,000.00000	\$2,000,000.00
			Total for Group 0050:\$2,00	8,000.00
Group 0060: Lighting - Continuou	is Roadw	/2//		
0026 G-MC-LTNG	8,717.000	•	\$35.00000	\$305,095.00
MAJOR COST DRIVERS, LIGHTING	·		Total for Group 0060:\$30	
				3,093.00
Group 0070: Signs				
0027 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CO	1.630 NTROL	MILE	\$250,000.00000	\$407,500.00
			Total for Group 0070:\$40	7,500.00
Group 0071: Pavement Marking				
0028 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CO	5.520 NTROL	MILE	\$500.00000	\$2,760.00
Edge Line 0029 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CO	2.260 NTROL	MILE	\$300.00000	\$678.00
Lane Line 0030 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC COL	0.500 NTROL	MILE	\$1,200.00000	\$600.00
Center Line 0031 J-MC-TRAF	750.000	FT	\$1.25000	\$937.50
MAJOR COST DRIVERS, TRAFFIC CO Channelizing Line				
0032 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC COI Stop Line	120.000 NTROL	FT	\$6.00000	\$720.00
0033 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CO Transverse Line	0.000 NTROL	FT	\$2.00000	\$0.00
0034 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CO	0.000 NTROL	FT	\$2.00000	\$0.00
Dotted Line 0035 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CO Lane Arrow	10.000 NTROL	EACH	\$80.00000	\$800.00
0036 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CO Word on Pavement	5.000 NTROL	EACH	\$100.00000	\$500.00
			Total for Group 0071:\$	6,995.50
Group 0072: Signals - Intersectio	ns			
	5113			

 0037
 K-MC-SGNL
 2.000
 EACH
 \$200,000.00000
 \$400,000.00

Estimate: EC2/3 - Alt N5% <u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
MAJOR COST DRIVERS, SIGNALS			
		Total for	Group 0072:\$400,000.00
Group 0080: Retaining Walls			
0038 M-MC-WALL 0.000	SF	\$100.00000	\$0.00
MAJOR COST DRIVERS, RETAINING WALLS		Та	tal far Craup 0080.00
		IC.	otal for Group 0080:\$0.00
Group 0090: Building Demolition			
0039 N-MC-DEMO 19.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Residential		\$10,000.00000	\$190,000.00
0040 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Service Station Island & Tanks		\$50,000.00000	\$0.00
0041 N-MC-DEMO 9.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Commercial		\$25,000.00000	\$225,000.00
0042 N-MC-DEMO 12.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds		\$750.00000	\$9,000.00
0043 N-MC-DEMO 12.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Garages		\$2,500.00000	\$30,000.00
		Total for	Group 0090:\$454,000.00
Group 0100: New Structures			
0044 R-MC-STRC 10,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Dry Run Creek (highway)	SF	\$150.00000	\$1,500,000.00
0045 R-MC-STRC 4,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Dry Run Creek (rail)	SF	\$300.00000	\$1,200,000.00
0046 R-MC-STRC 20,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Dry Run Creek (highway)	SF	\$150.00000	\$3,000,000.00
0047 R-MC-STRC 8,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Dry Run Creek (rail)	SF	\$300.00000	\$2,400,000.00
0048 R-MC-STRC 30,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad (highway)	SF	\$150.00000	\$4,500,000.00
0049 R-MC-STRC 12,000.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Over Railroad (rail)	SF	\$300.00000	\$3,600,000.00
0050 R-MC-STRC 7,200.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Side Road Over Dry Run Creek	SF	\$150.00000	\$1,080,000.00
0051 R-MC-STRC 7,200.000 MAJOR COST DRIVERS, STRUCTURES New Structure: Side Road Over Railroad	SF	\$150.00000	\$1,080,000.00
		Total for Gro	oup 0100:\$18,360,000.00

4:06:50PM Wednesday, January 18, 2012

Estimate: EC2/3 - Alt N5%				ENTRAN
Line # Item Number	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
<u>Description</u> Supplemental Description				
Group 0110: Rail Transit				
0052 U-MC-MISC	5,367.000	FT	\$1,000.00000	\$5,367,000.00
MAJOR COST DRIVERS, MISCELLA At Grade Ballasted Track (Light Rail)			\$1,000.00000	\$5,507,000.00
0053 U-MC-MISC MAJOR COST DRIVERS, MISCELLA Aerial Direct Fixation Track on Bridge			\$1,085.00000	\$651,000.00
0054 U-MC-MISC MAJOR COST DRIVERS, MISCELLA	1.000	EACH S	\$250,000.00000	\$250,000.00
Grade Crossing 0055 U-MC-MISC MAJOR COST DRIVERS, MISCELLA	1.000 NEOUS COST	-	\$771,160.00000	\$771,160.00
Transit Station		-	T	
			Total for Group 0110:\$7,0	039,160.00
Group 0120: Wetland Construct	ction			
0056 T-MC-WTLD MAJOR COST DRIVERS, WETLAND	0.000	ACRE ION	\$60,000.00000	\$0.00
0057 T-OC-WTLD OTHER COSTS, WETLAND CONSTI	863.000	FT	\$600.00000	\$517,800.00
Stream Restoration			Total for Group 0120:\$8	517.800.00
Group 0130: Misc. Costs				
0058 U-MC-MISC MAJOR COST DRIVERS, MISCELLA Performance Bond: 0.5% of total proje		S	\$184,874.00000	\$184,874.00
0059 U-MC-MISC MAJOR COST DRIVERS, MISCELLA	1.000	LS	\$35,000.00000	\$35,000.00
Railroad Insurance Bond 0060 U-MC-MISC	18 000	MNTH	\$2,500.00000	\$45,000.00
MAJOR COST DRIVERS, MISCELLA Field Office Type C			ψ2,000.00000	ψ <del>1</del> 3,000.00
0061 U-MC-MISC MAJOR COST DRIVERS, MISCELLA		S	\$800,000.00000	\$800,000.00
Mobilization: from CMS Item 624 for to 0062 U-MC-MISC MAJOR COST DRIVERS, MISCELLA	1.000	LS	\$184,874.00000	\$184,874.00
Construction Layout Stakes: 0.5% of a 0063 U-MC-MISC	total project cos 1.000		74,739) \$798,655.00000	\$798,655.00
MAJOR COST DRIVERS, MISCELLA Maintaining Traffic: 2.16% of total proj	NEOUS COST	S	φ/ 30,000.00000	φ790,000.00
			Total for Group 0130:\$2,0	048,403.00
Group 0140: Design Continger	nov Coste			
0064 V-MC-CNTG	1.000	LS	\$1,244,450.00000	\$1,244,450.00
MAJOR COST DRIVERS, CONTING	ENCY COSTS		00' @ 20' depth = 49,778CY * (Excavation \$1	
+ Embankment \$10/CY) 0065 V-MC-CNTG	1.000	LS	\$9,744,536.00000	\$9,744,536.00
MAJOR COST DRIVERS, CONTINGI PDP Design Contingency (step 5): 25		truction c	cost (\$38,978,142)	

<u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>

Total for Group 0140:\$10,988,986.00

### Estimate EC2/3 - Alt O

Estimated Cost:\$51,622,131.10

Contingency: 0.00%

#### Estimated Total: \$51,622,131.10

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative O

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/29/11 Checked by Steven Shadix on 01/18/12

Estimate: EC2/3 - Alt O <u>Line #</u> <u>Item Number</u> <u>Description</u> Supplemental Description	<u>Quantity</u>	<u>Units</u>	Unit Price	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY	1,538.000	CY	\$4.00000	\$6,152.00
MAJOR COST DRIVERS, ROADWAY			Total for Group 0001:	6.152.00
Group 0002: Fill - Embankment				•• ••• •••
0002 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	827,844.000	CY	\$3.00000	\$2,483,532.00
			Total for Group 0002:\$2,48	33,532.00
Group 0003: Fill - Granular				
•	300,445.000	CY	\$30.00000	\$9,013,350.00
MAJOR COST DRIVERS, ROADWAY Item 203 Granular Material, Type E	,	Ē		····
0004 A-MC-RDWY	39,289.000	SY	\$1.40000	\$55,004.60
MAJOR COST DRIVERS, ROADWAY Item 204 Geotextile, Type D				
			Total for Group 0003:\$9,06	8,354.60
Group 0010: Roadway Costs				
0005 A-OC-RDWY	2,500.000	FT	\$12.00000	\$30,000.00
OTHER COSTS, ROADWAY	2,000.000		\$12.00000	\$00,000.00
Guardrail 0006 A-OC-RDWY	86,260.000	SF	\$4.00000	\$345,040.00
OTHER COSTS, ROADWAY 10' Sidewalk/Bike				
0007 A-OC-RDWY OTHER COSTS, ROADWAY	12,352.000	FT	\$12.00000	\$148,224.00
Curb				
0008 A-OC-RDWY OTHER COSTS, ROADWAY	12,352.000	FT	\$14.00000	\$172,928.00
Curb & Gutter	29 400	ACRE	¢1 100 00000	\$21,240,00
OTHER COSTS, ROADWAY			\$1,100.00000	\$31,240.00
Clearing & Grubbing; light brush with d 0010 A-OC-RDWY		ain ACRE	\$1,650.00000	\$0.00
OTHER COSTS, ROADWAY			. ,	÷••••
Clearing & Grubbing; medium clearing 0011 A-OC-RDWY		ACRE	\$2,200.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; heavy clearing w	ith dozer			
			Total for Group 0010:\$72	27,432.00
One of the second secon				
Group 0020: Seeding & Mulchin	-	•		<b>•</b> • • • • • • • • • • • • • • • • • •
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION C	137,245.000 ONTROL	SY	\$2.00000	\$274,490.00
Seeding & Mulching			Total for Group 0020. \$27	74 400 00
			Total for Group 0020:\$27	4,430.00
Group 0021: Erosion Control - It	tem 832			
0013 B-MC-ERCO	1.000	LS	\$42,000.00000	\$42,000.00
4:10:05PM Wednesday January 18, 2012				Page 2 of 6

Estimate: EC2/3 - Alt O				ENTRAN
<u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
MAJOR COST DRIVERS, EROSION C Conceptual Est: Earthwork Cost \$2,000		000		
Conceptual Est. Lantiwork Cost \$2,000	,000 - 3,000,	000	Total for Group 0021:\$4	2,000.00
Group 0030: Underdrains				
0014 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	29,604.000	FT	\$6.00000	\$177,624.00
			Total for Group 0030:\$17	7,624.00
Group 0031: Culverts - Type A:	< 5'			
0015 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	568.000	FT	\$375.00000	\$213,000.00
			Total for Group 0031:\$21	3,000.00
Group 0032: Culverts, Type A: 5	5' - 10'			
0016 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	0.000	FT	\$825.00000	\$0.00
			Total for Group 00	32:\$0.00
Group 0033: Culverts, Type A: 1	0' - 20'			
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	0.000	FT	\$1,500.00000	\$0.00
			Total for Group 00	33:\$0.00
Group 0034: Closed Storm Syst	em			
0018 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	1.000	LS	\$296,448.00000	\$296,448.00
0019 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	1.000	LS	\$42,800.00000	\$42,800.00
Side Roads			Total for Group 0034:\$33	9,248.00
Group 0040: Mainline Lanes				,
0020 D-MC-PVMT	46,663.000	SY	\$41.00000	\$1,913,183.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 0040:\$1,91	3,183.00
Group 0041: Ramps				
0021 D-MC-PVMT	0.000	SY	\$41.00000	\$0.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 00	41:\$0.00
Group 0042: Non - Mainline Lan				·
0022 D-MC-PVMT	14,156.000	SY	\$41.00000	\$580,396.00
MAJOR COST DRIVERS, PAVEMENT			Total for Group 0042:\$58	
				,*

Estimate: EC2/3 - Alt O				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
Group 0050: Utilities				
0023 E-MC-WATR MAJOR COST DRIVERS, WATER LINE	1.000	LS	\$8,000.00000	\$8,000.00
0024 F-MC-SANI MAJOR COST DRIVERS, SANITARY S	0.000 EWER	LS	\$0.00000	\$0.00
0025 N-OC-DEMO MAJOR COST DRIVERS, BUILDING D Electric Transmission Tower Relocation	0.000	EACH	\$1,000,000.00000	\$0.00
			Total for Group 0050:\$8	,000.00
Group 0060: Lighting - Continuo	us Roadw	vay		
0026 G-MC-LTNG MAJOR COST DRIVERS, LIGHTING	9,175.000	FT	\$35.00000	\$321,125.00
MAJOR COST DRIVERS, LIGHTING			Total for Group 0060:\$321	,125.00
Group 0070: Signs				
0027 J-MC-TRAF	1.200	MILE	\$250,000.00000	\$300,000.00
MAJOR COST DRIVERS, TRAFFIC CC				
			Total for Group 0070:\$300	,000.00
Group 0071: Pavement Marking				
0028 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC <i>Edge Line</i>	5.800 NTROL	MILE	\$500.00000	\$2,900.00
0029 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC Lane Line	2.400 NTROL	MILE	\$300.00000	\$720.00
0030 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC Center Line	0.500 NTROL	MILE	\$1,200.00000	\$600.00
0031 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC Channelizing Line	750.000 NTROL	FT	\$1.25000	\$937.50
0032 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC Stop Line	120.000 NTROL	FT	\$6.00000	\$720.00
0033 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC Transverse Line	0.000 NTROL	FT	\$2.00000	\$0.00
0034 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC Dotted Line	0.000 NTROL	FT	\$2.00000	\$0.00
0035 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC Lane Arrow	10.000 NTROL	EACH	\$80.00000	\$800.00
0036 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC	5.000 NTROL	EACH	\$100.00000	\$500.00
Word on Pavement			Total for Group 0071:\$7	,177.50
Group 0072: Signals - Intersection	ons			

Group 0072: Signals - Intersections

	0037	K-MC-SGNL	2.000	EACH	\$200,000.00000	\$400,000.00
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Line # Item Number	Quantity	Units	Unit Price	Extension
Description	<u>quantity</u>	<u>oms</u>	<u>onici noc</u>	
Supplemental Description				
MAJOR COST DRIVERS, SIGNAL	S		Tatal	for Crown 007210 400 000 00
			Total	for Group 0072:\$400,000.00
Group 0080: Retaining Walls				
0038 M-MC-WALL	0.000	SF	\$100.00000	\$0.00
MAJOR COST DRIVERS, RETAIN	ING WALLS			Total for Group 0080:\$0.00
	_			
Group 0090: Building Demoli				
0039 N-MC-DEMO MAJOR COST DRIVERS, BUILDIN Residential	15.000 IG DEMOLITION	EACH	\$10,000.00000	\$150,000.00
0040 N-MC-DEMO MAJOR COST DRIVERS, BUILDIN Service Station Island & Tanks	0.000 IG DEMOLITION	EACH	\$50,000.00000	\$0.00
0041 N-MC-DEMO MAJOR COST DRIVERS, BUILDIN Commercial	11.000 IG DEMOLITION	EACH	\$25,000.00000	\$275,000.00
0042 N-MC-DEMO MAJOR COST DRIVERS, BUILDIN Sheds	9.000 IG DEMOLITION	EACH	\$750.00000	\$6,750.00
0043 N-MC-DEMO MAJOR COST DRIVERS, BUILDIN Garages	8.000 IG DEMOLITION	EACH	\$2,500.00000	\$20,000.00
			Total	for Group 0090:\$451,750.00
Croup 0100: Now Structures				
Group 0100: New Structures	25,000.000	SF	\$150.00000	\$3,750,000.00
MAJOR COST DRIVERS, STRUC New Structure: Over Railroad (high	TURES way)			
0045 R-MC-STRC MAJOR COST DRIVERS, STRUCT New Structure: Over Railroad (rail)	10,000.000 FURES	SF	\$300.00000	\$3,000,000.00
0046 R-MC-STRC MAJOR COST DRIVERS, STRUCT New Structure: Side Road Over Dr		SF	\$150.00000	\$1,080,000.00
0047 R-MC-STRC MAJOR COST DRIVERS, STRUCT New Structure: Side Road Over Ra	7,200.000 TURES	SF	\$150.00000	\$1,080,000.00
			Total fo	r Group 0100:\$8,910,000.00
Group 0110: Pail Transit				
Group 0110: Rail Transit	6,176.000	FT	\$875.00000	\$5,404,000.00
MAJOR COST DRIVERS, MISCEL At Grade Ballasted Track (DMU)	LANEOUS COST	S		
0049 U-MC-MISC MAJOR COST DRIVERS, MISCEL Aerial Direct Fixation Track on Brid			\$935.00000	\$233,750.00
0050 U-MC-MISC MAJOR COST DRIVERS, MISCEL Grade Crossing		EACH S	\$250,000.00000	\$250,000.00
0051 U-MC-MIŠC MAJOR COST DRIVERS, MISCEL	1.000 LANEOUS COST		\$771,160.00000	\$771,160.00
4:10:05PM Wednesday, January 18, 2012				Page 5 of 6

Wednesday, January 18, 2012

Estimate: EC2/3 - Alt O

ENTRAN

Quantity Units Unit Price **Extension** 

#### Line # Item Number **Description** Supplemental Description

Transit Station

Transit Station				
			Total for Group 0110:\$6,65	8,910.00
Group 0120: Wetland Construction				
0052 T-MC-WTLD MAJOR COST DRIVERS, WETLAND CONS		ACRE ON	\$60,000.00000	\$0.00
0053 T-OC-WTLD OTHER COSTS, WETLAND CONSTRUCTIC Stream Restoration	0.000		\$600.00000	\$0.00
			Total for Group 01	20:\$0.00
Group 0130: Misc. Costs				
0054 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEOUS Performance Bond: 0.5% of total project cost		S	\$164,637.00000	\$164,637.00
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEOUS Railroad Insurance Bond	1.000 5 COST	LS S	\$35,000.00000	\$35,000.00
MAJOR COST DRIVERS, MISCELLANEOUS Field Office Type C		MNTH S	\$2,500.00000	\$45,000.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEOUS Mobilization: from CMS Item 624 for total proj		S	\$800,000.00000	\$800,000.00
0058 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEOUS Construction Layout Stakes: 0.5% of total pro		S	\$164,637.00000 27.375)	\$164,637.00
0059 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEOUS Maintaining Traffic: 2.43% of total project cos	1.000 5 COST	ĽS S	\$800,136.00000	\$800,136.00
			Total for Group 0130:\$2,00	9,410.00
Group 0140: Design Contingency Co	osts			
0060 V-MC-CNTG MAJOR COST DRIVERS, CONTINGENCY C Constructible Risk Contingency: Newtown La \$15/CY + Embankment \$10/CY)		LS pact = 2,	\$8,007,400.00000 300' @ 20' depth = 320,296CY * (Excavation	\$8,007,400.00
0061 V-MC-CNTG MAJOR COST DRIVERS, CONTINGENCY C PDP Design Contingency (step 5): 25% of tot			\$8,722,947.00000 ost (\$34,891,785)	\$8,722,947.00
			Total for Group 0140:\$16,73	0,347.00

### Estimate EC2/3 - Alt P

Estimated Cost:\$30,250,368.50

Contingency: 0.00%

#### Estimated Total: \$30,250,368.50

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative P

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/29/11 Checked by Steven Shadix on 01/18/12

Estimate: EC2/3 - Alt P <u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>	Quantity	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY	7,055.000	CY	\$4.00000	\$28,220.00
MAJOR COST DRIVERS, ROADWAY			٦	Total for Group 0001:\$28,220.00
Group 0002: Fill - Embankment				
0002 A-MC-RDWY	396,394.000	CY	\$3.00000	\$1,189,182.00
MAJOR COST DRIVERS, ROADWAY			Tota	al for Group 0002:\$1,189,182.00
Group 0003: Fill - Granular				• • • •
0003 A-MC-RDWY	0.000	CY	\$30.00000	\$0.00
MAJOR COST DRIVERS, ROADWAY				Total for Group 0003:\$0.00
Group 0010: Roadway Costs	0.000		<b>A</b> 40.00000	<b>#</b> 2.22
0004 A-OC-RDWY OTHER COSTS, ROADWAY Guardrail	0.000	FT	\$12.00000	\$0.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	92,630.000	SF	\$4.00000	\$370,520.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY Curb	13,626.000	FT	\$12.00000	\$163,512.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY	13,626.000	FT	\$14.00000	\$190,764.00
Curb & Gutter 0008 A-OC-RDWY OTHER COSTS, ROADWAY			\$1,100.00000	\$34,100.00
Clearing & Grubbing; light brush with c 0009 A-OC-RDWY		ain ACRE	\$1,650.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; medium clearing	with dozer & ı	ake		
0010 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$2,200.00000	\$0.00
Clearing & Grubbing; heavy clearing w	vith dozer		То	stal for Croup 0010.9759 906 00
			IC	otal for Group 0010:\$758,896.00
Group 0020: Seeding & Mulchir	ng / Soddir	ng		
0011 B-MC-ERCO MAJOR COST DRIVERS, EROSION ( Seeding & Mulching	151,400.000 CONTROL	SY	\$2.00000	\$302,800.00
			Тс	otal for Group 0020:\$302,800.00
Group 0021: Erosion Control - I	tem 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION ( Conceptual Est: Earthwork Cost \$1,00	1.000 CONTROL		\$35,000.00000	) \$35,000.00
4·13·14PM				

Estimate: EC2/3 - Alt P			ENTRAN
Line # Item Number Quantit Description Supplemental Description	<u>y Units</u>	<u>Unit Price</u>	<u>Extension</u>
		Total for Group 00	21:\$35,000.00
Group 0030: Underdrains			
0013 C-MC-DRNG 32,152.00 MAJOR COST DRIVERS, DRAINAGE	0 FT	\$6.00000	\$192,912.00
		Total for Group 003	0:\$192,912.00
Group 0031: Culverts - Type A: < 5'			
	0 FT	\$375.00000	\$79,500.00
MAJOR COST DRIVERS, DRAINAGE		Total for Group 00	31:\$79,500.00
Group 0032: Culverts, Type A: 5' - 10'			
0015 C-MC-DRNG 0.00 MAJOR COST DRIVERS, DRAINAGE	0 FT	\$825.00000	\$0.00
		Total for Gro	up 0032:\$0.00
Group 0033: Culverts, Type A: 10' - 20'			
	0 FT	\$1,500.00000	\$0.00
MAJOR COST DRIVERS, DRAINAGE		Total for Gro	up 0033:\$0.00
Group 0034: Closed Storm System			
0017 C-MC-DRNG 1.00 MAJOR COST DRIVERS, DRAINAGE	0 LS	\$327,024.00000	\$327,024.00
0018 C-MC-DRNG 1.00 MAJOR COST DRIVERS, DRAINAGE	0 LS	\$42,800.00000	\$42,800.00
Side Roads		Total for Group 003	1.4360 824 00
			4.0000,024.00
Group 0040: Mainline Lanes 0019 D-MC-PVMT 51.476.00	0 SY	\$41.00000	¢2,110,516,00
0019 D-MC-PVMT 51,476.00 MAJOR COST DRIVERS, PAVEMENT	0 31		\$2,110,516.00
		Total for Group 0040:	\$2,110,516.00
Group 0041: Ramps			
0020 D-MC-PVMT 0.00 MAJOR COST DRIVERS, PAVEMENT	0 SY	\$41.00000	\$0.00
		Total for Gro	up 0041:\$0.00
Group 0042: Non - Mainline Lanes			
0021 D-MC-PVMT 14,156.00 MAJOR COST DRIVERS, PAVEMENT	10 SY	\$41.00000	\$580,396.00
		Total for Group 0042	2:\$580,396.00
Group 0050: Utilities			

Estimate: EC2/3 - Alt P				ENTRAN
<u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
0022 E-MC-WATR MAJOR COST DRIVERS, WATER	1.000 LINE	LS	\$8,000.00000	\$8,000.00
0023 F-MC-SANI MAJOR COST DRIVERS, SANITAI	0.000	LS	\$0.00000	\$0.00
0024 N-OC-DEMO MAJOR COST DRIVERS, BUILDIN Electric Transmission Tower Reloca	0.000 IG DEMOLITION	EACH	\$1,000,000.00000 Total for Group	\$0.00 \$0050:\$8,000.00
Group 0060: Lighting - Contir	nuous Roadv	vay		
0025 G-MC-LTNG MAJOR COST DRIVERS, LIGHTIN	9,563.000	FT	\$35.00000	\$334,705.00
MAJOR COST DRIVERS, LIGHTIN	10		Total for Group 00	60:\$334,705.00
Group 0070: Signs				
0026 J-MC-TRAF	1.800	MILE	\$250,000.00000	\$450,000.00
MAJOR COST DRIVERS, TRAFFI	C CONTROL		Total for Group 00	70:\$450,000.00
Group 0071: Pavement Mark	-		¢500.0000	¢2,400,00
0027 J-MC-TRAF MAJOR COST DRIVERS, TRAFFI Edge Line	6.200 C CONTROL	MILE	\$500.00000	\$3,100.00
0028 J-MC-TRAF MAJOR COST DRIVERS, TRAFFI	2.600 C CONTROL	MILE	\$300.00000	\$780.00
Lane Line 0029 J-MC-TRAF MAJOR COST DRIVERS, TRAFFI Center Line	0.500 C CONTROL	MILE	\$1,200.00000	\$600.00
0030 J-MC-TRAF MAJOR COST DRIVERS, TRAFFI	750.000 C CONTROL	FT	\$1.25000	\$937.50
Channelizing Line 0031 J-MC-TRAF	120.000	FT	\$6.00000	\$720.00
MAJOR COST DRIVERS, TRAFFI Stop Line	CONTROL			
0032 J-MC-TRAF MAJOR COST DRIVERS, TRAFFI Transverse Line	0.000 C CONTROL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, TRAFFI Dotted Line	0.000 C CONTROL	FT	\$2.00000	\$0.00
0034 J-MC-TRAF MAJOR COST DRIVERS, TRAFFI Lane Arrow	10.000 C CONTROL	EACH	\$80.00000	\$800.00
0035 J-MC-TRAF MAJOR COST DRIVERS, TRAFFI Word on Pavement	5.000 C CONTROL	EACH	\$100.00000	\$500.00
			Total for Group	0071:\$7,437.50
Group 0072: Signale - Intorec	octions			
Group 0072: Signals - Interse 0036 K-MC-SGNL MAJOR COST DRIVERS, SIGNAL	2.000	EACH	\$200,000.00000	\$400,000.00

Line # Item Number

# Total for Group 0072:\$400,000.00

#### Group 0080: Retaining Walls

Supplemental Description

0037 M-MC-WALL MAJOR COST DRIVERS, RETAINING WALI	0.000 _S	SF	\$100.00000	\$0.00
				Total for Group 0080:\$0.00
Group 0090: Building Demolition				
0038 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEMO <i>Residential</i>	9.000 LITION	EACH	\$10,000.00000	\$90,000.00
0039 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEMO Service Station Island & Tanks	0.000 LITION	EACH	\$50,000.00000	\$0.00
0040 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEMO Commercial	10.000 LITION	EACH	\$25,000.00000	\$250,000.00
0041 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEMO Sheds	9.000 LITION	EACH	\$750.00000	\$6,750.00
0042 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEMO Garages	8.000 LITION	EACH	\$2,500.00000	\$20,000.00
			Total f	or Group 0090:\$366,750.00

#### Group 0100: New Structures

0043 R-MC-STRC	7,200.000	SF	\$150.00000	\$1,080,000.00
MAJOR COST DRIVERS, STRU	CTURES			
New Structure: Side Road Over	Dry Run Creek			
0044 R-MC-STRC	7,200.000	SF	\$150.00000	\$1,080,000.00
MAJOR COST DRIVERS, STRU	CTURES			
New Structure: Side Road Over	Railroad			
			Total fo	or Group 0100:\$2,160,000.00

#### Group 0110: Rail Transit

0045 U-MC-MISC MAJOR COST DRIVERS, MISCEL At Grade Ballasted Track (DMU)	6,813.000 FT LANEOUS COSTS	\$875.00000	\$5,961,375.00
0046 U-MC-MISC MAJOR COST DRIVERS, MISCEL Aerial Direct Fixation Track on Brid		\$935.00000	\$0.00
0047 U-MC-MISC MAJOR COST DRIVERS, MISCEL Grade Crossing	1.000 EACH LANEOUS COSTS	\$250,000.00000	\$250,000.00
0048 U-MC-MISC MAJOR COST DRIVERS, MISCEL Transit Station	1.000 LS LANEOUS COSTS	\$771,160.00000	\$771,160.00

### Total for Group 0110:\$6,982,535.00

### Group 0120: Wetland Construction

0049 T-MC-WTLD	0.000	ACRE	\$60,000.00000	\$0.00
MAJOR COST DRIVER	S, WETLAND CONSTRUCT	ON		

Estimate: EC2/3 - Alt P				ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
0050 T-OC-WTLD OTHER COSTS, WETLAND CONSTRUC <sup>-</sup> Stream Restoration	0.000	FT	\$600.00000	\$0.00

Total for Group 0120:\$0.00

### Group 0130: Misc. Costs

0051 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Performance Bond: 0.5% of total project co		\$82,009.00000 4)	\$82,009.00
0052 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Railroad Insurance Bond	1.000 LS	\$25,000.00000	\$25,000.00
0053 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Field Office Type C	18.000 MNT US COSTS	ГН \$2,500.00000	\$45,000.00
0054 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Mobilization: from CMS Item 624 for total p		\$400,000.00000	\$400,000.00
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Construction Layout Stakes: 0.5% of total J		\$82,009.00000 6,401,674)	\$82,009.00
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Maintaining Traffic: 4.9% of total project co		\$803,683.00000 )	\$803,683.00
		Total for Croup (	1120.¢1 127 701 00

## Total for Group 0130:\$1,437,701.00

# Group 0140: Design Contingency Costs

0057 V-MC-CNTG	1.000	LS	\$8,007,400.00000	\$8,007,400.00		
MAJOR COST DRIVERS, CONTINGENO	CY COSTS					
	n Landfill Imp	act = 2,	300' @ 20' depth = 320,296CY * (Excavation			
\$15/CY + Embankment \$10/CY)						
0058 V-MC-CNTG	1.000	LS	\$4,448,594.00000	\$4,448,594.00		
MAJOR COST DRIVERS, CONTINGEN						
PDP Design Contingency (step 5): 25% c	of total constru	uction co	ost (\$17,794,375)			
Total for Group 0140:\$12,455,994.00						

## Estimate EC2/3 - Alt Q5%

Estimated Cost:\$73,047,453.00

Contingency: 0.00%

#### Estimated Total: \$73,047,453.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative Q - Light Rail Profile

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/30/11 Checked by Steven Shadix on 01/18/12

Estimate: EC2/3 - Alt Q5% <u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY 4 MAJOR COST DRIVERS, ROADWAY	,377,493.000	CY	\$4.00000	\$17,509,972.00
			Total for Group 0001:\$17	7,509,972.00
Group 0002: Fill - Embankment				
0002 A-MC-RDWY	608,223.000	CY	\$3.00000	\$1,824,669.00
MAJOR COST DRIVERS, ROADWAY			Total for Group 0002:\$1	,824,669.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY	0.000	LS	\$30.00000	\$0.00
MAJOR COST DRIVERS, ROADWAY			Total for Group	
				0000.00.00
Group 0010: Roadway Costs				• • • • • • • • •
0004 A-OC-RDWY OTHER COSTS, ROADWAY Guardrail	1,200.000	FT	\$12.00000	\$14,400.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY	21,000.000	SF	\$4.00000	\$84,000.00
10' Sidewalk/Bike	05 470 000		<b>4</b> 10,00000	<b>\$</b> 225.242.22
0006 A-OC-RDWY OTHER COSTS, ROADWAY <i>Curb</i>	25,470.000	FT	\$12.00000	\$305,640.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	25,470.000	FT	\$14.00000	\$356,580.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY	0.000	ACRE	\$1,100.00000	\$0.00
Clearing & Grubbing; light brush with c				
0009 A-OC-RDWY OTHER COSTS, ROADWAY Clearing & Grubbing; medium clearing		ACRE ake	\$1,650.00000	\$0.00
0010 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$2,200.00000	\$128,700.00
Clearing & Grubbing; heavy clearing w	vith dozer		<b>T</b> ( ) ( ) ( ) ( ) ( ) ( )	
			Total for Group 0010:	\$889,320.00
Group 0020: Seeding & Mulchir	ng / Soddir	ng		
0011 B-MC-ERCO MAJOR COST DRIVERS, EROSION ( Seeding & Mulching	283,000.000 CONTROL	SY	\$2.00000	\$566,000.00
Seeding & Walching			Total for Group 0020:	\$566,000.00
Croup 0021, Erasian Control	tom 922			
Group 0021: Erosion Control - I		10	\$200,000,0000	00 000 0009
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION ( Conceptual Est: Earthwork Cost over \$		LS	\$300,000.00000	\$300,000.00
4:15:49PM				

Estimate: EC2/3 - Alt Q5%					ENTRAN
Line # Item Number Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>		Extension
Supplemental Description					
				Total for Group 0021:\$300	0,000.00
Group 0030: Underdrains					
0013 C-MC-DRNG	62,740.000	FT	\$6.00000		\$376,440.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0030:\$376	5,440.00
Crown 0024: Culverte Turc A.				• •	
Group 0031: Culverts - Type A: <	Э 600.000	FT	\$375.0000	0	\$225,000.00
MAJOR COST DRIVERS, DRAINAGE	000.000		φ070.0000		•
				Total for Group 0031:\$22	5,000.00
Group 0032: Culverts, Type A: 5'	- 10'				
0015 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	568.000	FT	\$825.0000	0	\$468,600.00
				Total for Group 0032:\$468	3,600.00
Group 0033: Culverts, Type A: 10	)' - 20'				
0016 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	0.000	FT	\$1,500.000	000	\$0.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 003	33:\$0.00
Group 0034: Closed Storm Syste	m				
0017 C-MC-DRNG	1.000	LS	\$611,280.0	00000	\$611,280.00
MAJOR COST DRIVERS, DRAINAGE 0018 C-MC-DRNG	1.000	LS	\$80,000.00	0000	\$80,000.00
MAJOR COST DRIVERS, DRAINAGE Side Roads					
				Total for Group 0034:\$697	1,280.00
Group 0040: Mainline Lanes					
0019 D-MC-PVMT	96,220.000	SY	\$41.00000	i de la companya de l	\$3,945,020.00
MAJOR COST DRIVERS, PAVEMENT			T	otal for Group 0040:\$3,94	5,020.00
Group 0041: Ramps					
	13,333.000	SY	\$41.00000		\$546,653.00
MAJOR COST DRIVERS, PAVEMENT				Total for Group 0041:\$546	653.00
					,000.00
Group 0042: Non - Mainline Lane			<b>0</b> 44 00000		<b>4070 650 66</b>
0021 D-MC-PVMT 2 MAJOR COST DRIVERS, PAVEMENT	23,733.000	SY	\$41.00000		\$973,053.00
				Total for Group 0042:\$973	3,053.00
Group 0050: Utilities					

Estimate: EC2/3 - Alt Q5%	
Line # Item Number Quantity Units Unit Price Description Supplemental Description	<u>Extension</u>
0022 E-MC-WATR 1.000 LS \$12,000.00000 MAJOR COST DRIVERS, WATER LINE	\$12,000.00
0023 F-MC-SANI 1.000 LS \$4,000.00000 MAJOR COST DRIVERS, SANITARY SEWER	\$4,000.00
0024 N-OC-DEMO 0.000 EACH \$1,000,000.00000 MAJOR COST DRIVERS, BUILDING DEMOLITION Electric Transmission Tower Relocation	\$0.00
Total for Group 0050:\$16 Group 0060: Lighting - Continuous Roadway	,000.00
0025 G-MC-LTNG 19,735.000 FT \$35.0000	\$690,725.00
MAJOR COST DRIVERS, LIGHTING	
Total for Group 0060:\$690	,725.00
Group 0070: Signs	
0026 J-MC-TRAF 2.800 MILE \$250,000.00000 MAJOR COST DRIVERS, TRAFFIC CONTROL	\$700,000.00
Total for Group 0070:\$700	,000.00
Group 0071: Pavement Marking	
0027 J-MC-TRAF 12.040 MILE \$500.00000	¢6 020 00
MAJOR COST DRIVERS, TRAFFIC CONTROL Edge Line	\$6,020.00
0028 J-MC-TRAF 5.600 MILE \$300.00000 MAJOR COST DRIVERS, TRAFFIC CONTROL	\$1,680.00
Lane Line 0029 J-MC-TRAF 0.420 MILE \$1,200.00000 MAJOR COST DRIVERS, TRAFFIC CONTROL	\$504.00
Center Line 0030 J-MC-TRAF 1,200.000 FT \$1.25000 MAJOR COST DRIVERS, TRAFFIC CONTROL	\$1,500.00
Channelizing Line 0031 J-MC-TRAF 192.000 FT \$6.00000	\$1,152.00
MAJOR COST DRIVERS, TRAFFIC CONTROL Stop Line	••••••
0032 J-MC-TRAF 0.000 FT \$2.00000 MAJOR COST DRIVERS, TRAFFIC CONTROL Transverse Line	\$0.00
0033 J-MC-TRAF 0.000 FT \$2.00000 MAJOR COST DRIVERS, TRAFFIC CONTROL Dotted Line	\$0.00
0034 J-MC-TRAF 16.000 EACH \$80.00000 MAJOR COST DRIVERS, TRAFFIC CONTROL	\$1,280.00
Lane Arrow 0035 J-MC-TRAF 8.000 EACH \$100.00000 MAJOR COST DRIVERS, TRAFFIC CONTROL Word on Pavement	\$800.00
Total for Group 0071:\$12	,936.00
Croup 0072: Signala Interpretiens	
Group 0072: Signals - Intersections 0036 K-MC-SGNL 3.000 EACH \$200,000.00000 MAJOR COST DRIVERS, SIGNALS	\$600,000.00

# Total for Group 0072:\$600,000.00

Group 0080: Retaining	Walls
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Supplemental Description

0037 M-MC-WALL MAJOR COST DRIVERS, RETAINING WALL	0.000 .S	SF	\$100.00000	\$0.00
				Total for Group 0080:\$0.00
Group 0090: Building Demolition				
0038 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEMOI <i>Residential</i>		EACH	\$10,000.00000	\$130,000.00
0039 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEMOI Service Station Island & Tanks	0.000 LITION	EACH	\$50,000.00000	\$0.00
0040 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEMOI Commercial	9.000 LITION	EACH	\$25,000.00000	\$225,000.00
0041 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEMOI Sheds	11.000 LITION	EACH	\$750.00000	\$8,250.00
0042 N-MC-DEMO MAJOR COST DRIVERS, BUILDING DEMOI Garages	11.000 LITION	EACH	\$2,500.00000	\$27,500.00
2			Total f	or Group 0090:\$390,750.00

### Group 0100: New Structures

•				
0043 R-MC-STRC	15,000.000	SF	\$150.00000	\$2,250,000.00
MAJOR COST DRIVERS, STRUCTU				
New Structure: Over Dry Run Creek	(highway)			
0044 R-MC-STRC	6,000.000	SF	\$300.00000	\$1,800,000.00
MAJOR COST DRIVERS, STRUCTU	JRES			
New Structure: Over Dry Run Creek	(rail)			
0045 R-MC-STRC	15,600.000	SF	\$150.00000	\$2,340,000.00
MAJOR COST DRIVERS, STRUCTU				
New Structure: Side Road Over Dry	Run Creek & Ra	ilroad		
0046 R-MC-STRC	12,000.000	SF	\$150.00000	\$1,800,000.00
MAJOR COST DRIVERS, STRUCTU	JRES			
New Structure: Side Road Over SR 3	32			

### Total for Group 0100:\$8,190,000.00

### Group 0110: Rail Transit

0047 U-MC-MISC MAJOR COST DRIVERS, MISCEL At Grade Ballasted Track (Light Ra		\$1,000.00000	\$12,735,000.00
0048 U-MC-MISC MAJOR COST DRIVERS, MISCEL Aerial Direct Fixation Track on Brid		\$1,085.00000	\$162,750.00
0049 U-MC-MISC MAJOR COST DRIVERS, MISCEL Grade Crossing	1.000 EACH LANEOUS COSTS	\$250,000.00000	\$250,000.00
0050 U-MC-MISC MAJOR COST DRIVERS, MISCEL Transit Station	0.000 LS LANEOUS COSTS	\$0.00000	\$0.00

Supplemental Description

**Description** 

## Total for Group 0110:\$13,147,750.00

Group 0120: Wetland Construction	l			
0051 T-MC-WTLD MAJOR COST DRIVERS, WETLAND CON		ACRE	\$60,000.00000	\$0.00
0052 T-OC-WTLD 5 OTHER COSTS, WETLAND CONSTRUCT Stream Restoration	,088.000 FION	FT	\$600.00000	\$3,052,800.00
			Total for Group	0120:\$3,052,800.00
Group 0130: Misc. Costs				
0053 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Performance Bond: 0.5% of total project co		s	\$275,810.00000	\$275,810.00
0054 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Railroad Insurance Bond	1.000 US COST		\$35,000.00000	\$35,000.00
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Field Office Type C	18.000 US COST		\$2,500.00000	\$45,000.00
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Mobilization: from CMS Item 624 for total p		S	\$1,200,000.00000	\$1,200,000.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Construction Layout Stakes: 0.5% of total p		S	\$275,810.00000 \$1.968)	\$275,810.00
0058 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEO Maintaining Traffic: 2.7% of total project co	1.000 US COST	LS S	\$1,489,374.00000	\$1,489,374.00
	• •	,	Total for Group	0130:\$3,320,994.00

### Group 0140: Design Contingency Costs

0059	V-MC-CNTG	1.000	LS	\$14,609,491.00000	\$14,609,491.00		
MA	OR COST DRIVERS, CONTINGENCY	COSTS					
PDP Design Contingency (step 5): 25% of total construction cost (\$58,437,962)							

Total for Group 0140:\$14,609,491.00

### Estimate EC2/3 - Alt R5%

Estimated Cost:\$64,449,343.00

Contingency: 0.00%

#### Estimated Total: \$64,449,343.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative R - Light Rail Profile

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/30/11 Checked by Steven Shadix on 01/18/12

Estimate: EC2/3 - Alt R5% <u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY 3 MAJOR COST DRIVERS, ROADWAY	8,846,449.000	CY	\$4.00000	\$15,385,796.00
			Total for 0	Group 0001:\$15,385,796.00
Group 0002: Fill - Embankment	:			
0002 A-MC-RDWY	195,023.000	CY	\$3.00000	\$585,069.00
MAJOR COST DRIVERS, ROADWAY			Total f	or Group 0002:\$585,069.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	0.000	CY	\$30.00000	\$0.00
				Total for Group 0003:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY Guardrail	1,200.000	FT	\$12.00000	\$14,400.00
0005 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	8,000.000	SF	\$4.00000	\$32,000.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY Curb	21,688.000	FT	\$12.00000	\$260,256.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	21,688.000	FT	\$14.00000	\$303,632.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY Clearing & Grubbing; light brush with o			\$1,100.00000	\$0.00
0009 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$1,650.00000	\$0.00
Clearing & Grubbing; medium clearing 0010 A-OC-RDWY		<i>ake</i> ACRE	\$2,200.00000	\$110,000.00
OTHER COSTS, ROADWAY Clearing & Grubbing; heavy clearing w		AORE	ψ2,200.00000	ψ110,000.00
Cleaning & Crubbing, neavy cleaning v			Total f	or Group 0010:\$720,288.00
Group 0020: Seeding & Mulchi	ng / Soddir	าต		
0011 B-MC-ERCO	240,978.000	-	\$2.00000	\$481,956.00
MAJOR COST DRIVERS, EROSION ( Seeding & Mulching	CONTROL			
			Total f	or Group 0020:\$481,956.00
Group 0021: Erosion Control -	tem 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION Conceptual Est: Earthwork Cost over 3		LS	\$300,000.00000	\$300,000.00
4:20:26PM				

Estimate: EC2/3 - Alt R5%					ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>		<u>Extension</u>
				Total for Group 0021:\$300	),000.00
Group 0030: Underdrains					
0013 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	55,126.000	FT	\$6.00000		\$330,756.00
				Total for Group 0030:\$330	),756.00
Group 0031: Culverts - Type A: <	: 5'				
0014 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	536.000	FT	\$375.0000	0	\$201,000.00
				Total for Group 0031:\$201	,000.00
Group 0032: Culverts, Type A: 5'	- 10'				
0015 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	556.000	FT	\$825.0000	0	\$458,700.00
				Total for Group 0032:\$458	3,700.00
Group 0033: Culverts, Type A: 10	)' - 20'				
0016 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	0.000	FT	\$1,500.000	000	\$0.00
				Total for Group 003	33:\$0.00
Group 0034: Closed Storm Syste	em				
0017 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	1.000	LS	\$520,512.0	00000	\$520,512.00
0018 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	1.000	LS	\$80,000.00	0000	\$80,000.00
Side Roads				Total for Group 0034:\$600	) 512 00
					,012.00
Group 0040: Mainline Lanes	81,933.000	SV	\$41.00000		\$3,359,253.00
MAJOR COST DRIVERS, PAVEMENT	01,000.000	01			
			1	otal for Group 0040:\$3,359	,255.00
Group 0041: Ramps		•	• · · · · · · · · ·		<b>A</b>
0020 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	13,333.000	SY	\$41.00000		\$546,653.00
				Total for Group 0041:\$546	5,653.00
Group 0042: Non - Mainline Lane					
0021 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	23,733.000	SY	\$41.00000		\$973,053.00
				Total for Group 0042:\$973	3,053.00
Group 0050: Utilities					

Estimate: EC2/3 - Alt R5%				ENTRAN
Line # Item Number Description	<u>Quantity</u>	<u>Units</u>	Unit Price	<b>Extension</b>
Supplemental Description				
0022 E-MC-WATR MAJOR COST DRIVERS, WATER LIN	1.000 IE	LS	\$12,000.00000	\$12,000.00
0023 F-MC-SANI MAJOR COST DRIVERS, SANITARY	1.000	LS	\$4,000.00000	\$4,000.00
0024 N-OC-DEMO MAJOR COST DRIVERS, BUILDING I Electric Transmission Tower Relocation	0.000 DEMOLITION	EACH	\$1,000,000.00000	\$0.00
Electric transmission tower Relocation			Total for Group 0050:\$	616,000.00
Group 0060: Lighting - Continue	nus Roadw	/2//		
0025 G-MC-LTNG	18,104.000	-	\$35.00000	\$633,640.00
MAJOR COST DRIVERS, LIGHTING	10,10 11000			
			Total for Group 0060:\$6	33,640.00
Group 0070: Signs				
0026 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC C	2.500	MILE	\$250,000.00000	\$625,000.00
	ONTROL		Total for Group 0070:\$6	25,000.00
Group 0071: Pavement Marking	r			
0027 J-MC-TRAF	<b>J</b> 10.840	MILE	\$500.00000	\$5,420.00
MAJOR COST DRIVERS, TRAFFIC C Edge Line			\$300.00000	φ0,420.00
0028 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC C	5.000 ONTROL	MILE	\$300.00000	\$1,500.00
Lane Line 0029 J-MC-TRAF	0.420	MILE	\$1,200.00000	\$504.00
MAJOR COST DRIVERS, TRAFFIC C Center Line			¥1,200.00000	φσσ4.00
0030 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC C	1,200.000 ONTROL	FT	\$1.25000	\$1,500.00
Channelizing Line 0031 J-MC-TRAF	192.000	FT	\$6.00000	\$1,152.00
MAJOR COST DRIVERS, TRAFFIC C Stop Line	ONTROL			. ,
0032 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC C		FT	\$2.00000	\$0.00
Transverse Line			<b>#</b> 2 2222	<b>\$</b> 0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC C	0.000 ONTROL	FT	\$2.00000	\$0.00
Dotted Line 0034 J-MC-TRAF	16.000	EACH	\$80.00000	\$1,280.00
MAJOR COST DRIVERS, TRAFFIC C Lane Arrow	ONTROL			
0035 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC C Word on Pavement	8.000 ONTROL	EACH	\$100.00000	\$800.00
			Total for Group 0071:\$	12,156.00
Croup 0079: Signala Intersect	ione			
Group 0072: Signals - Intersect		EVCH	\$200,000,00000	\$600,000,00
MAJOR COST DRIVERS, SIGNALS	3.000	EACH	\$200,000.00000	\$600,000.00
4:20:26 DM				

## Total for Group 0072:\$600,000.00

#### Group 0080: Retaining Walls

Supplemental Description

0037 M-MC-WALL 0.00 MAJOR COST DRIVERS, RETAINING WALLS	) SF	\$100.00000	\$0.00
			Total for Group 0080:\$0.00
Group 0090: Building Demolition			
0038 N-MC-DEMO 8.00 MAJOR COST DRIVERS, BUILDING DEMOLITIO Residential	) EACH N	\$10,000.00000	\$80,000.00
0039 N-MC-DEMO 0.00 MAJOR COST DRIVERS, BUILDING DEMOLITIO Service Station Island & Tanks		\$50,000.00000	\$0.00
0040 N-MC-DEMO 11.00 MAJOR COST DRIVERS, BUILDING DEMOLITIO Commercial		\$25,000.00000	\$275,000.00
0041 N-MC-DEMO 9.00 MAJOR COST DRIVERS, BUILDING DEMOLITIO Sheds		\$750.00000	\$6,750.00
0042 N-MC-DEMO 9.00 MAJOR COST DRIVERS, BUILDING DEMOLITIO Garages		\$2,500.00000	\$22,500.00
		Total f	or Group 0090:\$384,250.00

#### Group 0100: New Structures

-				
0043 R-MC-STRC	15,000.000	SF	\$150.00000	\$2,250,000.00
MAJOR COST DRIVERS, STRUCT				
New Structure: Over Dry Run Creek	(highway)			
0044 R-MC-STRC	6,000.000	SF	\$300.00000	\$1,800,000.00
MAJOR COST DRIVERS, STRUCT				
New Structure: Over Dry Run Creek	(rail)			
0045 R-MC-STRC	15,600.000	SF	\$150.00000	\$2,340,000.00
MAJOR COST DRIVERS, STRUCT				
New Structure: Side Road Over Dry	Run Creek & Ra	ilroad		
0046 R-MC-STRC	12,000.000	SF	\$150.00000	\$1,800,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Side Road Over SR	32			

### Total for Group 0100:\$8,190,000.00

### Group 0110: Rail Transit

0047 U-MC-MISC MAJOR COST DRIVERS, MISCELLA At Grade Ballasted Track (Light Rail)	10,894.000 FT NEOUS COSTS	\$1,000.00000	\$10,894,000.00
0048 U-MC-MISC MAJOR COST DRIVERS, MISCELLA Aerial Direct Fixation Track on Bridge		\$1,085.00000	\$162,750.00
0049 U-MC-MISC MAJOR COST DRIVERS, MISCELLA Grade Crossing	1.000 EACH NEOUS COSTS	\$250,000.00000	\$250,000.00
0050 U-MC-MISC MAJOR COST DRIVERS, MISCELLA Transit Station	0.000 LS NEOUS COSTS	\$0.00000	\$0.00

Supplemental Description

**Description** 

## Total for Group 0110:\$11,306,750.00

Group 0120: Wetland Constructio	n		
0051 T-MC-WTLD MAJOR COST DRIVERS, WETLAND CC	0.000 ACRE	\$60,000.00000	\$0.00
0052 T-OC-WTLD OTHER COSTS, WETLAND CONSTRUC Stream Restoration	4,311.000 FT CTION	\$600.00000	\$2,586,600.00
		Total for Group	0120:\$2,586,600.00
Group 0130: Misc. Costs			
0053 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Performance Bond: 0.5% of total project of		\$241,713.00000	\$241,713.00
0054 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Railroad Insurance Bond	1.000 LS DUS COSTS	\$35,000.00000	\$35,000.00
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Field Office Type C	18.000 MNTH OUS COSTS	\$2,500.00000	\$45,000.00
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Mobilization: from CMS Item 624 for total		\$1,200,000.00000	\$1,200,000.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Construction Layout Stakes: 0.5% of total		\$241,713.00000 42,432)	\$241,713.00
0058 U-MC-MISC MAJOR COST DRIVERS, MISCELLANE Maintaining Traffic: 3.1% of total project c	1.000 LS OUS COSTS	\$1,498,616.00000	\$1,498,616.00
		Total for Group	0130:\$3,262,042.00

### Group 0140: Design Contingency Costs

0059	V-MC-CNTG	1.000	LS	\$12,889,869.00000	\$12,889,869.00			
MA	IOR COST DRIVERS,	CONTINGENCY COSTS						
PDF	PDP Design Contingency (step 5): 25% of total construction cost (\$51,559,474)							

Total for Group 0140:\$12,889,869.00

### Estimate EC2/3 - Alt S5%

Estimated Cost:\$69,457,739.00

Contingency: 0.00%

#### Estimated Total: \$69,457,739.00

HAM/CLE-32F-2.50/0.00 Eastern Corridor Segment II/III - Alternative S - Light Rail Profile

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number: 86462

Estimate Type: C1

Prepared by Leo Honebrink on 12/30/11 Checked by Steven Shadix on 01/18/12

Estimate: EC2/3 - Alt S5% <u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	ENTRAN <u>Extension</u>
Group 0001: Excavation				
0001 A-MC-RDWY 3 MAJOR COST DRIVERS, ROADWAY	,191,797.000	CY	\$4.00000	\$12,767,188.00
			Total for Group 0001:\$12,767	7,188.00
Group 0002: Fill - Embankment				
0002 A-MC-RDWY MAJOR COST DRIVERS, ROADWAY	542,627.000	CY	\$3.00000	\$1,627,881.00
WASON COST DRIVENS, NOADWAT			Total for Group 0002:\$1,627	7,881.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY	0.000	CY	\$30.00000	\$0.00
MAJOR COST DRIVERS, ROADWAY			Total for Group 000	03:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY	1,800.000	FT	\$12.00000	\$21,600.00
Guardrail 0005 A-OC-RDWY OTHER COSTS, ROADWAY 10' Sidewalk/Bike	26,000.000	SF	\$4.00000	\$104,000.00
0006 A-OC-RDWY OTHER COSTS, ROADWAY Curb	25,524.000	FT	\$12.00000	\$306,288.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	25,524.000	FT	\$14.00000	\$357,336.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY			\$1,100.00000	\$0.00
Clearing & Grubbing; light brush with a 0009 A-OC-RDWY		ACRE	\$1,650.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; medium clearing				
0010 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$2,200.00000	\$128,920.00
Clearing & Grubbing; heavy clearing w	ith dozer		Total for Group 0010:\$918	3.144.00
Croup 0020, Sooding & Mulahir	a / Cadd:-			
Group 0020: Seeding & Mulchir 0011 B-MC-ERCO	283,600.000	-	\$2.00000	\$567,200.00
MAJOR COST DRIVERS, EROSION ( Seeding & Mulching		01	φ2.00000	<i>фоот,200.00</i>
			Total for Group 0020:\$567	7,200.00
Group 0021: Erosion Control - I	tem 832			
0012 B-MC-ERCO MAJOR COST DRIVERS, EROSION C Conceptual Est: Earthwork Cost over \$ 4:53:46PM	1.000 CONTROL	LS	\$300,000.00000	\$300,000.00

Estimate: EC2/3 - Alt S5%					ENTRAN
<u>Line #</u> <u>Item Number</u> Description	<u>Quantity</u>	<u>Units</u>	Unit Price		<b>Extension</b>
Supplemental Description					
				Total for Group 0021:\$300	,000.00
Group 0030: Underdrains					
0013 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	62,848.000	FT	\$6.00000		\$377,088.00
				Total for Group 0030:\$377	,088.00
Group 0031: Culverts - Type A:	< 5'				
0014 C-MC-DRNG	550.000	FT	\$375.0000	0	\$206,250.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0031:\$206	,250.00
Crown 0022: Culturate Turne A. F	' 10'			•	
Group 0032: Culverts, Type A: 5 0015 C-MC-DRNG	- 10 545.000	FT	\$825.0000	n	\$449,625.00
MAJOR COST DRIVERS, DRAINAGE	040.000		φ020.00000		
				Total for Group 0032:\$449	,625.00
Group 0033: Culverts, Type A: 1	0' - 20'				
0016 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	320.000	FT	\$1,500.000	000	\$480,000.00
				Total for Group 0033:\$480	,000.00
Group 0034: Closed Storm Syst	em				
0017 C-MC-DRNG	1.000	LS	\$612,576.0	00000	\$612,576.00
MAJOR COST DRIVERS, DRAINAGE 0018 C-MC-DRNG	1.000	LS	\$80,000.00	0000	\$80,000.00
MAJOR COST DRIVERS, DRAINAGE Side Roads					
				Total for Group 0034:\$692	,576.00
Group 0040: Mainline Lanes					
0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	96,424.000	SY	\$41.00000		\$3,953,384.00
			Т	otal for Group 0040:\$3,953	,384.00
Group 0041: Ramps					
0020 D-MC-PVMT	13,333.000	SY	\$41.00000		\$546,653.00
MAJOR COST DRIVERS, PAVEMENT				Total for Group 0041:\$546	653 00
					,000.00
Group 0042: Non - Mainline Lan		0)(	<b>*</b> 44 00000		<b>\$</b> 070.050.00
0021 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	23,733.000	SY	\$41.00000		\$973,053.00
				Total for Group 0042:\$973	,053.00
Group 0050: Utilities					

Estimate: EC2/3 - Alt S5%				ENTRAN
Line # Item Number Description	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
Supplemental Description				
0022 E-MC-WATR MAJOR COST DRIVERS, WATER LINE	1.000	LS	\$12,000.00000	\$12,000.00
0023 F-MC-SANI MAJOR COST DRIVERS, SANITARY S	1.000	LS	\$4,000.00000	\$4,000.00
0024 N-OC-DEMO MAJOR COST DRIVERS, BUILDING D	1.000	EACH	\$1,000,000.00000	\$1,000,000.00
Electric Transmission Tower Relocation			Total for Group 0050:\$1,	016.000.00
Croup 0060, Lighting Continue	ua Daadu	(O) (	······································	
Group 0060: Lighting - Continuo		•		
0025 G-MC-LTNG MAJOR COST DRIVERS, LIGHTING	20,112.000	FT	\$35.00000	\$703,920.00
			Total for Group 0060:\$	703.920.00
Group 0070: Signs				
0026 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CO	2.900	MILE	\$250,000.00000	\$725,000.00
			Total for Group 0070:\$	725.000.00
				-)
Group 0071: Pavement Marking				
0027 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC	12.440 NTROL	MILE	\$500.00000	\$6,220.00
Edge Line 0028 J-MC-TRAF	5.800	MILE	\$300.00000	\$1,740.00
MAJOR COST DRIVERS, TRAFFIC CC Lane Line			\$300.00000	<b>Φ</b> Ι,740.00
0029 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC	0.420 DNTROL	MILE	\$1,200.00000	\$504.00
Center Line 0030 J-MC-TRAF	1 200 000	ET	¢1 25000	\$1,500.00
0030 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC Channelizing Line	1,200.000 DNTROL	FT	\$1.25000	\$1,500.00
0031 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC	192.000 NTROL	FT	\$6.00000	\$1,152.00
Stop Line 0032 J-MC-TRAF	0.000	ET	\$2.00000	00.02
MAJOR COST DRIVERS, TRAFFIC CC Transverse Line		FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CO	0.000 NTROI	FT	\$2.00000	\$0.00
Dotted Line				
0034 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CC	16.000	EACH	\$80.00000	\$1,280.00
Lane Arrow				
0035 J-MC-TRAF	8.000	EACH	\$100.00000	\$800.00
MAJOR COST DRIVERS, TRAFFIC CO Word on Pavement	DNTROL			
			Total for Group 0071:	\$13,196.00
				. , -
Group 0072: Signals - Intersection	ons			
0036 K-MC-SGNL MAJOR COST DRIVERS, SIGNALS		EACH	\$200,000.00000	\$600,000.00
4:53:46PM				

## Total for Group 0072:\$600,000.00

#### Group 0080: Retaining Walls

Supplemental Description

0037 M-MC-WALL 0.000 MAJOR COST DRIVERS, RETAINING WALLS	SF	\$100.00000	\$0.00
			Total for Group 0080:\$0.00
Group 0090: Building Demolition			
0038 N-MC-DEMO 13.000 MAJOR COST DRIVERS, BUILDING DEMOLITION <i>Residential</i>	EACH	\$10,000.00000	\$130,000.00
0039 N-MC-DEMO 0.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Service Station Island & Tanks	EACH	\$50,000.00000	\$0.00
0040 N-MC-DEMO 12.000 MAJOR COST DRIVERS, BUILDING DEMOLITION <i>Commercial</i>	EACH	\$25,000.00000	\$300,000.00
0041 N-MC-DEMO 10.000 MAJOR COST DRIVERS, BUILDING DEMOLITION Sheds	EACH	\$750.00000	\$7,500.00
0042 N-MC-DEMO 10.000 MAJOR COST DRIVERS, BUILDING DEMOLITION <i>Garages</i>	EACH	\$2,500.00000	\$25,000.00

# Total for Group 0090:\$462,500.00

### Group 0100: New Structures

-				
0043 R-MC-STRC	15,000.000	SF	\$150.00000	\$2,250,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Over Dry Run Creek	(highway)			
0044 R-MC-STRC	6,000.000	SF	\$300.00000	\$1,800,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Over Dry Run Creek	(rail)			
0045 R-MC-STRC	15,600.000	SF	\$150.00000	\$2,340,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Side Road Over Dry	r Run Creek & Ra	ilroad		
0046 R-MC-STRC	12,000.000	SF	\$150.00000	\$1,800,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Side Road Over SR	32			

### Total for Group 0100:\$8,190,000.00

### Group 0110: Rail Transit

0047 U-MC-MISC MAJOR COST DRIVERS, MISCELLA At Grade Ballasted Track (Light Rail)	12,962.000 FT NEOUS COSTS	\$1,000.00000	\$12,962,000.00
0048 U-MC-MISC MAJOR COST DRIVERS, MISCELLA Aerial Direct Fixation Track on Bridge		\$1,085.00000	\$162,750.00
0049 U-MC-MISC MAJOR COST DRIVERS, MISCELLA Grade Crossing	1.000 EACH NEOUS COSTS	\$250,000.00000	\$250,000.00
0050 U-MC-MISC MAJOR COST DRIVERS, MISCELLA Transit Station	0.000 LS NEOUS COSTS	\$0.00000	\$0.00

Supplemental Description

**Description** 

## Total for Group 0110:\$13,374,750.00

Group 0120: Wetland Construction	n			
0051 T-MC-WTLD MAJOR COST DRIVERS, WETLAND CO		ACRE ON	\$60,000.00000	\$0.00
0052 T-OC-WTLD OTHER COSTS, WETLAND CONSTRUC Stream Restoration	5,504.000 TION	FT	\$600.00000	\$3,302,400.00
			Total for Group 0	120:\$3,302,400.00
Group 0130: Misc. Costs				
0053 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEC Performance Bond: 0.5% of total project c		s	\$261,460.00000	\$261,460.00
0054 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEC Railroad Insurance Bond	1.000 DUS COST	-	\$35,000.00000	\$35,000.00
0055 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEC Field Office Type C	18.000 DUS COST		\$2,500.00000	\$45,000.00
0056 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEC Mobilization: from CMS Item 624 for total		S	\$1,200,000.00000	\$1,200,000.00
0057 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEC Construction Layout Stakes: 0.5% of total		s	\$261,460.00000 01.808)	\$261,460.00
0058 U-MC-MISC MAJOR COST DRIVERS, MISCELLANEC Maintaining Traffic: 2.9% of total project co	1.000 DUS COST	LS S	\$1,516,463.00000	\$1,516,463.00
	-	-	Total for Group 0	130:\$3,319,383.00

## Group 0140: Design Contingency Costs

0059	V-MC-CNTG	1.000	LS	\$13,891,548.00000	\$13,891,548.00		
MAJ	IOR COST DRIVERS, CONTINGENCY	COSTS					
PDP Design Contingency (step 5): 25% of total construction cost (\$55,566,191)							

Total for Group 0140:\$13,891,548.00

### Estimate EC2/3 - Alt T5%

Estimated Cost:\$98,681,589.00

Contingency: 0.00%

#### Estimated Total: \$98,681,589.00

Eastern Corridor Segment II/III - Alternative T - Light Rail Profile

Base Date: 01/01/12

Spec Year: 10

Unit System: E

Work Type: GEN CONST: INVLVS 2 OR MOR MAJ WRK TYPE

Highway Type: 448

Urban/Rural Type: URBAN CLASS

Season: SUMMER

County: HAMILTON

Midpoint of Latitude:

Midpoint of Longitude:

District:

Federal/State Project Number:

Estimate Type: C1

Prepared by Leo Honebrink on 12/30/11 Checked by Steven Shadix on 01/18/12

Estimate: EC2/3 - Alt T5%				ENTRAN
Line # Item Number Description	<u>Quantity</u>	<u>Units</u>	Unit Price	<b>Extension</b>
Supplemental Description				
Group 0001: Excavation				
0001 A-MC-RDWY MAJOR COST DRIVERS, ROADWA	3,421,895.000 Y	CY	\$4.00000	\$13,687,580.00
			Total for Group 0001:\$13,68	7,580.00
Group 0002: Fill - Embankmer	nt			
0002 A-MC-RDWY MAJOR COST DRIVERS, ROADWA	1,710,764.000 Y	CY	\$3.00000	\$5,132,292.00
			Total for Group 0002:\$5,13	2,292.00
Group 0003: Fill - Granular				
0003 A-MC-RDWY MAJOR COST DRIVERS, ROADWA	0.000	CY	\$30.00000	\$0.00
	1		Total for Group 00	03:\$0.00
Group 0010: Roadway Costs				
0004 A-OC-RDWY OTHER COSTS, ROADWAY	2,500.000	FT	\$12.00000	\$30,000.00
Guardrail 0005 A-OC-RDWY	21,000.000	SF	\$4.00000	\$84,000.00
OTHER COSTS, ROADWAY 10' Sidewalk/Bike	,			. ,
0006 A-OC-RDWY OTHER COSTS, ROADWAY Curb	39,824.000	FT	\$12.00000	\$477,888.00
0007 A-OC-RDWY OTHER COSTS, ROADWAY Curb & Gutter	39,824.000	FT	\$14.00000	\$557,536.00
0008 A-OC-RDWY OTHER COSTS, ROADWAY	0.000	ACRE	\$1,100.00000	\$0.00
Clearing & Grubbing; light brush with 0009 A-OC-RDWY		ain ACRE	\$1,650.00000	\$0.00
OTHER COSTS, ROADWAY Clearing & Grubbing; medium clearin			* ,	
0010 A-OC-RDWY OTHER COSTS, ROADWAY		ACRE	\$2,200.00000	\$200,200.00
Clearing & Grubbing; heavy clearing	with dozer		Total for Crown 0010, \$1.24	0 604 00
			Total for Group 0010:\$1,34	9,624.00
Group 0020: Seeding & Mulch	•	•		
0011 B-MC-ERCO MAJOR COST DRIVERS, EROSION Seeding & Mulching	442,489.000 I CONTROL	SY	\$2.00000	\$884,978.00
			Total for Group 0020:\$88	4,978.00
Group 0021: Erosion Control -	Item 832			
0012 B-MC-ERCO	1.000	LS	\$300,000.00000	\$300,000.00
MAJOR COST DRIVERS, EROSION Conceptual Est: Earthwork Cost over				
4:56:18PM				

Estimate: EC2/3 - Alt T5%					ENTRAN
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>		<u>Extension</u>
				Total for Group 0021:\$300	,000.00
Group 0030: Underdrains					
0013 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	85,468.000	FT	\$6.00000		\$512,808.00
				Total for Group 0030:\$512	,808.00
Group 0031: Culverts - Type A: <	< 5'				
0014 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	1,072.000	FT	\$375.00000	)	\$402,000.00
				Total for Group 0031:\$402	,000.00
Group 0032: Culverts, Type A: 5	' - 10'				
0015 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	804.000	FT	\$825.00000	)	\$663,300.00
				Total for Group 0032:\$663	,300.00
Group 0033: Culverts, Type A: 1	0' - 20'				
0016 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	268.000	FT	\$1,500.000	00	\$402,000.00
MAJOR COST DRIVERS, DRAINAGE				Total for Group 0033:\$402	,000.00
Group 0034: Closed Storm Syste	em				
0017 C-MC-DRNG	1.000	LS	\$699,276.0	0000	\$699,276.00
MAJOR COST DRIVERS, DRAINAGE 0018 C-MC-DRNG MAJOR COST DRIVERS, DRAINAGE	1.000	LS	\$170,300.0	0000	\$170,300.00
Side Roads				Total for Group 0034:\$869	,576.00
Group 0040: Mainline Lanes					
0019 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	96,614.000	SY	\$41.00000		\$3,961,174.00
MAJOR COST DRIVERS, PAVEIVIENT			To	otal for Group 0040:\$3,961	,174.00
Group 0041: Ramps					
0020 D-MC-PVMT	13,333.000	SY	\$41.00000		\$546,653.00
MAJOR COST DRIVERS, PAVEMENT				Total for Group 0041:\$546	.653.00
					,
Group 0042: Non - Mainline Lan		ev.	¢41.00000		\$2 222 644 00
0021 D-MC-PVMT MAJOR COST DRIVERS, PAVEMENT	81,284.000	SY	\$41.00000		\$3,332,644.00
			ſc	otal for Group 0042:\$3,332	,644.00
Group 0050: Utilities					

Estimate: EC2/3 - Alt T5%				ENTRAN
Line # Item Number Que Que Description	uantity	<u>Units</u>	Unit Price	<b>Extension</b>
Supplemental Description				
0022 E-MC-WATR MAJOR COST DRIVERS, WATER LINE	1.000	LS	\$12,000.00000	\$12,000.00
0023 F-MC-SANI MAJOR COST DRIVERS, SANITARY SEWE	1.000 R	LS	\$4,000.00000	\$4,000.00
0024 N-OC-DEMO MAJOR COST DRIVERS, BUILDING DEMO Electric Transmission Tower Relocation	1.000	EACH	\$1,000,000.00000	\$1,000,000.00
			Total for Group 0050:\$1,016	6,000.00
Group 0060: Lighting - Continuous F	Roadw	/ay		
0025 G-MC-LTNG 19,8 MAJOR COST DRIVERS, LIGHTING	85.000	FT	\$35.00000	\$695,975.00
			Total for Group 0060:\$695	5,975.00
Group 0070: Signs				
0026 J-MC-TRAF	2.900	MILE	\$250,000.00000	\$725,000.00
MAJOR COST DRIVERS, TRAFFIC CONTR	OL		Total for Group 0070:\$725	5,000.00
Group 0071: Pavement Marking				
	12.440	MILE	\$500.00000	\$6,220.00
MAJOR COST DRIVERS, TRAFFIC CONTR Edge Line	OL			÷-,
0028 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CONTR	5.800 OL	MILE	\$300.00000	\$1,740.00
Lane Line 0029 J-MC-TRAF	0.840	MILE	\$1,200.00000	\$1,008.00
MAJOR COST DRIVERS, TRAFFIC CONTR Center Line			<b>*</b> / <b>*</b>	<b>A</b> ( <b>B A A A</b>
MAJOR COST DRIVERS, TRAFFIC CONTR	00.000 OL	FT	\$1.25000	\$1,500.00
Channelizing Line 0031 J-MC-TRAF 1 MAJOR COST DRIVERS, TRAFFIC CONTR	92.000	FT	\$6.00000	\$1,152.00
Stop Line		FT	¢2,0000	¢0.00
0032 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CONTR Transverse Line	0.000 OL	FT	\$2.00000	\$0.00
0033 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CONTR	0.000	FT	\$2.00000	\$0.00
Dotted Line	16.000	EACH	\$80.00000	\$1,280.00
MAJOR COST DRIVERS, TRAFFIC CONTR Lane Arrow		L/ (OIT	\$00.00000	ψ1,200.00
0035 J-MC-TRAF MAJOR COST DRIVERS, TRAFFIC CONTR Word on Pavement	8.000 OL	EACH	\$100.00000	\$800.00
			Total for Group 0071:\$13	8,700.00
Group 0072: Signals - Intersections				
0036 K-MC-SGNL MAJOR COST DRIVERS, SIGNALS	3.000	EACH	\$200,000.00000	\$600,000.00
4-56-18DM				

**Extension** 

# Total for Group 0072:\$600,000.00

#### Group 0080: Retaining Walls

Supplemental Description

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0037 M-MC-WALL MAJOR COST DRIVERS MSE Walls	36,000.000 , RETAINING WALLS	SF	\$100.00000	\$3,600,000.00
			Total for	Group 0080:\$3,600,000.00
Group 0090: Building	Demolition			
0038 N-MC-DEMO MAJOR COST DRIVERS <i>Residential</i>	31.000 , BUILDING DEMOLITION	EACH	\$10,000.00000	\$310,000.00
0039 N-MC-DEMO MAJOR COST DRIVERS Service Station Island & T	0.000 , BUILDING DEMOLITION Tanks	EACH	\$50,000.00000	\$0.00
0040 N-MC-DEMO MAJOR COST DRIVERS Commercial	9.000 , BUILDING DEMOLITION	EACH	\$25,000.00000	\$225,000.00
0041 N-MC-DEMO MAJOR COST DRIVERS Sheds	20.000 , BUILDING DEMOLITION	EACH	\$750.00000	\$15,000.00
0042 N-MC-DEMO MAJOR COST DRIVERS <i>Garages</i>	20.000 , BUILDING DEMOLITION	EACH	\$2,500.00000	\$50,000.00

Total for Group 0090:\$600,000.00

### Group 0100: New Structures

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0043 R-MC-STRC	7,500.000	SF	\$150.00000	\$1,125,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Over Dry Run Cree	k (highway - WB)			
0044 R-MC-STRC	10,000.000	SF	\$150.00000	\$1,500,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Over Dry Run Cree	k (highway - EB)			
0045 R-MC-STRC	8,000.000	SF	\$300.00000	\$2,400,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Over Dry Run Cree	k (rail)			
0046 R-MC-STRC	6,600.000	SF	\$150.00000	\$990,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Over 8 Mile Road (I	nighway - WB)			
0047 R-MC-STRC	6,600.000	SF	\$150.00000	\$990,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Over 8 Mile Road (I	nighway - EB)			
0048 R-MC-STRC	6,000.000	SF	\$300.00000	\$1,800,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Over 8 Mile Road (r	ail)			
0049 R-MC-STRC	15,600.000	SF	\$150.00000	\$2,340,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Side Road Over Dry	/ Run Creek & Ra	ilroad		
0050 R-MC-STRC	12,000.000	SF	\$150.00000	\$1,800,000.00
MAJOR COST DRIVERS, STRUCT	URES			
New Structure: Side Road Over SR	32			
			Total for Group 0100:\$12,94	5.000.00
				-,

Estimate: EC2/3 - Alt T5%				ENTRAN	
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>	
Group 0110: Rail Transit					
0051 U-MC-MISC MAJOR COST DRIVERS, MISCEL At Grade Ballasted Track (Light Ra			\$1,000.00000	\$14,400,000.00	
0052 U-MC-MISC MAJOR COST DRIVERS, MISCEL Aerial Direct Fixation Track on Bridg			\$1,085.00000	\$217,000.00	
0053 U-MC-MISC MAJOR COST DRIVERS, MISCEL Grade Crossing		EACH S	\$250,000.00000	\$250,000.00	
0054 U-MC-MIŠC MAJOR COST DRIVERS, MISCEL Transit Station	0.000 LANEOUS COST		\$0.00000	\$0.00	
			Total for Group 01	10:\$14,867,000.00	
Croup 0120: Watland Constr	uction				
Group 0120: Wetland Constru					
0055 T-MC-WTLD MAJOR COST DRIVERS, WETLAN			\$60,000.00000	\$2,400.00	
0056 T-OC-WTLD OTHER COSTS, WETLAND CONS Stream Restoration	11,519.000		\$600.00000	\$6,911,400.00	
			Total for Group 0120:\$6,913,800.00		
Group 0130: Misc. Costs					
0057 U-MC-MISC MAJOR COST DRIVERS, MISCEL Performance Bond: 0.5% of total pr		S	\$370,331.00000	\$370,331.00	
0058 U-MC-MISC MAJOR COST DRIVERS, MISCEL Railroad Insurance Bond	1.000	LS	\$35,000.00000	\$35,000.00	
0059 U-MC-MISC MAJOR COST DRIVERS, MISCEL Field Office Type C			\$2,500.00000	\$45,000.00	
0060 U-MC-MISC MAJOR COST DRIVERS, MISCEL Mobilization: from CMS Item 624 fo		S	\$1,600,000.00000	\$1,600,000.00	
0061 U-MC-MISC MAJOR COST DRIVERS, MISCEL Construction Layout Stakes: 0.5%	1.000 LANEOUS COST	LS S	\$370,331.00000	\$370,331.00	
0062 U-MC-MISC				\$1,000,785,00	

0062 U-MC-MISC 1.000 LS \$1,999,785.00000 MAJOR COST DRIVERS, MISCELLANEOUS COSTS Maintaining Traffic: 2.7% of total project cost (\$74,066,104)

# Total for Group 0130:\$4,420,447.00

## Group 0140: Design Contingency Costs

0063 V-MC-CNTG	1.000	LS	\$629,650.00000	\$629,650.00			
MAJOR COST DRIVERS, CONTINGENCY COSTS							
Constructible Risk Contingency: Burger Landfill Impact = 800' @ 10' depth = 25,186CY * (Excavation \$15/CY +							
Embankment \$10/CY)							
0064 V-MC-CNTG	1.000	LS	\$19,610,388.00000	\$19,610,388.00			
MAJOR COST DRIVERS, CONTINGENCY COSTS							
PDP Design Contingency (step 5): 25% of total construction cost (\$78,441,551)							

\$1,999,785.00

<u>Line # Item Number</u> <u>Description</u> <u>Supplemental Description</u>

Total for Group 0140:\$20,240,038.00