FORM G-17 Major Spare Parts							
Item No.		Total No. of	Unit of Measure	Unit Price	Total Price Ye		
		Units			1		
RS-0010	Network Switch - RuggedComRSG2200	1	Qty	\$4,730.42	\$4,730.42		
Back Office BO-001	e System				\$0.00		
BO-001					\$0.00		
BO-002 BO-003			-		\$0.00		
BO-003					\$0.00		
	Service Center						
CS-001	WUC - Dell Desktop Mid-Range	1	Qty	\$2,732.00	\$2,732.00		
CS-002	WUC - Dell Monitor - Mid Range	1	Qty	\$546.00	\$546.00		
CS-003	WUC - Laser Printer min 50ppm	1	Qty	\$546.00	\$546.00		
CS-004	WUC - POS Terminal	1	Qty	\$2,186.00	\$2,186.00		
TOC and S	ystem Monitoring						
TO-001					\$0.00		
TO-002					\$0.00		
TO-003					\$0.00		
TO-004	1 12-				\$0.00		
	ntrol and CCTV	1	04.	ć1 520 00	Ć4 620 00		
AC-001	CCTV camera - Cohu 3930HD	1 1	Qty	\$1,639.00 \$21,855.00	\$1,639.00 \$21,855.00		
AC-002 AC-003	DVR Server - Pelco Endura NSM5200	1	Qty	\$21,855.00	\$0.00		
AC-003 AC-004					\$0.00		
Item No.	Item Description	Total No. of Units	Unit of Measure	Unit Price	Total Price Yea		
	Item Description		Unit of Measure	Unit Price			
	quipment VES camera - Kapsch VRX		Unit of Measure  Qty	Unit Price \$12,481.89	The second secon		
Roadside I RS-001 RS-002	quipment VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator	Units  1 1	Qty Qty	\$12,481.89 \$2,820.53	\$12,481.89 \$2,820.53		
Roadside I RS-001 RS-002 RS-003	quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent	1 1 1	Qty Qty Qty	\$12,481.89 \$2,820.53 \$10,271.39	\$12,481.89 \$2,820.53 \$10,271.39		
Roadside I RS-001 RS-002 RS-003 RS-004	quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent  Inductive loop array (AVC) - Nortech Loop Array	1 1 1 1	Qty Qty Qty Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005	quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent  Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier	1 1 1 1 1	Qty Qty Qty Qty Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006	Quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent  Inductive loop array (AVC) - Nortech Loop Array  Inductive loop controller (AVC) - Nortech IDP608 x86 carrier  Overhead laser scanner - SICK LMSS11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty Qty Qty Qty Qty Qty Qty Qty Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006	Quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent  Inductive loop array (AVC) - Nortech Loop Array  Inductive loop controller (AVC) - Nortech IDP608 x86 carrier  Overhead laser scanner - SICK LMS511  CCTV camera - Pelco IXE20DN12-EAD	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008	Quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent  Inductive loop array (AVC) - Nortech Loop Array  Inductive loop controller (AVC) - Nortech IDP608 x86 carrier  Overhead laser scanner - SICK LMS511  CCTV camera - Pelco IXE20DN12-EAD  Uninterruptable power supply - Eaton_9170PLFXA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009	Quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent  Inductive loop array (AVC) - Nortech Loop Array  Inductive loop controller (AVC) - Nortech IDP608 x86 carrier  Overhead laser scanner - SICK LMS511  CCTV camera - Pelco IXE20DN12-EAD  Uninterruptable power supply - Eaton_9170PLFXA  Network Router - Cisco 3750X-48	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010	Quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent  Inductive loop array (AVC) - Nortech Loop Array  Inductive loop controller (AVC) - Nortech IDP608 x86 carrier  Overhead laser scanner - SICK LMS511  CCTV camera - Pelco IXE20DN12-EAD  Uninterruptable power supply - Eaton_9170PLFXA  Network Router - Cisco 3750X-48  Network Switch - RuggedComRSG2200	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009	Quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent  Inductive loop array (AVC) - Nortech Loop Array  Inductive loop controller (AVC) - Nortech IDP608 x86 carrier  Overhead laser scanner - SICK LMS511  CCTV camera - Pelco IXE20DN12-EAD  Uninterruptable power supply - Eaton_9170PLFXA  Network Router - Cisco 3750X-48  Network Switch - RuggedComRSG2200	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010 Back Office	Quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent  Inductive loop array (AVC) - Nortech Loop Array  Inductive loop controller (AVC) - Nortech IDP608 x86 carrier  Overhead laser scanner - SICK LMS511  CCTV camera - Pelco IXE20DN12-EAD  Uninterruptable power supply - Eaton_9170PLFXA  Network Router - Cisco 3750X-48  Network Switch - RuggedComRSG2200	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010 Back Office BO-001	Quipment  VES camera - Kapsch VRX  VES Illuminator - Kapsch VR-X External Illuminator  Roadside controller - Corvalent  Inductive loop array (AVC) - Nortech Loop Array  Inductive loop controller (AVC) - Nortech IDP608 x86 carrier  Overhead laser scanner - SICK LMS511  CCTV camera - Pelco IXE20DN12-EAD  Uninterruptable power supply - Eaton_9170PLFXA  Network Router - Cisco 3750X-48  Network Switch - RuggedComRSG2200	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010 Back Office BO-001 BO-002 BO-003 BO-004	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200  2 System	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010 Back Office BO-001 BO-002 BO-003 BO-004 Customer :	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200 e System	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010 Back Office BO-001 BO-002 BO-003 BO-004 Customer : CS-001	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200  2 System  Service Center WUC - Dell Desktop Mid-Range	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00		
Roadside   RS-001   RS-002   RS-003   RS-004   RS-005   RS-006   RS-007   RS-008   RS-009   RS-0010   RS-0	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200 2 System Service Center WUC - Dell Desktop Mid-Range WUC - Dell Monitor - Mid Range	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00 \$2,814.00 \$562.00		
Roadside   RS-001   RS-002   RS-003   RS-004   RS-005   RS-006   RS-007   RS-008   RS-009   RS-0010   RS-0	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200 2 System Service Center WUC - Dell Desktop Mid-Range WUC - Dell Monitor - Mid Range WUC - Laser Printer min 50ppm	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$2,814.00 \$562.00 \$562.00	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00 \$2,814.00 \$562.00 \$562.00		
Roadside   RS-001   RS-002   RS-003   RS-004   RS-005   RS-006   RS-007   RS-008   RS-009   RS-0010   RS-0	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200 2 System Service Center WUC - Dell Desktop Mid-Range WUC - Dell Monitor - Mid Range WUC - Laser Printer min 50ppm WUC - POS Terminal	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00 \$2,814.00 \$562.00		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010 Back Office BO-001 BO-002 BO-003 BO-004 Customer : CS-001 CS-002 CS-003 CS-004	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200 2 System Service Center WUC - Dell Desktop Mid-Range WUC - Dell Monitor - Mid Range WUC - Laser Printer min 50ppm	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$2,814.00 \$562.00 \$562.00	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00 \$2,814.00 \$562.00 \$2,252.00		
Roadside   RS-001   RS-002   RS-003   RS-004   RS-005   RS-006   RS-007   RS-008   RS-009   RS-0010   RS-0	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200 2 System Service Center WUC - Dell Desktop Mid-Range WUC - Dell Monitor - Mid Range WUC - Laser Printer min 50ppm WUC - POS Terminal	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$2,814.00 \$562.00 \$562.00	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00 \$2,814.00 \$562.00 \$2,252.00 \$0.00		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010 Back Office BO-001 BO-002 BO-003 BO-004 Customer : CS-001 CS-002 CS-003 CS-004 FOC and Sy TO-001	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200 2 System Service Center WUC - Dell Desktop Mid-Range WUC - Dell Monitor - Mid Range WUC - Laser Printer min 50ppm WUC - POS Terminal	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$2,814.00 \$562.00 \$562.00	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00 \$562.00 \$562.00 \$2,252.00 \$0.00 \$0.00		
Roadside   RS-001   RS-002   RS-003   RS-004   RS-005   RS-006   RS-007   RS-008   RS-009   RS-0010   RS-0	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200 2 System Service Center WUC - Dell Desktop Mid-Range WUC - Dell Monitor - Mid Range WUC - Laser Printer min 50ppm WUC - POS Terminal	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$2,814.00 \$562.00 \$562.00	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00 \$2,814.00 \$562.00 \$2,252.00 \$0.00		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010 Back Office BO-001 BO-002 BO-003 BO-004 Customer : CS-001 CS-002 CS-003 CS-004 FOC and Sy TO-001 TO-002 TO-003 TO-004	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200 2 System Service Center WUC - Dell Desktop Mid-Range WUC - Dell Monitor - Mid Range WUC - Laser Printer min 50ppm WUC - POS Terminal	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$2,814.00 \$562.00 \$562.00	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00 \$2,814.00 \$562.00 \$2,252.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010 Back Office BO-001 BO-002 BO-003 BO-004 Customer : CS-001 CS-002 CS-003 CS-004 FOC and Sy TO-001 TO-002 TO-003 TO-004	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200  2 System  Service Center WUC - Dell Desktop Mid-Range WUC - Laser Printer min 50ppm WUC - POS Terminal sstem Monitoring	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$2,814.00 \$562.00 \$562.00	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00 \$2,814.00 \$562.00 \$2,252.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00		
Roadside I RS-001 RS-002 RS-003 RS-004 RS-005 RS-006 RS-007 RS-008 RS-009 RS-0010 Back Office BO-001 BO-002 BO-003 BO-004 Customer : CS-001 CS-002 CS-003 CS-004 FOC and Sy FO-001 FO-002 FO-003 FO-004 Access Cor	VES camera - Kapsch VRX VES Illuminator - Kapsch VR-X External Illuminator Roadside controller - Corvalent Inductive loop array (AVC) - Nortech Loop Array Inductive loop controller (AVC) - Nortech IDP608 x86 carrier Overhead laser scanner - SICK LMS511 CCTV camera - Pelco IXE20DN12-EAD Uninterruptable power supply - Eaton_9170PLFXA Network Router - Cisco 3750X-48 Network Switch - RuggedComRSG2200 - System  Service Center WUC - Dell Desktop Mid-Range WUC - Laser Printer min 50ppm WUC - POS Terminal sstem Monitoring	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Qty	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$2,814.00 \$562.00 \$562.00 \$2,252.00	\$12,481.89 \$2,820.53 \$10,271.39 \$4,059.71 \$2,407.46 \$8,086.78 \$2,041.67 \$20,945.72 \$10,596.67 \$4,872.33 \$0.00 \$0.00 \$0.00 \$0.00 \$562.00 \$562.00 \$2,252.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00		

Total Major Spare Parts Price Year 5		FORM G-17 Major Spare Parts								
Total No. of   Unit of Measure   Unit Price	Jtem No.	Item Description		Unit of Measure	Unit Price	Total Price Ye				
Item No.   Item No.   Item Description   Unit of Measure   Unit Price	Total M	lajor Spare Parts Price Year 5				\$108,972.15				
RS-001   VES camera - Kapsch VRX   1	Item No.	Item Description	The second secon	Unit of Measure	Unit Price	Total Price Ye				
NS-002   VES Illuminator - Kapsch VR-X External Illuminator	Roadside I	Equipment								
Readside controller - Corvalent   1	RS-001	VES camera - Kapsch VRX	1	Qty	\$12,856.35	\$12,856.35				
1	RS-002	VES Illuminator - Kapsch VR-X External Illuminator	1	Qty	\$2,905.14	\$2,905.14				
RS-005   Inductive loop controller (AVC) - Nortech IDP608 x86 carrier   1	RS-003	Roadside controller - Corvalent	1	Qty	\$10,579.54	\$10,579.54				
1	RS-004	Inductive loop array (AVC) - Nortech Loop Array	1	Qty	\$4,181.50	\$4,181.50				
SS-007   CCTV camera - Pelco IXE20DN12-EAD   1   Clty   S2,102.92   SS-008   Uninterruptable power supply - Faton .9170PLFXA   1   Clty   S21,574.09   SS-009   Network Router - Clsos .750X-48   1   Clty   S10,914.57   SS-0010   Network Router - Clsos .750X-48   1   Clty   S5,018.50   St-009   Network Router - Clsos .750X-48   1   Clty   S5,018.50   St-009   Network Switch - RuggedComRSG2200   1   Clty   S5,018.50   St-0010   St-0010   Clty   S5,018.50   St-0010   Clty   S5,018.50   St-0010   Clty   S5,018.50   St-0010   Clty   S5,018.50   St-0010   Clty   S2,898.00   Clty   S2,898.00   Clty   S2,898.00   Clty   S2,898.00   Clty   S2,898.00   Clty   S5,003   WUC - Dell Monitor - Mid Range   1   Clty   S5,790.00   Clty   S5,003   WUC - Laser Printer min Soppm   1   Clty   S5,790.00   Clty   S5,003   WUC - Laser Printer min Soppm   1   Clty   S2,330.00   Clty   S2,330.00   Clty   S2,330.00   Clty   Clty   S2,330.00   Clty   Clty   S2,330.00   Clty   S2,330	RS-005	Inductive loop controller (AVC) - Nortech IDP608 x86 carrier	1	Qty	\$2,479.69	\$2,479.69				
National Color	RS-006	Overhead laser scanner - SICK LMS511	1	Qty	\$8,329.38	\$8,329.38				
Network Router - Cisco 3750X-48	RS-007	CCTV camera - Pelco IXE20DN12-EAD	1	Qty	\$2,102.92	\$2,102.92				
SE-0010   Network Switch - RuggedComRSG2200   1   Qty   \$5,018.50	RS-008	Uninterruptable power supply - Eaton_9170PLFXA	1	Qty	\$21,574.09	\$21,574.09				
Sack Office System	RS-009	Network Router - Cisco 3750X-48		Qty	\$10,914.57	\$10,914.57				
30-001	RS-0010	Network Switch - RuggedComRSG2200	1	Qty	\$5,018.50	\$5,018.50				
30-002	Back Office	e System								
30-003	BO-001					\$0.00				
Customer Service Center   Customer   Customer Service Center   Custo	30-002					\$0.00				
Customer Service Center	30-003					\$0.00				
CS-001   WUC - Dell Desktop Mid-Range   1	30-004					\$0.00				
CS-002   WUC - Dell Monitor - Mid Range	Customer	Service Center								
Color   Colo	CS-001	WUC - Dell Desktop Mid-Range	1	Qty	\$2,898.00	\$2,898.00				
CS-004   WUC - POS Terminal   1	CS-002	WUC - Dell Monitor - Mid Range	1	Qty	\$579.00	\$579.00				
OC and System Monitoring	CS-003	WUC - Laser Printer min 50ppm	1	Qty	\$579.00	\$579.00				
10-002   10-003   10-004   10-005   1	CS-004	WUC - POS Terminal	1	Qty	\$2,320.00	\$2,320.00				
TO-002	TOC and Sy	ystem Monitoring								
TO-003	TO-001					\$0.00				
CO-004   CCCVC amera - Cohu 3930HD	TO-002					\$0.00				
Access Control and CCTV AC-001	ГО-003					\$0.00				
CCTV camera - Cohu 3930HD	O-004					\$0.00				
AC-002   DVR Server - Pelco Endura NSM5200   1   Qty   \$23,185.00     AC-003	Access Cor	ntrol and CCTV								
Total Major Spare Parts Price Year 6	AC-001	CCTV camera - Cohu 3930HD	1	Qty	\$1,739.00	\$1,739.00				
Item No.   Item Description   Total No. of Unit of Measure   Unit Price   Total No. of Units   Unit of Measure   Unit Price   Total No. of Units   Unit of Measure   Unit Price   Total No. of Unit Price   To	AC-002	DVR Server - Pelco Endura NSM5200	1	Qty	\$23,185.00	\$23,185.00				
Item No.   Item Description	AC-003					\$0.00				
Item No.   Item Description   Total No. of Unit of Measure   Unit Price   Total No. of Unit Price Indicate   Total No. of Unit Price   Total No. of Unit Price Indicate   Total No. of Unit Price   Total No. of						\$0.00				
Control   Cont	Total Ma	ajor Spare Parts Price Year 6				\$112,241.68				
St.   Oot   VES camera - Kapsch VRX   1	Item No.	Item Description		Unit of Measure	Unit Price	Total Price Yea				
SC-002   VES Illuminator - Kapsch VR-X External Illuminator   1   Qty   \$2,992.30	oadside E									
S-003   Roadside controller - Corvalent   1   Qty   \$10,896.92	RS-001	VES camera - Kapsch VRX	1	Qty	\$13,242.04	\$13,242.04				
1	RS-002	VES Illuminator - Kapsch VR-X External Illuminator	1	Qty	\$2,992.30	\$2,992.30				
S-005   Inductive loop controller (AVC) - Nortech IDP608 x86 carrier   1   Qty   \$2,554.08     S-006   Overhead laser scanner - SICK LMS511   1   Qty   \$8,579.27     S-007   CCTV camera - Pelco IXE20DN12-EAD   1   Qty   \$2,166.01     S-008   Uninterruptable power supply - Eaton_9170PLFXA   1   Qty   \$22,221.31     S-009   Network Router - Cisco 3750X-48   1   Qty   \$11,242.00     S-0010   Network Switch - RuggedComRSG2200   1   Qty   \$5,169.05     S-0010   S-0010   O-001   O-002     S-0003   O-004   O-004   O-004     S-0004   S-0006   O-004   O-004     S-0007   S-0008   O-004   O-004     S-0008   O-0008   O-0008   O-0004     S-0008   O-0008   O-0008     S-0008   O-0008   O-0008     S-0008   O-0008   O-0008     S-0008   O-0008   O-0008     S-0009   O-0008   O-0008     S-0009   O-0008   O-0008     S-0009   O-0009     S-0009   O-0009	RS-003	Roadside controller - Corvalent	1	Qty	\$10,896.92	\$10,896.92				
S-006   Overhead laser scanner - SICK LMS511   1   Qty   \$8,579.27     S-007   CCTV camera - Pelco IXE20DN12-EAD   1   Qty   \$2,166.01     S-008   Uninterruptable power supply - Eaton_9170PLFXA   1   Qty   \$22,221.31     S-009   Network Router - Cisco 3750X-48   1   Qty   \$11,242.00     S-0010   Network Switch - RuggedComRSG2200   1   Qty   \$5,169.05     S-0010   S-0010     S-0010     S-0010   S-0010   S-0010     S-0010   S-0010   S-0010     S-0010   S-0010   S-0010     S-0010   S-0010   S-0010     S-0010   S-0010   S-0010     S-0010   S-0010   S-0010     S-0010   S-0010   S-0010     S-0010   S-0010   S-0010     S-0010   S-0010     S-0010   S-0010   S-0010   S-0010     S-0010   S-0010   S-0010   S-0010     S-0010   S-0010   S-001	S-004		1	Qty	\$4,306.95	\$4,306.95				
S-007   CCTV camera - Pelco   IXE20DN12-EAD   1   Qty   \$2,166.01	S-005	Inductive loop controller (AVC) - Nortech IDP608 x86 carrier	1	Qty	\$2,554.08	\$2,554.08				
S-008   Uninterruptable power supply - Eaton_9170PLFXA   1   Qty   \$22,221.31	S-006	Overhead laser scanner - SICK LMS511	1	Qty	\$8,579.27	\$8,579.27				
S-009 Network Router - Cisco 3750X-48 1 Qty \$11,242.00   S-0010 Network Switch - RuggedComRSG2200 1 Qty \$5,169.05   ack Office System	S-007	CCTV camera - Pelco IXE20DN12-EAD	1	Qty		\$2,166.01				
S-0010 Network Switch - RuggedComRSG2200 1 Qty \$5,169.05 ack Office System O-001	S-008	Uninterruptable power supply - Eaton_9170PLFXA	1	Qty	\$22,221.31	\$22,221.31				
ack Office System	S-009	Network Router - Cisco 3750X-48	1	Qty		\$11,242.00				
ack Office System  O-001  O-002  O-003  O-004	S-0010	Network Switch - RuggedComRSG2200	1	Qty	\$5,169.05	\$5,169.05				
O-002 O-003 O-004	ack Office	System								
O-003 O-004	O-001					\$0.00				
0-004	0-002					\$0.00				
	O-003					\$0.00				
ustomer Service Center	0-004					\$0.00				
	ustomer S	Service Center								
S-001 WUC - Dell Desktop Mid-Range 1 Qty \$2,985.00	S-001	WUC - Dell Desktop Mid-Range	1	Qty	\$2,985.00	\$2,985.00				

1000000	M	ajor Spare Parts	ata 12- Line		The second second
Item No.	Item Description	Total No. of Units	Unit of Measure	Unit Price	Total Price Yea
CS-002	WUC - Dell Monitor - Mid Range	1	Qty	\$596.00	\$596.00
CS-003	WUC - Laser Printer min 50ppm	1	Qty	\$596.00	\$596.00
CS-004	WUC - POS Terminal	1	Qty	\$2,390.00	\$2,390.00
TOC and Sy	ystem Monitoring				
TO-001					\$0.00
TO-002					\$0.00
TO-003					\$0.00
TO-004					\$0.00
Access Cor	atrol and CCTV				
AC-001	CCTV camera - Cohu 3930HD	1	Qty	\$1,791.00	\$1,791.00
AC-002	DVR Server - Pelco Endura NSM5200	1	Qty	\$23,881.00	\$23,881.00
AC-003					\$0.00
AC-004					\$0.00

Year Definition:

Startup Operations: Tolling Readiness to 12 months after Tolling Readiness

Steady State Operating (Year 2) - 12 months after Tolling Readiness to 24 months after Tolling Readiness

Steady State Operating (Year 3) - 24 months after Tolling Readiness to 36 months after Tolling Readiness

Steady State Operating (Year 4) - 36 months after Tolling Readiness to 48 months after Tolling Readiness

Steady State Operations (Year 5) - 48 months after Tolling Readiness to 60 months after Tolling Readiness

Steady State Operations (Year 6) - 60 months after Tolling Readiness to 72 months after Tolling Readiness

Steady State Operations (Year 7) - 72 months after Tolling Readiness to 84 months after Tolling Readiness; if the end of the TCS Operations and Maintenance Term occurs after the 84th month, the Joint Board shall continue to pay for Operations and Maintenance on a monthly basis at the rate specified for Year 7.

	FORM G-18 Maintenance of Traffic										
Item No.	Item Description	Total No. of Units	Unit of Measure	Unit Price through Tolling Readiness	Unit Price Year 1	Unit Price Year 2	Unit Price Year 3	Unit Price Year 4	Unit Price Year 5	Unit Price Year 6	Unit Price Year 7
MOT-001	Day Time (6am til 6 pm)	1	Equipment Lane	\$550	\$567	\$584	\$601	\$620	\$638	\$657	\$677
MOT-002	Evening and Overnight Time (6pm to 6 am)	1	Equipment Lane	\$825	\$850	\$876	\$902	\$929	\$957	\$986	\$1,015
MOT-003	Weekends (Fri 6pm to Mon 6am)	1	Equipment Lane	\$1,100	\$1,133	\$1,167	\$1,202	\$1,239	\$1,276	\$1,314	\$1,353
МОТ-004	Item Description	Total No. of Units	Unit of Measure	Unit Price through Tolling Readiness	Unit Price Year 1	Unit Price Year 2	Unit Price Year 3	Unit Price Year 4	Unit Price Year 5	Unit Price Year 6	Unit Price Year 7
MOT-005	Day Time (6am til 6 pm)	2 (traffic lanes or 1 traffic lane and 1 shoulder)	Equipment Lanes	\$688	\$709	\$730	\$752	\$774	\$798	\$821	\$846
MOT-006	Evening and Overnight Time (6pm to 6 am)	2 (traffic lanes or 1 traffic lane and 1 shoulder)	Equipment Lanes	\$1,032	\$1,063	\$1,095	\$1,127	\$1,161	\$1,196	\$1,232	\$1,269
MOT-007	Weekends (Fri 6pm to Mon 6am)	2 (traffic lanes or 1 traffic lane and 1 shoulder)	Equipment Lanes	\$1,375	\$1,417	\$1,459	\$1,503	\$1,548	\$1,595	\$1,642	\$1,692

Year Definition:

Startup Operations (Year 1): Tolling Readiness to 12 months after Tolling Readiness

Steady State Operations (Year 2) - 12 months after Tolling Readiness to 24 months after Tolling Readiness

Steady State Operations (Year 3) - 24 months after Tolling Readiness to 36 months after Tolling Readiness

Steady State Operations (Year 4) - 36 months after Tolling Readiness to 48 months after Tolling Readiness

Steady State Operations (Year 5) - 48 months after Tolling Readiness to 60 months after Tolling Readiness

Steady State Operations (Year 6) - 60 months after Tolling Readiness to 72 months after Tolling Readiness

Steady State Operations (Year 7) - 72 months after Tolling Readiness to 84 months after Tolling Readiness; if the end of the TCS Operations and Maintenance Term occurs after the 84th month, the Joint Board shall continue to pay for Operations and Maintenance on a monthly basis at the rate specified for Year 7.

## **EXHIBIT CC**

## **PAYMENT MILESTONES**

## 1. Purpose

The following section details the scope of work for the Payment Milestones listed in the Price Sheets (Forms G-1 through G-17) included in Exhibit C to the Agreement. The descriptions are intended to be general in nature and are not intended to define compliance with the Technical Requirements and the other requirements of the Contract Documents. Nothing contained herein shall limit, waive or release the Toll System Provider from full compliance with the Technical Requirements and other requirements of the Contract Documents or its obligation to provide a fully functional TCS in accordance with the Contract Documents and the Technical Requirements.

The TSP may invoice on a monthly basis for each of the Payment Milestones listed below as completion of those Payment Milestones is reached. Intermediate and cumulative summary Payment Milestones shall not be invoiced separately but are shown to illustrate the cumulative price of the individual Payment Milestones comprising major categories of the Work.

	Payment Milestone	Description
Item No RS-009	Intermediate Summary	Total Roadside Price (RS-009) = RS-001+RS-002+RS-003+RS-004+RS-005+RS-006+RS- 007+RS-008
Payment Milestone RS-001	Roadside System Plan and Documentation	This Payment Milestone shall include any and all work necessary to develop and deliver the Roadside System Plan and Documentation. The Roadside Systems Plan and Documentation shall contain, at a minimum, an overview of the Roadside System, a description of the major tasks involved in the integration, including the overall resources that are needed to fully support the installation Work. The Roadside System Plan and Documentation shall describe the roadside system design; roadside and CCTV related communications system components, Hardware and Software; installations plans and procedures for field installation, mounting requirements for readers, antennas, and CCTV related components; cable tray plans, cut sheets and installation plans; and any other Hardware, enclosures, communications or cabinet space required; power requirements for all roadside and CCTV related equipment; suggested security plans

Indiana Finance Authority/Joint Board LSIORB Toll Services Project

Exhibit CC Page 1 Exhibits to Toll Services Agreement Execution Version

	Payment Milestone	Description
		and/or keying for cabinets and CCTV equipment; electrical wiring plans and cabling plans and diagrams to support network, CCTV, and roadside equipment and their operations; manufacturers data, cut sheets, any submittals, maintenance instructions, manufacturer's warranty information for all roadside and CCTV related equipment; an equipment list of all equipment necessary to provide an operational Roadside System and operational CCTV System; and maintenance of traffic plans and coordination documents to support installation. The Roadside Systems Plan and Documentation shall describe all interfaces required for system implementation, including an outline of the different types of integration tests conducted to ensure that the Roadside equipment and CCTV System and equipment is designed and operates according to the RFP and the Contract Documents. The Roadside System Plan and Documentation shall identify the roles and responsibilities of each TSP internal group responsible for the Project.
		The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the Roadside System Plan and Documentation.
Payment Milestone	Roadside Hardware Equipment	This Payment Milestone shall include all ordering, procuring, provisioning and delivering of necessary Hardware, conduits, wiring, cabling, brackets, enclosures, communications equipment, Software, and any critical monitoring equipment required for readers, antennas, and CCTV related equipment to make the Roadside System and CCTV Systems operational and meet the requirements of the Contract Documents.
RS-002	Purchase and Delivery	The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the Hardware equipment purchase and delivery manifest and, if it so elects, the Joint Board's visible inspection of the equipment at the approved Warehouse Facility and confirmation of delivery of the equipment.
Payment Milestone RS-003	Roadside Software License	This Payment Milestone shall include all work necessary to acquire and complete all Software Licenses (COTS or Customer) and shall include all Software licenses and support renewals for the Roadside System and associated roadside equipment, including active licenses and support renewals for the Roadside System and associated roadside equipment through the duration of the Contract Term.

	Payment Milestone	Description
		The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of a current written inventory of all Software licenses that are in good standing.
Payment	Roadside Onsite	This Payment Milestone shall include all work necessary to integrate, install and test the Roadside System and the associated roadside equipment necessary to achieve Revenue Service.
Milestone RS-004	Equipment Installation	The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the installed and commissioned equipment.
Payment Milestone RS-005	Roadside Integration	This Payment Milestone shall include all activities necessary to integrate the functional components of the Roadside System and the associated roadside equipment into the TSP Software application. This shall include all work necessary to install, configure, test and configure, and make operational, the Roadside System as identified in the Roadside System Plan and Documentation.
		The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the Baseline Test without any "Priority 1 issues" as defined in TR Section TP.
Payment Milestone RS-006	Roadside Training	This Payment Milestone shall include all work necessary to (i) train the roadside maintenance staff, the Joint Board and its representatives, including any training that is required or that is necessary to be provided by System Suppliers and development experts to operate and maintain the Roadside System and its associated equipment and (ii) provide the roadside maintenance staff and the Joint Board and its representatives with training manuals, including online training systems and/ or online training manuals if available.
		The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the training sessions, delivery of training manuals, and review and approval of the training manuals.
Payment Milestone	Roadside Go- Live	This Payment Milestone shall include all work necessary for Roadside Go-Live and shall include: a) successful completion and Joint Board review and acceptance of the System Production Readiness Test, b)

	Payment Milestone	Description
RS-007		delivery to the Joint Board of an accurate and complete inventory of all Roadside System equipment delivered and installed, c) a complete and accurate listing of Major Spare Parts in the Major Spare Parts Inventory and the location thereof, d) a preventive maintenance schedule and the corresponding components and location, and e) a set of current maintenance training manuals.
		The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of all items described above.
		This Payment Milestone shall include work necessary for the TSP to provide System As-Built Documentation. The TSP shall provide all details and plans consistent with Good Industry Practices and professional requirements.
Payment Milestone RS-008	Roadside System As-Built Documentation	The TSP shall provide a binder containing equipment installation and maintenance manuals, warranty information, etc. for all installed equipment, and provide electronic (soft) copies of all such materials on CD or DVD with the binder.
		The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of all System As-Built Documentation.
Item No. RS-017	Intermediate Summary	Total Network Price (RS-017)=RS-011+RS-012+RS-013+RS-014+RS-015+RS-016
Payment Milestone RS-011	Network System Plan and Documentation	This Payment Milestone shall include all work necessary to develop the Network System Plan and documentation as described in the TR Section TP and shall contain an overview of the Roadside Network System. The Network System Plan and documentation shall describe the major tasks involved in the network installation and integration, including all resources that are needed to fully support the installation and integration effort. The Network System Plan and documentation shall describe the network design, toll related network components, and all necessary Hardware and Software. It shall also provide input into the network design and confirming network communications requirements for the TCS. The Network System

Indiana Finance Authority/Joint Board LSIORB Toll Services Project

Exhibit CC Page 4 Exhibits to Toll Services Agreement Execution Version

	Payment Milestone	Description
		Plan and documentation shall describe all interfaces required for system implementation, including an outline of the different types of integration tests conducted to ensure that the roadside network equipment is designed and operates according to the Technical Requirements and other Contract Documents. The Network System Plan shall identify the roles and responsibilities of each TSP internal group responsible on this Project. The Network System Plan and documentation shall provide installation plans and procedures for field installation and testing. It shall also include an equipment list of all equipment necessary to provide an operational Network System.
		The TSP may invoice the Joint Board for payment upon the Joint Board's review and written approval of the Network System Plan and documentation.
Payment Milestone RS-012	Network Hardware Equipment Purchase and	This Payment Milestone shall include all work necessary for Hardware equipment purchase and delivery pricing including onsite roadside Network System equipment procurement, manufacture, fabrication, preparation, coordination and installation, satisfactory completion of required inspections by the TSP and Joint Board, inspection punch list, satisfactory completion of all punch list items, and final installation completion reports.
110 022	Delivery	The TSP may invoice for this Payment Milestone upon the Joint Board review and written approval of the all items described in this Payment Milestone, delivery of a manifest of such items, Joint Board visible inspection of the equipment at the Warehouse Facility and confirmation of delivery of the equipment.
Payment Milestone RS-013	Network Software License	This Payment Milestone shall include all work necessary to acquire and complete all Software licenses and shall include all Software licenses and support renewals for the roadside equipment network and associated equipment, including active licenses and support renewals for the roadside Network System and associated roadside equipment through the duration of the Contract Term.
		The TSP may invoice for this Payment Milestone after the Joint Board review and written approval a current

	Payment Milestone	Description
		written inventory of all Software licenses that are in good standing.
Payment Milestone RS-014	Network Onsite Equipment Installation	This Payment Milestone shall include all work necessary to integrate, install and test the roadside Network System; its associated equipment, and all functional components into the TSP Software applications. This includes all activities, testing and inspections as identified in the Network System Plan and documentation as described in TR Section TP. This Payment Milestone includes all installation/setup of the network at the Toll Gantries and at the BOS/CSC.
		The TSP may invoice for this Payment Milestone upon the Joint Board review and written approval of installed and commissioned network equipment.
Payment Milestone RS-015	Network Training	This Payment Milestone shall include all work necessary to (i) train the network maintenance staff, the Joint Board and its representatives, including any training that is required or that is necessary to be provided by System Suppliers and development experts to operate and maintain the roadside network and its associated equipment and (ii) provide the maintenance staff and the Joint Board and its representatives with training manuals, including online training systems and/or online training manuals if available.
		The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the training sessions, delivery of any training manuals, and review and approval of the training manuals.
Payment Milestone	Network System As-Built	This Payment Milestone shall include all work necessary to prepare and submit a binder containing network equipment installation and maintenance manuals, warranty information, etc. for all installed Network System equipment and provide electronic (soft) copies of all such materials on CD or DVD with the binder.
RS-016	Documentation	The TSP may invoice for this Payment Milestone after the Joint Board's review and written approval of all items described in this Payment Milestone and all System As-Built Documentation.

	Payment Milestone	Description
Item No. RS-024	Intermediate Summary	Total Generator Price (RS-024)= RS-019+RS-020+RS-021+RS-022+RS-023
Payment Milestone RS-019	Generator Plans, Cut Sheets and Documentation	This Payment Milestone shall include all necessary services to develop and provide to the Joint Board, in written and soft copy in native format, submittals, reports, lane, network and communications diagrams, cut sheets shop drawings, inventory numbers and other such information, as it relates to emergency generators. The TSP shall provide a tentative bill of materials. The Hardware design shall identify how the Hardware components meet the Technical Requirements and Contract Documents, shall tabulate power and environmental requirements, installation requirements, and servicing requirements, and shall indicate how the function of the Hardware component shall be monitored and tested.  The TSP may invoice for this Payment Item after the Joint Board's review and written approval of all items described in this Payment Milestone.
Payment Milestone RS-020	Generator Equipment Purchase and Delivery	This Payment Milestone shall include all necessary work to procure, purchase and deliver one (1) new generator per tolling point and at the following locations: Customer Service Center (if required), and each Walk-Up Centers (Indiana and Kentucky). Each generator shall be accompanied by:  • power panel and automatic transfer switch  • backup generator  • UPS  • provisions for natural gas to the gantry sites  The TSP may invoice for this Payment Milestone after the Joint Board's review and written approval of the generators inspected at the approved Warehouse Facility.
Payment Milestone RS-021	Generator Onsite Equipment	This Payment Milestone shall include all necessary work to deliver and install one (1) new generator per tolling point and at the following locations: Customer Service Center (if required), and each Walk-Up

Indiana Finance Authority/Joint Board LSIORB Toll Services Project

Exhibit CC Page 7 Exhibits to Toll Services Agreement Execution Version

	Payment Milestone	Description
	Installation	Centers (Indiana and Kentucky).
		The TSP may invoice for this Payment Milestone after the Joint Board's review and written approval of the installed, tested and commissioned generator inspected at the respective sites.
Payment Milestone RS-022	Generator Startup and Training	This Payment Milestone shall include all work necessary for the generator startup and training and shall include but not be limited to training with respect to the regularly scheduled maintenance requirements, operating sequence, smart alarming, and fueling of the generators. The TSP shall ensure that the facility maintenance staff, the Joint Board and its representatives are trained by System Suppliers and development experts, and provided with equipment manufacturer installation manuals and operation and maintenance manuals including online training systems and/or online training manuals, if available. The TSP shall provide a training report and the required manuals at the completion of training. All ancillary items to monitor the generator with camera or other support items shall be included in this pay item.  The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the generator startup per the manufacturer's recommendation, completion of the generator training sessions, delivery of training manuals, and review and approval of the training manuals.
Payment Milestone RS-023	Generator Equipment As- Built Documentation	This Payment Milestone shall include all work necessary to develop, maintain, and deliver equipment Generator As-Built Documentation for the generators at each tolling point, at the Customer Service Center (if required) and each Walk-Up Centers (Indiana and Kentucky). It shall also include, but not be limited to, Hardware schematics, Software design flows, operations manuals, training manuals, and descriptions. The TSP shall maintain the Interface Control Documents (ICDs) as a part of construction submittals for generator, transfer switch, and propane tank to facilitate communications.  The TSP may invoice for this Payment Milestone after the Joint Board's review and written approval of the Generator As-Built Documentation described in this Payment Milestone.

	Payment Milestone	Description
ltem No. RS-028	Intermediate Summary	Total Changeable Message Sign (CMS) and Installation Price (RS-028)=RS-026+RS-027
Payment Milestone	Changeable Message Sign (CMS) Equipment	This Payment Milestone shall include all ordering, procuring, provisioning and delivering of necessary Hardware, conduits, wiring, cabling, brackets, enclosures, communications equipment, Software, and any critical monitoring equipment required for the changeable message signs to make the CMS operational and meet the requirements of the Contract Documents.
RS-026	Purchase and Delivery	The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the Hardware equipment purchase and delivery manifest and, if it so elects, the Joint Board's visible inspection of the equipment at the approved Warehouse Facility and confirmation of delivery of the equipment.
Payment Milestone	Onsite Equipment Installation of	This Payment Milestone shall include all work necessary to integrate, install and test the changeable message sign and the associated equipment necessary to make the CMS operational and functional.
RS-027	Changeable Message Sign (CMS)	The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the installed and commissioned CMS equipment.
Item No. RS-029	Cumulative Summary	Total Roadside, Network, Generator, and CMS Price (RS-029)=RS-009+RS-017+RS-024+RS-028
Item No. BO-008	Intermediate Summary	Total Back Office System Price (BO-008)= BO-001+BO-002+BO-003+BO-004+BO-005+BO-006+BO-007
Payment Milestone BO-001	Business Rules and Operational Requirements	This Payment Milestone shall include all work necessary to develop, update and configure the TCS Business Rules for the BOS. This Payment Milestone includes all work required to define, develop and configure a set of rules established by the Tolling Body that details (i) how the Toll Collection System shall respond to

	Payment Milestone	Description
		various operating situations that occur during the toll collection process based on business case and policy decisions, and (ii) the treatment of those transactions throughout the account management and maintenance and violation enforcement phases of a transaction.
		The TSP shall submit documentation of the Business Rules and any updates that reflect how the approved Business Rules have been implemented into the TCS.
		The TSP may invoice for this Payment Milestone after the Joint Board's review and written approval of the documentation (Business Rules) described in this Payment Milestone.
Payment Milestone BO-002	Back Office System Plan and Documentation	This Payment Milestone shall include the Back Office System Plan and documentation as described in the TR Section TP and shall contain an overview of the Back Office System. The Back Office System Plan and documentation shall describe the major tasks involved in the Back Office System installation and integration, including all resources that are needed to fully support the installation and integration effort. This Payment Milestone shall include all work necessary to develop, configure and implement the TCS BOS configuration as referenced in the TR Section TP including but not limited to: component configurations, drivers and switch settings, patch and release management. The TSP shall submit to the Joint Board, in hard copy and electronic copy, documentation identifying all configuration settings, and any subsequent changes using the configuration management system.
		This Payment Milestone includes all work necessary to develop and provide interface configurations for all TCS BOS components and tasks, including but not limited to the following items:
		<ul> <li>Account management, initiation and maintenance</li> <li>Automatic noticing and correspondence production and tracking</li> <li>Transponder inventory and tracking</li> <li>Interactive and fully integrated customer website, including a mobile device website</li> <li>IVR, call management, and reporting, including Walk-Up Centers connectivity and interaction</li> </ul>

	Payment Milestone	Description
		Operational statistics for key performance indicators
		Audit, reconciliation, and reporting, and
		Customer management and marketing
		The TSP shall submit to the Joint Board as-built internal interface configuration documents that include the current settings.
		This Payment Milestone includes all work necessary to develop and provide interface configurations for items including but not limited to the following:
		Retail toll account payment and Transponder sales
		Cash replenishment alternatives
		Interoperable agencies and entities supporting interagency operations
		Financial Institutions
		<ul> <li>Department of Motor Vehicles in Kentucky and Indiana and any other state identified by the Joint Board, and</li> </ul>
		Other sources of license plate identification
		The TSP shall submit to the Joint Board as-built external interface configuration documents that include the current settings.
		The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the Toll Collection System Configuration documentation as described in this Payment Milestone. The TSP may invoice this Payment Milestone upon the Joint Board's review and written approval of all external and internal interface configurations as described in this Payment Milestone.
Payment	Intermediate	This Payment Milestone shall include all work necessary to support an intermediate TCS BOS site visit and
Milestone	BOS Site Visit	TCS BOS configuration observation by the Joint Board in its current state at a time determined by the Joint

	Payment Milestone	Description
BO-003	and Configuration Observation	Board. This Payment Milestone shall include all Work in support of the BOS site visit during the observation period(s). The TSP shall provide adequate staffing to answer questions and shall provide guidance, reports, and demonstrate items identified in the Technical Requirements.
		The TSP may invoice for this Payment Milestone after the Joint Board's completion of a BOS site visit and demonstration of the current system configuration.
Payment Milestone BO-004	BOS Software Licensing	This Payment Milestone shall include all work required to procure, document and implement all Software licenses that are necessary for the BOS. This BOS Software licensing Payment Milestone shall include the execution and delivery to the Joint Board of a Software license agreement or sublicense between the licensor or sublicensor and the Joint Board or its designee(s), in form and substance satisfactory to the Joint Board, granting a perpetual, fully paid license to the Software for all equipment, Software and firmware related to the Toll Collection System.  The TSP may invoice for this Payment Milestone after the Joint Board's review and written approval of a current written inventory of all Software licenses that are in good standing and delivery of all Software
		licenses that are required with respect to the BOS TCS.
Payment Milestone	BOS Customer Payment Channels	This Payment Milestone shall include all work to develop and configure customer payment channels including, but not limited to credit card, debit card, automated clearing house, money order, cashier's check, traveler's checks, cash and other cash equivalents, to develop and configure the means to track payments from the various customer payment channels, and to establish methods of payment by notice and posting to Unregistered Video or Violation accounts.
BO-005	Approval and Acceptance	The TSP may invoice for this Payment Milestone after all required payment channels are developed and configured in the system as provided in this Payment Milestone, and the Joint Board's review and written approval of all such payment channels and delivery of TSP's documentation confirming the payment channels are configured in the BOS as required by the Technical Requirements and other Contract

	Payment Milestone	Description
		Documents.
Payment Milestone BO-006	Training for all BOS Operations	This Payment Milestone shall include all work necessary to (i) train the BOS maintenance staff, the Joint Board and its representatives, including any training that is required or that is necessary to be provided by system suppliers and development experts to operate and maintain the BOS and its associated equipment and (ii) provide the BOS staff and the Joint Board and its representatives with user manuals for the BOS operations, including online training systems and/or online training manuals if available. The TSP shall provide to the Joint Board a training report that demonstrates staff was and is fully and properly trained, and invite the Joint Board to witness the training.  The TSP may invoice the Joint Board for this Payment Milestone upon the Joint Board's review and written approval of the training sessions and the training reports and all required items mentioned above
		This Payment Milestone shall include all work necessary to: a)prove that all performance measures are
Payment Milestone BO-007	BOS Go-Live	compliant with TR Section PR, b) provide a complete inventory of all BOS equipment required for the TCS, c) provide a complete listing of all Major Spare Parts that are required for the BOS, and confirm procurement of the items required by the Major Spare Parts inventory specified in the Technical Requirements, in the quantities required by the Contract Documents, and indicate where such Spare Parts are located, d) confirmation that a maintenance schedule (for system, operating and applications) patch and release management has been approved by the Joint Board, and e) provide the Joint Board with a complete set of current training, operations, and users manuals.
		The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of items (a)-(e) above.
Item No. BO-12	Intermediate Summary	Total Disaster Recovery Price (BO-12)=BO-10+BO-11

	Payment Milestone	Description
Payment Milestone BO-010	Disaster Recovery System Plan and Failover Documentation	This Payment Milestone shall include any and all work necessary to develop and deliver the Disaster Recovery System Plan and Failover Documentation for the TCS as described in TR Section TP. The Disaster Recovery System Plan and Failover Documentation shall contain an overview of the DR failover plan and a description of the major tasks involved in the failover of the TCS in event of a disaster. The major tasks descriptions shall also identify the human, technological, financial, or other resources needed to fully support the failover efforts. The Disaster Recovery System Plan and Failover Documentation shall describe the DR system design; the location of the DR site, Hardware, Software, and all equipment at the DR site necessary to support failover operations; recovery management procedures for implementing and managing the recovery process; identification of key personnel, by name, email address, location and cell phone contact number directing/coordinating the recovery process; TCS business impact analysis; loss of service continuity; initial systems damage assessment checklist; description of redundant systems and failover processes; emergency contact lists; detailed procedures/processes to be used in the event of complete destruction of the primary facility host site; a recovery plan in the event of a lost gantry at a tolling site (i.e. a temporary lane recovery plan); and training in recovery of processes needed for long-term business and systems continuity and a list of all equipment that must be purchased, procured, or acquired for the use of the Project to implement the disaster recovery and failover.  The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of all the Disaster Recovery System Plan and Failover Documentation.
Payment Milestone BO-011	Disaster Recovery Hardware Equipment Purchase and Delivery	This Payment Milestone shall include all work necessary to include all aspects of identifying, ordering, procuring, delivering, inspecting and testing of necessary Hardware, conduits, wiring, cabling, Hardware, brackets, enclosures, communications equipment, web database or application servers or servers for storage, applications, Software, and any critical monitoring equipment required to be on hand pursuant to the Disaster Recovery System Plan and Failover Documentation is located to ensure the DR system failovers may be implemented as and when needed so that the TCS continues to perform in accordance with and meet the Technical Requirements and all other requirements of the Contract Documents.

	Payment Milestone	Description
		The TSP may invoice the for this Payment Milestone upon the Joint Board's review and written approval of the all items described in this Payment Milestone, delivery of a manifest of such items, and Joint Board visible inspection and confirmation of delivery of the equipment.
Item No. BO-13	Cumulative Summary	Total Back Office System and Disaster Recovery Price (BO-13)=BO-008 + BO-12
Item No. TO-007	Intermediate Summary	Total Toll Operations Center (TOC) Planning Price (TO-007)= TO-001+TO-002+TO-003+TO-004+TO-005+TO-006
Payment Milestone TO-001	MOMS Plan and Documentation	The MOMS plan and documentation shall describe the major tasks involved in the MOMS system development, implementation, installation and integration, including all resources that are needed to fully support the installation effort. This Payment Milestone shall include all work necessary to develop, configure and implement the MOMS as referenced in the TR Section TP, including but not limited to: installation of all Hardware and Software, equipment, desks, furniture, staffing requirements, and associated equipment to successfully monitor the roadway and the Toll Collection System.  The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the TOC System Plan and documentation.
Payment Milestone TO-002	TOC Hardware Equipment Purchase and Delivery	This Payment Milestone shall include procurement and delivery of all necessary conduits, wiring, and cabling, Hardware, brackets, enclosures, communications equipment, Hardware, Software, telecommunications, monitors, desks, chairs, office incidentals, and any critical monitoring equipment required for the Toll Operations Center.  The TSP may invoice the for this Payment Milestone upon the Joint Board's review and written approval of the all items described in this Payment Milestone, delivery of a manifest of such items, and the Joint Board's visible inspection and confirmation of delivery of the equipment.

	Payment Milestone	Description
Payment Milestone TO-003	TOC Software Setup and Installation	This Payment Milestone shall include all work necessary to acquire and complete all Software licenses (COTS or Customer) and shall include all Software licenses and support renewals for the Toll Operations Center equipment and associated toll operations equipment, including systems, tools, firmware, etc. through the duration of the Contract Term.  The TSP may invoice for this Payment Milestone after the Joint Board's review and written approval a current written inventory of all Software licenses that are in good standing.
Payment Milestone TO-004	TOC Onsite Equipment Installation	This Payment Milestone shall include all work necessary to complete the TOC onsite equipment installation, including but not limited to the installation and construction of any necessary facility changes, installation of TOC equipment described in TO-002 in the Technical Requirements and in the Contract Documents. This Payment Milestone shall include setup and configuration of any necessary buildings, equipment pads, access, and any other necessary items to install and operate the Toll Operations Center with the DB Contractor, the Developer and Other Joint Board Contractor(s).  The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the installed, tested and commissioned onsite equipment for the Toll Operations Center.
Payment Milestone TO-005	TOC Training	This Payment Milestone shall include all work necessary for the TOC training and shall include but not be limited to training with respect to the regularly scheduled maintenance requirements, operating sequence, smart alarming, incident management plans and associated notifications, and overall operations of the TOC. The TSP shall ensure that the TOC staff, the Joint Board and its representatives are trained by System Suppliers and development experts, and provided with operation and maintenance manuals including online training systems and/or online training manuals, if available. The TSP shall provide a training report that demonstrates staff was trained; the report shall identify any follow-up training required and proof of training assessments from all students who completed the training.
		The TSP may invoice for this Payment Milestone after the Joint Board's review and written approval of the

	Payment Milestone	Description
		completed training sessions and delivery of training manuals.
Payment Milestone TO-006	TOC System As- Built Documentation	This Payment Milestone shall include all work necessary to develop and submit TOC As Built System Documentation. The TOC system As-Built Documentation shall include but not be limited to, Hardware schematics, Software design flows, operations manuals, training manuals, and descriptions.  The TSP may invoice for this Payment Milestone upon the Joint Board's review and written approval of the TOC As Built System Documentation.
Item No. TO-010	Intermediate Summary	Total TOC Pre-Toll Operations and System Monitoring Price (TO-0010)= TO-009
Payment Milestone TO-009	TOC Pre-Toll Operations and System Monitoring	This Payment Milestone shall include work necessary to setup, operate and provide operational support required for Roadside System Revenue Service. This pay item requires full staffing and training of the Toll Operations Center and preparation for Revenue Service.
	(For 2 months Prior to Revenue Service Date)	The TSP may invoice the Joint Board on a monthly basis after the completion of the services described above and the Joint Board's review and written approval of the previous month's Project Management report.
Item No. TO-0011	Cumulative Summary	Total TOC Planning and TOC Pre-Toll Operations and system Monitoring Price (TO- 0012)=TO-007 + TO-010
Item No. CS-003	Cumulative Summary	Total Customer Service Center (CSC) Pre-Toll Operations Price (CS-003)=CS-001+CS-002
Payment Milestone CS-001	Planning of CSC Prior to Pre-Toll Operations	This Payment Milestone shall include all work to set up the Customer Service Center prior to the Pre-Toll Operations Period. This Payment Milestone shall include completion of all financial, personnel, benefits, management, oversight, acquisition, expansion, equipment, purchases, procurement, commodities, real

	Payment Milestone	Description
		estate, furniture, telephones, headsets, computers, Hardware, Software, licenses, training and training equipment, permits, network or phone expansions services, establishment of ongoing services required for operations, IVR expansion as needed, office incidentals, security requirements, expansion or addition of lockbox operations, etc. to support expanding an existing CSC to support the Project or opening the Project's Customer Service Center prior to the Pre-Toll Operations Period to support a fully functional and operational CSC and comply with the Technical Requirements and requirements of the other Contract Documents.
		The TSP may invoice the Joint Board for this Payment Milestone after completion of setup and planning services, and after the Joint Board has reviewed, approved in writing, inspected and verified that the TSP has achieved Pre-Toll Operations Readiness with respect to the CSC.
Payment Milestone CS-002	Pre-Toll Operations	This Payment Milestone shall include all work to operate, maintain and support the Pre-Toll Operations of the Project Customer Service Center for the Pre Toll Operations Period. This pay item shall include all necessary financial, personnel, benefits, management, oversight, acquisition, expansion, equipment, purchases, procurement, commodities, real estate, furniture, telephones, headsets, computers, Hardware, Software, licenses, training and training equipment, permits, network or phone expansions services, support services as needed, office incidentals, security requirements, expansion or addition of lockbox operations etc. to provide a fully operational CSC with all capabilities mentioned in the Contract Documents. Anticipated required services for the Pre Toll Operations Period are 1) account management and maintenance services, 2) website services, 3) mailroom operations, 4) customer communications through phone, email and or text, 5) interoperability and reciprocity, 6) financial and lockbox operations, 7) transponder inventory and fulfillment 8) quality assurance and quality control, 9) training, 10) management, oversight and personnel services, 11) reporting, 12) security of information, 13) miscellaneous requirements, and 14) equipment in order to successfully establish and open toll patron accounts, fulfill Transponder requests, support marketing and outreach efforts, support customer calls and requests for information, support account management through IVR and website, answer calls regarding

	Payment Milestone	Description
		account information and road opening prior to tolling readiness and the revenue service date.
		The TSP may invoice the Joint Board on a monthly basis after the completion of services for the prior month and Joint Board review and approval of the previous month's Operations and Maintenance Report.
Item No.PM- 003	Intermediate Summary	Total Project Management Price (PM-003)=PM-001+PM-002
Payment Milestone PM-001	Pre-Toll Operations	This Payment Milestone shall include all work required to manage the Project from award of the Contract until the date that TSP achieves Tolling Readiness. This Payment Milestone shall include all compensation to TSP for the oversight of the Project and management of the delivery of the TCS in compliance with all Technical Requirements and other requirements of the Contract Documents. The Contract Price component associated with this Payment Milestone includes all costs associated with project management, project executive staffing, overhead, home office overhead, profit, markup, benefits, support and administrative staffing, document production, schedule documentation, schedule generation, report generation, oversight, incidentals, travel, expenses, planning, organizing, resource allocation, and any other oversight related activities related to the delivery of the TCS by the TSP.  The TSP may invoice the Joint Board for this Payment Milestone on a monthly basis after the Joint Board has reviewed and provided written approval of the previous month's Project Management Report.
Payment Milestone PM-002	Startup Operations (12 months total)	This Payment Milestone shall include all work related to the management of the Project from Tolling Readiness to one year after Tolling Readiness. The Contract Price component associated with this Payment Milestone shall include all compensation to TSP for the oversight of the Project and management of the delivery of the TCS by the TSP. The Contract Price component associated with this Payment Milestone shall include all costs associated with project management, project executive staffing, overhead, home office overhead, profit, markup, benefits, support and administrative staffing, document production, schedule

	Payment Milestone	Description
		documentation, schedule generation, report generation, oversight, incidentals, <b>travel</b> , <b>expenses</b> , planning, organizing, resource allocation, and any other oversight related activities related to the delivery of the TCS by the TSP.
		The TSP may invoice the Joint Board for this Payment Milestone on a monthly basis and after the Joint Board has reviewed and provided written approval of the previous month's Project Management Report.
ltem No. PM-008	Intermediate Summary	Total Planning Document Price (PM-008)=PM-005+PM-006+PM-007
Payment Milestone	0-90 Days After	This Payment Milestone shall include the remaining Plans not included in individual Payment Milestones above which are due to the Joint Board 90 days after NTP and are located in the TR Section TP described as TP-008, TP-009, TP-010, TP-017, TP-018, TP-019 and TP-029.
PM-005		The TSP may invoice the Joint Board for this Payment Milestone upon delivery of all Plans listed above and after Joint Board's review and written approval of all of the Plans.
Payment Milestone	90-180 Days Δfter NTP	This Payment Milestone shall include the Plans not included in individual Payment Milestones above which are due to the Joint Board 180 days after NTP and are located in the TR Section TP described as TP- 004, TP- 005, TP-007, TP-011, TP-012, TP-013, and TP-028.
PM-006		The TSP may invoice the Joint Board for this Payment Milestone upon delivery of all Plans listed above and after Joint Board's review, and written approval of all of the Plans other than the Plan described in TR Section TP-028.
Payment Milestone PM-007	Completion of System	This Payment Milestone shall include the remaining Plans not included in individual Payment Milestones above which are due to the Joint Board at the completion of the System Acceptance Test and are located in the TR Section TP-014.
55,	Acceptance Test	The TSP may invoice the Joint Board for this Payment Milestone upon delivery of the Plan listed above and after

	Payment Milestone	Description
		the Joint Board's review and written approval of the Plan.
Item No. PM-009	Cumulative Summary	Total Project Management and Planning Document Price (PM-009)=PM-003+PM-008
item No. T-007	Cumulative Summary	Total End to End System Test Price (T-007)=T-001+T-002+T-003+T-004+T-005+T-006
Payment	Baseline Test	This Payment Milestone description is located in the Technical Requirements. Please refer to TR Section TP-020 for details and requirements for this Payment Milestone.
Milestone T-001		The TSP may invoice for the Joint Board for this Payment Milestone upon the successful completion of the Baseline Test requirements and after the Joint Board has reviewed and approved in writing both the Baseline Test Plan and the results of a successful Baseline Test.
Payment	Pre-Production Controlled Test	This Payment Milestone description is located in the Technical Requirements. Please refer to TR Section TP-021 for details and requirements for this Payment Milestone.
Milestone T-002		The TSP may invoice the Joint Board for this Payment Milestone upon the successful completion of the Pre-Production Controlled Test requirements and after the Joint Board has reviewed and approved in writing both the Pre-Production Controlled Test Plan and results of a successful Pre-Production Controlled Test.
Payment Milestone	Back Office System Production Readiness Test	This Payment Milestone description is located in the Technical Requirements. Please refer to TR Section TP-022 for details and requirements for this Payment Milestone.
T-003		The TSP may invoice the Joint Board for this Payment Milestone upon the successful completion of the Back Office System Production Readiness Test requirements and after the Joint Board has reviewed and provided its written approval of both the System Production Readiness Test Plan and the results of a successful Back Office

	Payment Milestone	Description
		System Production Readiness Test.
Payment	System Production Readiness Test	This Payment Milestone description is located in the Technical Requirements. Please refer to TR Section TP-023 for details and requirements for this Payment Milestone.
Milestone T-004		For each of the 3 required System Production Readiness Tests, the TSP may invoice the Joint Board for this Payment Milestone upon the successful completion of the System Production Readiness Test requirements and after the Joint Board has reviewed and provided its written approval of both the System Production Readiness Test Plan and the results of a successful System Production Readiness Test.
Payment	Operations Test	This Payment Milestone description is located in the Technical Requirements. Please refer to TR Section TP-0023 for details and requirements for this Payment Milestone.
Milestone T-005		For each of the 4 required Operations Tests, the TSP may invoice the Joint Board for this Payment Milestone upon the successful completion of the Operations Test requirements and after the Joint Board has reviewed and provided its written approval of both the Operations Test Plan and results of a successful Operations Test.
		This Payment Milestone description is located in the Technical Requirements. Please refer to TR Section TP-0024 for details and requirements for this Payment Milestone.
Payment Milestone T-006	System Acceptance Test	The TSP may invoice the Joint Board for this Payment Milestone upon (i) the successful completion of the System Acceptance Test requirements and after the Joint Board has reviewed and provided its written approval of both the System Acceptance Test Plan and results of a successful System Acceptance Test, and (ii) satisfaction of all other conditions to Final Payment of the Total Toll Collection System Capital Price set forth in <a href="Section 12.8.1">Section 12.8.1</a> of the Agreement.

	Payment Milestone	Description
Item No. DM-003	Cumulative Summary	Total Data Mart Price (DM-003)= DM-001 or DM-002, whichever is the higher price
Payment Milestone DM-001	Option 1: Data Mart Copy	This Payment Milestone shall include providing all Hardware, Software, equipment, the installation, labor, installation plan and the technical support necessary for the TSP to provide the Joint Board with a separate copy of the Transaction, account and other system data in the TCS on or before the Revenue Service Date and shall be continuously updated throughout the Contract Term. The Payment Milestone description is located in the Technical Requirements. Please refer to TR Sections SA-050, SA-051, and SA-052.  The TSP may invoice the Joint Board for this Payment Milestone after TSP has completed installation of a separate copy of the Project data and TSP has demonstrated to the Joint Board's satisfaction, as confirmed in writing by the Joint Board, that the Data Mart may be queried and such queries will result in generation of the Joint Board's desired reports.
Payment Milestone DM-002	Option 2: ETL	This Payment Milestone shall include all Hardware, Software, equipment, the installation, labor, installation plan and the technical support for the TSP to allow ETL Software to access the Transaction, account and other system data in the Toll Collection System on or before the Revenue Service Date from both a KYTC and an INDOT data system and shall be continuously updated throughout the Contract Term. This Payment Milestone description is located in the Technical Requirements. Please refer to TR Sections SA-050, SA-051 and SA-052.  The TSP may invoice the Joint Board for this Payment Milestone upon TSP's demonstration to the Joint Board's satisfaction, as confirmed in writing by the Joint Board, that TSP has completed the work necessary to establish the ETL's ability to access the above described data in a manner that will allow the ETL to query the database and such queries will result in generation of the Joint Board's desired reports.
item No. Bi-005	Intermediate Summary	Bonds Price (BI-005)= BI-001+BI-002+BI-003+BI-004

	Payment Milestone	Description
Daymant	Installation Payment Bond	This Payment Milestone description is located in the Agreement. Please refer to Agreement Section 8.1.1 for details and requirements for this Payment Milestone.
Payment Milestone BI-001		The TSP may invoice the Joint Board for reimbursement of actual costs up to the indicated in the Price Sheets in Exhibit C to the Agreement for this Payment Milestone after submittal of a copy of the coverage in form acceptable to the Joint Board, and the Joint Board's confirmation and written approval of the coverage.
Payment	Installation	This Payment Milestone description is located in the Agreement. Please refer to Agreement Section 8.1.1 for details and requirements for this Payment Milestone.
Milestone BI-002	Performance Bond	The TSP may invoice the Joint Board for reimbursement of actual costs up to the amount indicated in the Price Sheets in Exhibit C to the Agreement for this Payment Milestone after submittal of a copy of the coverage in form acceptable to the Joint Board, and the Joint Board's confirmation and written approval of the coverage.
Payment	Operations and	This Payment Milestone description is located in the Agreement. Please refer to Agreement Section 8.1.1 for details and requirements for this Payment Milestone.
Milestone BI-003	Maintenance Bond	The TSP may invoice the Joint Board for reimbursement of actual costs up to the amount indicated in the Price Sheets in Exhibit C to the Agreement for this Payment Milestone after submittal of a copy of the coverage in form acceptable to the Joint Board, and the Joint Board's confirmation and written approval of the coverage.
Payment Milestone BI-004	Warranty Bond	This Payment Milestone shall include the pay item description located in the Agreement. Please refer to Agreement Section 8.1.3 for details and requirements for this Payment Milestone.

	Payment Milestone	Description
		The TSP may invoice the Joint Board for reimbursement of actual costs up to the amount indicated in the Price Sheets in <a href="Exhibit C">Exhibit C</a> to the Agreement for this bond after submittal of the bond to the Joint Board in the required form, or confirmation of reduction of the amount of the existing Payment and Performance Bonds to 20% of the Total Toll Collection System Capital Cost for the duration of the Warranty term, and the Joint Board's confirmation of coverage, verification, review and written approval of the bond.
item No. Bi-014	Intermediate Summary	Insurance Price (BI-014)=BI-007+BI-008+BI-009+BI-010+BI-011+BI-012+BI-013
Payment Milestone BI-007	Commercial General Liability	This Payment Milestone description is located in the Agreement. Please refer to Agreement Section 9.1.1 for details and requirements for this Payment Milestone.  The TSP may invoice the Joint Board for reimbursement of actual costs up to the amount indicated in the Price Sheets in <a href="Exhibit C">Exhibit C</a> to the Agreement for this Payment Milestone, after submittal of a copy of the coverage in form acceptable to the Joint Board the Joint Board's confirmation and written approval of the coverage.
Payment Milestone BI-008	Worker's Compensation Insurance	This Payment Milestone description is located in the Agreement. Please refer to Agreement Section 9.1.2 for details and requirements for this Payment Milestone.  The TSP may invoice the Joint Board for reimbursement of actual costs up to the amount indicated in the Price Sheets in Exhibit C to the Agreement for this Payment Milestone after submittal of a copy of the coverage in form acceptable to the Joint Board, and the Joint Board's confirmation and written approval of the coverage.
Payment Milestone BI-009	Business Automobile Liability Insurance	This Payment Milestone description is located in the Agreement. Please refer to Agreement Section 9.1.3 for details and requirements for this Payment Milestone.

	Payment Milestone	Description
		The TSP may invoice the Joint Board for reimbursement of actual costs up to the amount indicated in the Price Sheets in Exhibit C to the Agreement for this Payment Milestone after submittal of a copy of the coverage in form acceptable to the Joint Board, and the Joint Board's confirmation and written approval of the coverage.
Payment	Umbrella or Excess Liability Insurance	This Payment Milestone description is located in the Agreement. Please refer to Agreement Section 9.1.4 for details and requirements for this Payment Milestone.
Milestone BI-010		The TSP may invoice the Joint Board for reimbursement of actual costs up to the amount indicated in the Price Sheets in <a href="Exhibit C">Exhibit C</a> to the Agreement for this Payment Milestone after submittal of a copy of the coverage in form acceptable to the Joint Board, and the Joint Board's confirmation and written approval of the coverage.
	Cyber Liability Insurance	This Payment Milestone description is located in the Agreement. Please refer to Agreement Section 9.1.5 for details and requirements for this Payment Milestone.
Payment Milestone BI-011		The TSP may invoice the Joint Board for reimbursement of actual costs up to the amount indicated in the Price Sheets in Exhibit C to the Agreement for this Payment Milestone after submittal of a copy of the coverage in form acceptable to the Joint Board, and the Joint Board's confirmation and written approval of the coverage.
Payment	Crime Insurance	This Payment Milestone description is located in the Agreement. Please refer to Agreement Section 9.1.6 for details and requirements for this Payment Milestone.
Milestone BI-012		The TSP may invoice the Joint Board for reimbursement of actual costs up to the amount indicated in the Price Sheets in Exhibit C to the Agreement for this Payment Milestone after submittal of a copy of the coverage in form acceptable to the Joint Board, and the Joint Board's confirmation and written approval of

	Payment Milestone	Description
		the coverage.
Payment	Professional	This Payment Milestone description is located in the Agreement. Please refer to Agreement Section 9.1.7 for details and requirements for this Payment Milestone.
Milestone BI-013	Liability Insurance	The TSP may invoice the Joint Board for reimbursement of actual costs up to the amount indicated in the Price Sheets in <u>Exhibit C</u> to the Agreement for this Payment Milestone after submittal of a copy of the coverage in form acceptable to the Joint Board, and the Joint Board's confirmation and written approval of the coverage.

	Payment Milestone	Description
Item No. BI-015	Cumulative Summary	Total Bonds and Insurance Price (BI-015)=BI-005+BI-014
Item No. OMR-004	Intermediate Summary	Annual Roadside Operations (OMH-004)=OMH-001* OMR-002*OMR-003, for each column C through F
Payment Milestone OMR-001	Roadside Operations and Maintenance Per Lane Per Month	This Payment Milestone shall include all work required to operate and maintain roadside equipment measured on a per lane per month basis in accordance with the Performance Requirements in the Technical Requirements. The Contract Price component for this Payment Milestone includes all TSP Work and Costs to operate and maintain roadside equipment other than Major Spare Parts (after expiration of required warranties) and other budgeted Pass Through Cost Items.  The TSP may invoice the Joint Board for Roadside Operations and Maintenance Work on a monthly basis and after the Joint Board has reviewed and approved in writing the previous month's Monthly Operations and Maintenance Report. The invoice must be accompanied by the Monthly Operations and Maintenance Report for such month.
Item No. OMR-005	Intermediate Summary	Total Roadside Operations and Maintenance Price Per Contract Term (OMR-005)= OMR-004 (Column C)+ OMR-004 (Column D) + OMR-004 (Column E) + OMR-004 (Column F) + OMR-004 (Column G) + OMR-004 (Column H) + OMR-004 (Column I)
Item No. OMR-009	Intermediate Summary	Annual CMS Operations (OMH-009)=OMR-006*OMR-007*OMR-008, for each column C through F
Payment Milestone OMR-006	Changeable Message Sign (CMS) Operations and Maintenance Per Sign Per Month	This Payment Milestone shall include all work required to operate and maintain all changeable message signs and their associated equipment measured on a per sign per month basis in accordance with the Performance Requirements in the Technical Requirements. The Contract Price component for this Payment Milestone includes all TSP Work and Costs to operate and maintain all changeable message signs and their associated equipment other than Major Spare Parts (after expiration of required warranties) and other

	Payment Milestone	Description
		budgeted Pass Through Cost Items.
		The TSP may invoice the Joint Board for CMS Operations and Maintenance Work on a monthly basis and after the Joint Board has reviewed and approved in writing the previous month's Monthly Operations and Maintenance Report. The invoice must be accompanied by the Monthly Operations and Maintenance Report for such month.
Item No. OMR-010	Cumulative Summary	Total CMS Operations and Maintenance Price Per Contract Term (OMR-010)= OMR-009 (Column C)+ OMR-009 (Column D) + OMR-009 (Column E) + OMR-009 (Column F)+ OMR-009 (Column H) + OMR-009 (Column I)
Item No. OMR- 0011	Cumulative Summary	Total Roadside and CMS Operations and Maintenance Price Per Contract Term (OMR-0011)= OMR-005+OMR-0010
Item No. OMN-003	Intermediate Summary	Annual Network Maintenance Price (OMN-003)=OMN-001*12 months for each Column C through I
Payment Milestone	Network/WAN/L AN/ Maintenance Per Month	This Payment Milestone shall include all work required to operate and maintain Network/WAN/LAN equipment measured on a per month basis in accordance with the Performance Requirements in the Technical Requirements. The Contract Price component for this Payment Milestone includes all TSP Work and Costs to operate and maintain Network/WAN/LAN equipment other than Major Spare Parts (after expiration of required warranties) and other budgeted Pass Through Cost Items.
OMN-001		The TSP may invoice the Joint Board for Network/WAN/LAN/ Operations and Maintenance on a monthly basis and after the Joint Board has reviewed and approved in writing the previous month's Monthly Operations and Maintenance Report. The invoice must be accompanied by the Monthly Operations and Maintenance Report for such month.

	Payment Milestone	Description
Item No. OMN-004	Cumulative Summary	Total Network Maintenance Price Per Contract Term (OMN-004)= OMN-001*12 months for each Column C through I
Item No. OMH-003	Intermediate Summary	Annual Back Office System (BOS) Hosting Price (OMH-003)=OMH-001*12 months for each Column C through I
Payment Milestone OMH-001	Back Office System (BOS) Hosting Price Per Month	This Payment Milestone shall include all work required to host the Back Office System (BOS) measured on a per month basis in accordance with the Performance Requirements in the Technical Requirements. The Contract Price component for this Payment Milestone includes all TSP Work and Costs to host the BOS other than Major Spare Parts (after expiration of required warranties) and other budgeted Pass Through Cost Items.  The TSP may invoice the Joint Board for Back Office System (BOS) Hosting on a monthly basis and after the Joint Board has reviewed and approved in writing the previous month's Monthly Operations and Maintenance Report. The invoice must be accompanied by the Monthly Operations and Maintenance Report for such month.
Item No. OMH-004	Cumulative Summary	Total Back Office System (BOS) Hosting Price Per Contract Term (OMH-004)= OMH-003 (Column C)+OMH-003 (Column D) + OMH-003 (Column E) + OMH-003 (Column F) + OMH-003 (Column I)
Item No. OMB-003	Intermediate Summary	Annual Back Office System (BOS) IT Operations and Maintenance Price (OMB-003)=OMB-001*12, for each column C through I
Payment Milestone OMB-001	Back Office System (BOS) IT Operations and Maintenance Price Per Month	This Payment Milestone shall include all Back Office System (BOS) IT Operations and Maintenance Work measured on a per month basis in accordance with the Performance Requirements in the Technical Requirements. The Contract Price component for this Payment Milestone includes all TSP Work and Costs for BOS IT Operations and Maintenance Work other than Major Spare Parts (after expiration of required warranties) and other budgeted Pass Through Cost Items.

	Payment Milestone	Description
		The TSP may invoice the Joint Board for Back Office System (BOS) IT Operations and Maintenance Work on a monthly basis and after the Joint Board has reviewed and approved in writing the previous month's Monthly Operations and Maintenance Report. The invoice must be accompanied by the Monthly Operations and Maintenance Report for such month.
item No. OMB-004	Cumulative Summary	Total Back Office System (BOS) IT Operations and Maintenance Price Per Contract Term (OMB-004)= OMB-003 (Column C)+OMB-003 (Column D) + OMB-003 (Column E) + OMB-003 (Column F) +OMB-003 (Column I)
ltem No. OMT-003	Intermediate Summary	Annual TOC Operations and Maintenance Price (OMT-003)=OMT-001*12, for each Column C through I
Payment Milestone OMT-001	TOC Operations and Maintenance Fee Per Month	This Payment Milestone shall include all work required to operate and maintain the TOC measured on a per month basis in accordance with the Performance Requirements in the Technical Requirements. The Contract Price component for this Payment Milestone includes all TSP Work and Costs to operate and maintain the TOC other than Major Spare Parts (after expiration of required warranties) and other budgeted Pass Through Cost Items.
CIVIT COI		The TSP may invoice the Joint Board for TOC Operations and Maintenance Price on a monthly basis and after the Joint Board has reviewed and approved in writing the previous month's Monthly Operations and Maintenance Report. The invoice must be accompanied by the Monthly Operations and Maintenance Report for such month.
item No. OMT-004	Cumulative Summary	Total Toll Operations Center (TOC) Operations and Maintenance Price Per Contract Term (OMT-004)= OMT-003 (Column C)+OMT-003 (Column D) + OMT-003 (Column E) + OMT-003 (Column F) + OMT-003 (Column I)

	Payment Milestone	Description
Item No.OMC- 003	Intermediate Summary	Annual Customer Service Center Operations and Maintenance Price (OMC-003)=OMC-001*12, for each Column C through I
Payment Milestone	Customer Service Center Operations and Maintenance Price Per Month	This Payment Milestone shall include all work required to operate and maintain the CSC measured on a per month basis in accordance with the Performance Requirements in the Technical Requirements. The Contract Price component for this Payment Milestone includes all TSP Work and Costs to operate and maintain the CSC other than Major Spare Parts (after expiration of required warranties) and other budgeted Pass Through Cost Items.
OMC-001		The TSP may invoice the Joint Board for CSC Operations and Maintenance Work on a monthly basis and after the Joint Board has reviewed and approved in writing the previous month's Monthly Operations and Maintenance Report. The invoice must be accompanied by the Monthly Operations and Maintenance Report for such month.
Item No. OMC-004	Cumulative Summary	Total Customer Service Center (CSC) Operations and Maintenance Price Per Contract Term (OMC-004)= OMC-003 (Column C)+OMC-003 (Column D) + OMC-003 (Column E) + OMC-003 (Column F) + OMC-003 (Column H) + OMC-003 (Column I)

## **EXHIBIT D**

# PROPOSAL COMMITMENTS AND CLARIFICATIONS

# **Proposal Commitments**

COMMITME	TECHNICAL	PROPOSAL COMMITMENTS
NT NO.	REQUIREMEN	THE SOME COMMITTIES
	T	
1	Technical	The Toll System Provider shall provide two field-proven
ļ	Proposal,	classification systems (loop and laser) which shall cause the
	Volume II	system to operate in <u>all</u> weather conditions without degradation
	SA-003	of the overall KPI performance of the System.
2	Technical	The Toll System Provider shall provide a 100% Facility Host and
	Proposal,	BOS virtualized BOS environment that will allow for expansion of
	Volume II	storage needs as they arise throughout the Project.
	SA-009	
3	Technical	The Toll System Provider shall provide a system that logs
	Proposal,	retention limits which are configurable within the System and
	Volume II	shall incorporate changes to rules regarding data retention
	SA-011	quickly and efficiently.
4	Technical	The Toll System Provider shall provide the EMC Avamar de-
	Proposal,	duplication solution, providing fast daily backups for virtualized
	Volume II	environments, NAS systems, desktops, laptops, remote offices
	SA-012	and all Business Critical Systems.
5	Technical	The Toll System Provider shall provide an automated backup,
	Proposal,	archival and purging system that operates without the assistance
	Volume IÍ	of a staff member, utilizing EMC's Avamar system.
	SA-014	
6	Technical	See Appendix D Table 3 for Link Bandwidths Sizes.
	Proposal,	
	Volume II	
	SA-015	
7	Technical	The Toll System Provider shall provide a 100% Facility Host and
	Proposal,	BOS virtualized computing and virtual SAN storage environment.
	Volume II	This virtualized environment shall expand storage needs as they
	SA-017	arise throughout the Project. The Toll System Provider's
		anticipated storage needs are in the 25-40 TB range.
		The virtualized environment shall allow for gradual expansion of
		storage needs throughout the life of the Project. Any major
		architectural changes required by the Joint Board throughout the
		Project shall be realized with extensive expansion of the storage capacity within 30 minutes.
8	Technical	The Toll System Provider shall provide the capability to handle
	Proposal,	15% growth anticipation year over year, and the System shall
	Volume II	support at minimum 50 and up to 150 concurrent users.
	SA-019	capport at minimum oo and up to 100 concurrent accis,
	U. ( U I U	

9	Technical Proposal, Volume II SA-021	The Toll System Provider Network Architecture shall allow for the Roadside system interfaces to the BOS through the Facility Host. Each of the Toll Zones shall have redundant communication lines for direct transfer of all Financial, Traffic, and Event Transactions in near-real-time. This configuration shall maintain faster than near-real-time performance, and shall throttle transmission speeds during peak traffic times. The Toll System Provider shall provide a System designed to prioritize Event Transactions. MOMS monitoring shall occur in sub two-second transfer speed.
10	Technical Proposal, Volume II SA- 032	The Toll System Provider shall provide a TCS that secures all personally identifiable information through PCI standards and encryption for PCI data, and through the use of firewalls and system safeguards for non PCI data, consistent with applicable state laws.
11	Technical Proposal, Volume II SA-034	The Toll System Provider shall ensure that the TCS Host and MOMs shall have access levels and user roles which are controlled through a web-based graphical user interface (GUI). All TCS Host and MOMS system access shall be controlled through a web based graphical user interface.
12	Technical Proposal, Volume II SA-035	The Toll System Provider shall make the data base structure and database access constraints available to the Joint Board to provide the foundation for the ICD required for any future interface to a separate TSP or third-party congestion pricing module.
13	Technical Proposal, Volume II SA-038	The Toll System Provider VR-X camera solution shall be designed to take high-quality images, which shall provide human readable license plate capture on above 99% of all images taken and over 99% of images where the license plate is properly placed, and not obstructed, bent, or damaged in some other way.
14	Technical Proposal, Volume II SA-039	The Toll System Provider shall provide a Disaster Recovery Site that is housed in a tier 4 datacenter providing a 99.999 uptime statistic. The Disaster Recovery Site shall also have the capability to switch-over to the back-up facility within minutes of initiating a manual fail-over.
15	Technical Proposal, Volume II SA-047	The Toll System Provider shall provide the capability of obtaining and shall obtain registered owner data from all 51 US DMV's (including the District of Columbia) and the Commonwealth of Puerto Rico.
16	Technical Proposal, Volume II	The Toll System Provider shall provide 100% redundancy on all TSP-terminated links permits. The service levels provided by the TSP and the System shall not degrade during the Term. The

	SA-049	TSP shall utilize for ISP service for Segment 1 and Segment 2 TW Telecom and AT&T Managed Internet Service.
17	Technical Proposal, Volume II RS- 001	The Toll System Provider shall provide a TCS that utilizes multiple devices and deployment strategies to ensure system redundancy in the classification of vehicles, so that if one device is down, another device can still properly classify the vehicle both by axle and by size.
18	Technical Proposal, Volume II RS-007	The Toll System Provider shall provide, the capability to store all collected data, including images, for a minimum of 30 consecutive days at each TZC. In addition, all toll rates changes can be applied to the TZC manually in the absence of communications.
19	Technical Proposal, Volume II RS-008	Once the Transaction is created, all of the related raw data messages shall be marked with the unique transaction number and saved in the on-disk database.
20	Technical Proposal, Volume II RS-009	The Toll System Provider shall install antennas over all the straddle lanes.
21	Technical Proposal, Volume II RS-015	The Toll System Provider shall install all overhead mounted equipment, such as cameras and laser scanners, using quick release memory brackets which require no tools.
22	Technical Proposal, Volume II RS-016	All equipment enclosures, including the gantry mounted cabinet, and mounting hardware provided by Toll System Provider will be stainless-steel and shall have a minimum life cycle of 10 years.
23	Technical Proposal, Volume II RS-018	The Toll System Provider shall provide a laser detection and classification system, utilizing the latest generation SICK LMS-511 laser measurement scanners, which shall be designed with a powerful multi-echo high speed sampling technology providing reliability even in the worst weather conditions.
24	Technical Proposal, Volume II RS-020	The Toll System Provider shall monitor all cabinet doors by CCTV and MOMS, and the System shall trigger an alert when any cabinet door is opened and closed. These alerts shall be linked to the access control and alarm monitoring system (ACAMS) system which shall store a recording of the event and allow for live or recorded observation from the TOC.
25	Technical Proposal, Volume II RS-023	The Toll System Provider shall provide in-lane OCR capabilities.

	· · · · · · · · · · · · · · · · · · ·	
26	Technical	The Toll System Provider shall provide Traffic Transactions,
	Proposal,	Financial Transactions, and Event Transactions which are
	Volume II	readable using commercially available tools such as Toad, SQL
	RS-024	Developer, Excel, or other database access methods.
27	Technical	The System provided by Toll System Provider shall, depending
	Proposal,	on the sensor fault, provide that even multiple sensor failures
	Volume II	within the Toll Zone will be tolerated without adversely impacting
	RS-026	lane performance.
28	Technical	The Roadside System provided by Toll System Provider shall
	Proposal,	transfer Traffic Transactions to the BOS for processing and
	Volume II	storage immediately in near-real time after the Traffic
	RS-028	Transaction is created, utilizing a field proven approach.
29	Technical	In addition to the specific Transaction Summary report, the Toll
	Proposal,	System Provider shall also provide a Daily Traffic and Revenue
	Volume II	report which shall document both the full and the collected
	RS-031	(discounted) rates of the day (or time period chosen).
30	Technical	The Toll System Provider shall provide list storage and process
	Proposal,	mechanisms that process the full list end to end. The System
	Volume II	shall be designed to process the full list in less than 5 minutes
	RS-033	from receipt to usage at the Toll Zone.
31	Technical	The Toll System Provider lane architecture and Roadside
	Proposal,	System shall be designed to a design capacity of 4,000 vehicles
	Volume II	per hour per lane at a peak rate for 10 consecutive seconds.
	RS-037	
32	Technical	The Toll System Provider shall provide the certification or
	Proposal,	equivalent by Underwriters Laboratories for the components
	Volume II	shown in Appendix D Table 2.
	RS-042	
33	Technical	The Toll System Provider shall provide a primary classification
	Proposal,	system that is able to detect a vehicle which is traveling opposite
	Volume II	to the planned direction of travel. (e.g. wrong-way detection) The
	RS-044	Roadside System shall detect and flag any vehicle passing
		opposite to the planned flow of traffic.
34	Technical	The Toll System Provider shall provide chat functionality in the
	Proposal,	BOS, with a Live Agent fully integrated to the BOS allowing
	Volume II	agents to chat with live customers during normal CSC business
	BO-004	hours.
35	Technical	The Toll System Provider shall provide, through the IVR feature,
	Proposal,	the capability for a customer service representative to know
	Volume II	whether the customer is calling from Indiana or Kentucky and
	BO-007	specifically tailor their approach to the specific needs of each
		state, if required by the Joint Board.
t- ·		

36	Technical	The System provided by Toll System Provider shall send
	Proposal, Volume II BO-008	Transponder status information, including lost, stolen or otherwise invalid, to the Roadside System at regular intervals so that Transactions can be processed as video transactions, and be processed properly by the BOS. The Toll System Provider shall ensure that these transaction records are recorded for any additional processing or reporting as necessary per enforcement requests or other legal frameworks established by the Joint Board.
37	Technical Proposal, Volume II BO-009	The Toll System Provider shall provide a smart phone application for customer account management and account replenishment services. The Toll System Provider shall also provide mobile users with the ability to access the customer website in both of the following ways.  1. The customer web site shall be responsive and shall recognize the resolution of the device accessing the site (by browser, by device) and shall adjust the user experience to the device (desktop, iPad, iPhone, Android device). This will provide full access to the customer site to facilitate customer sign-ups, management of the account, payments, and other account functions.  2. Toll System Provider shall provide a mobile app for the Apple IOS environment and the Android environment. The application will provide the ability to manage a customer's account – open an account, pay a one-time toll, make an account payment, add/remove vehicles, request transponders/report transponders missing, update account information, and provide basic toll information – location and rates.
38	Technical Proposal, Volume II BO-012	The Toll System Provider shall be capable of providing a dynamic pricing option and shall collaborate with the Joint Board to deliver a dynamic pricing system consistent with the Business Rules and Operational Plans of the LSIORB Project. The cost and schedule impact to implement a dynamic pricing option are not included in this Agreement.
39	Technical Proposal, Volume II BO-016	The Toll System Provider shall utilize established relationships with Ace Cash Express, Wal-Mart, Western Union, and MoneyGram retail locations subject to Joint Board approval.
40	Technical Proposal, Volume II BO-019	The Toll System Provider shall provide for the transfer of account ownership through an automated System process. The Toll System Provider (with access permissions to this functionality) shall input the information about the new customer from the paperwork provided for the new accounts.

41	Technical Proposal, Volume II BO-021	The Toll System Provider shall provide a System capable of interfacing with any rental car agency and third-party service providers for identification of rental and leased cars outside of the E-ZPass system.
42	Technical Proposal, Volume II BO-022	The Toll System Provider will allow customers to open temporary unregistered accounts with a prepaid dollar amount. If requested by the Joint Board, Toll System Provider shall provide a Pre-paid Pass" system within the BOS and customer website which is consistent with Business Rules established by the Joint Board.
43	Technical Proposal, Volume II BO-026	The Toll System Provider shall provide a BOS that shall support (through existing interfaces) the ability to serve the underbanked/unbanked by allowing for the payment of services (account replenishment, invoice payment, and violation payment) through local businesses (such as MoneyGram locations, Wal-Mart, etc.).
44	Technical Proposal, Volume II BO-031	The Toll System Provider shall provide a BOS that shall retain address history in the System and such history shall be viewable in the BOS by all CSRs (with appropriate security level). Address history shall contain the same address information as the "PRIMARY" address and shall display the date(s) that the change(s) of address was made and by whom (System or user).
45	Technical Proposal, Volume II BO-032	The Toll System Provider shall provide Standard Operating Procedures (SOPs) that shall require that CSRs ensure that customer address information is current, when working with the customer during a phone contact.
46	Technical Proposal, Volume II BO-047	The Toll System Provider shall provide a BOS that shall permit payments to be made by customers via methods to include: mail (lockbox), telephone, IVR, and web using a credit card, ACH, EFT, money order or cashier's check.
47	Technical Proposal, Volume II BO-054	Toll System Provider shall utilize USA ePay or another service provider approved by the Joint Board as its merchant provider/card processor. All credit card information shall be stored on such service provider's systems in a manner that complies with PCI level I standards for USA ePay and appropriate PCI standards for any other service provider approved by the Joint Board.  The Toll System Provider shall provide the best merchant fee available to the TSP, not to exceed 3%, as a Pass Through Cost Item.
48	Technical Proposal, Volume II BO- 051	The Toll System Provider shall provide a system that authorizes credit card/branded debit card payments within 2 minutes and settles these transactions within 72 hours.

49	Technical Proposal,	The Toll System Provider shall provide a System that utilizes multiple OCR engines and uses historical data to determine
	Volume II BO-056	plate values and jurisdictions for vehicles. The System can also utilize results from foreign OCR engines in calculating its results
		(typically from cameras which utilize an on-board OCR engine) to maximize automated read rates.
50	Technical Proposal, Volume II BO-060	The Toll System Provider shall provide an interface to an electronic bulk mailing system for mailing of Correspondences, statements, bills, and notices to customers and similar high-volume standardized mailings and shall ensure the high-volume of mail is managed with the timeliness and professional care required for sensitive customer communications. The TSP inhouse System shall allow for bulk e-mail of customer
		Correspondences, statements, bills, and notices to customers.
51	Technical Proposal, Volume II BO-066	The Toll System Provider shall provide a bi-lingual CSC with Spanish as a secondary language, and shall provide bi-lingual services (website, notices, staffing) as needed.
52	Technical Proposal, Volume II BO-068	The Toll System Provider shall provide a customer website for the LSIORB Project that will be implemented so that the information section can be updated without programmer intervention. The customer account portion of the website shall match the overall look and feel. This implementation will be coordinated with the Joint Board's marketing firm.
53	Technical Proposal, Volume II BO-071	The Toll System Provider shall provide an IVR/telephony system which provides real time reporting of all contact center activities, including queues, skills, teams, groups, and more. The system shall use a browser-based interface, so that supervisors and administrators can view the data they need from any location. The platform shall also maintain historical data of all call-related and agent-related events in the system to provide historical reports, which shall be able to be viewed and filtered in numerous ways. The database schema shall be open, and shall enable the creation of custom reports using standard report generation tools.
54	Technical Proposal, Volume II BO-072	The Toll System Provider shall provide an IVR/telephony system that shall record 100% of all incoming calls.
55	Technical Proposal, Volume II BO-076	The customer website provided by Toll System Provider shall be capable of making direct pulls of information from the BOS database.

56	Technical Proposal, Volume II BO-077	The Toll System Provider shall partner with Software House International (SHI) for a managed private cloud platform that shall host the current BOS production environment and shall have a redundant back-up facility that is fully equipped to assume full workload at the performance levels required by the Contract in the event a disaster incapacitates the primary facility. The back-up facility shall be fully replicated to a third site that has the capability to restore service within a 4 hour SLA between the Toll System Provider and SHI.
57	Technical Proposal, Volume II BO-089	The Toll System Provider shall use Tableau for business analytics and reporting and shall allow the Joint Board, vendors, and approved third-parties to view, create, and edit reports within the system.
58	Technical Proposal, Volume II BO- 091	The Toll System Provider shall utilize Remedyforce as their help desk solution, and shall use Tableau for reporting purposes. Any substitutions to these products shall be equal or better in functionality and shall be approved by the Joint Board.
59	Technical Proposal, Volume II BO-101	Each report provided by the Toll System Provider shall include an information block containing the report name and number, the report version number, any parameters supplied to the report (date range, for example), the user executing the report, and the date and time the report was run.
60	Technical Proposal, Volume II BO-118	The Toll System Provider shall provide a manual set of procedures developed according to the courts' needs for those jurisdictions not yet automated.
61	Technical Proposal, Volume II BO-126	The Toll System Provider shall use an existing retail agreement with Ace Cash Express/MoneyGram to process payments nationwide and tag purchase and distribution for LSIORB toll clients
62	Technical Proposal, Volume II BO-128	The Toll System Provider shall provide a cash-replenishment network, as stated in BO-126, with functionality for customers to purchase transponders, pay invoices or Violations, and support balance inquiries on customer accounts. The TSP shall support (through existing interfaces) the ability for the processing of replenishment payments through local businesses (such as MoneyGram locations, Wal-Mart, etc.). During the initial establishment phase of the system, the appropriate local establishments may be added to this capability.
63	Technical Proposal, Volume II BO-129	The Toll System Provider shall provide functionality to allow customers without an account to pay for tolls prior to the issuance of a Customer Statement either through the customer website, at the Walk Up Center, or over the phone with a CSR.

64	Technical Proposal, Volume II BO-130	The Toll System Provider shall use its existing agreement through Niets to obtain DMV lookup information for all states and provinces, and to obtain DMV address information for states beyond Kentucky and Indiana
65	Technical Proposal, Volume II CS-012	The Toll System Provider shall co-locate the Facility Host and the Back Office System, and concentrate all quick-retrieval and archival storage at that location
66	Technical Proposal, Volume II CS-032	The Toll System Provider shall provide the staffing and capability so that the mail shall be opened, sorted by work type, and batched under dual-control (two staff members present at all times) and routed in accordance with SOP.s
67	Technical Proposal, Volume II CS-040	The Toll System Provider shall provide a second image review process to verify the initial image review result for image review results which involve human data entry. These image reviews shall be queued for double-blind validation where reviewer1/reviewer2 results must agree without either human seeing the other's result) to ensure high accuracy. This includes license plates that have not been "seen" by the system before, images that fall below OCR confidence levels, plates that have achieved high confidence levels but may be incorrect, or other configurable parameters to ensure that high levels of quality image review are met.  In the event that the reviewer1/reviewer2 results do not agree, then the image shall be reviewed by a supervisor to determine the plate's final disposition.
68	Technical Proposal, Volume II CS-044	The Toll System Provider shall deploy cameras —and tag storage/fulfillment area that shall be monitored by surveillance cameras. Camera recordings shall be stored for 15 days for review.
69	Technical Proposal, Volume II CS-061	The System shall be set up to alert management if certain positive or negative statements are made in survey results.
70	Technical Proposal, Volume II CS-064	The Toll System Provider shall compensate all full-time and part-time employees working on the LSIORB Project with competitive salaries and all normal privileges, benefits, and guarantees of employment that are afforded to Toll System Provider's existing regular and part-time employees, including providing benefits such as medical, dental, and vision insurance, life insurance, voluntary short term and long term disability insurance, flexible spending accounts, medical reimbursement accounts, savings program (401K), sick leave, vacation pay, and holiday pay.
71	Technical Proposal, Volume II	The Toll System Provider shall submit a Security and Compliance manual for review and approval to the Joint Board

	T00.004	1
	CS-081	
72	Technical Proposal, Volume II CS-082	The Toll System Provider shall provide monitors in the CSC to display current customer service metrics, including but not limited to current status of calls, wait times and number of customers on hold, by queue, and updated in real time.
73	Technical Proposal, Volume II CS-086	The Toll System Provider shall provide black and white, and at the request of the Joint Board, color high quality Correspondence from the CSC, including but not limited to escalation, Violation, and collection notices.
74	Technical Proposal, Volume II CS-087	The Toll System Provider shall assign 18 agents to LSIORB, and may assign as many as 60-70 agents to the skill set and modify priorities accordingly.
75	Technical Proposal, Volume II TO-04	The Toll System Provider shall provide a Staff scheduling module that shall be present within MOMS and allows the time scheduling, entry, and work management of all technical staff.
76	Technical Proposal, Volume II TO-011	The Toll System Provider shall incorporate a mobile Maintenance Online Management System application (Mobile Field) to enhance the diagnostic, dispatch, response and repair process ensuring the read points stay up and running while keeping maintenance downtime to a minimum.
77	Technical Proposal, Volume II TO-017	The Toll System Provider shall provide cameras that are installed using quick release brackets which require no tools. The cameras shall have quick connector fittings for all cables rated to MIL-C-26482 spec
78	Technical Proposal, Volume II TO-020	The Toll System Provider shall provide up to ten (10) additional reports, beyond the standard suite and the specific reports mentioned in the technical requirements document, at no additional cost to the Joint board.
79	Technical Proposal, Volume II TO-021	The Toll System Provider shall provide a MOMS that shall receive events and create alarms from various sources including: SNMP Traps SNMP Polls (guaranteed response knowledge) Hardware or Software polling Custom interfaces including socket, web service or database MOMS shall monitor the cross jobs, operating system services, applications, database management, and other metrics as part of its ongoing automated monitoring processes.
80	Technical Proposal, Volume II	The Toll System Provider shall provide a Project Warranty Support Database (PWSD) or a tool with equal or better functionality to manage hardware and software warranty of parts

	OM-001	of the System supplied by the TSP on the LSIORB Project as
		approved by the Joint Board.
81	Technical Proposal, Volume II OM-004	The Toll System Provider shall cover all Software defects and failures as they relate to non-performance or non-compliance to the approved systems design for a minimum of three years. For warranty duration, specific to the BOS Kapsch is committing to provide a minimum of 3 years of warranty for the BOS and all associated interfaces. The warranty becomes effective from the commencement of Revenue Service for the first Toll Zone. Kapsch also commits to cover the warranty during the Pre-Toll Operations and of all associated commercial off the shelf (COTS) Hardware, Software and interfaces for a minimum of three years, from Revenue Service, independent of the respective manufacturer's warranty.
82	Technical Proposal, Volume II OM-006	The Toll System Provider shall direct their O&M Project Manager to include a warranty report in the monthly Project Management and Maintenance Reports and especially highlight all components whose warranty is set to expire in the next three months.
83	Technical Proposal, Volume II PR-002	The Toll System Provider shall provide VRX cameras that shall handle a peak rate of 1,800 front and 1,800 rear images/hour per equipment lane.
84	Technical Proposal, Volume II PR-008	The System provided by Toll System Provider shall cause each captured image to consist of a pixel array that is 2580 horizontal and 2048 vertical. These images shall correspond to an image of the vehicle that is 15.5 feet wide and 10.9 feet high based on cameras mounted at lane center and pointed 29 degrees down with respect to the longitudinal profile of the road surface under the toll gantry. The Toll System Provider shall also provide that all overview camera images of the vehicle shall be in color
85	Technical Proposal, Volume II PR-009	The Toll System Provider shall provide experience technicians who shall monitor the System 24 hours per day, 7 days per week, 365 (366 in leap years) days per year.
86	Technical Proposal, Volume II PR-014	The Toll System Provider shall post Transponder based Transactions to accounts within 24 hours. Video based Transactions shall be posted within 24 hours of image review identifying the license plate but in no event later than 4 days. In the case of away agency transactions, Transactions shall be provided to the clearing account for the respective agency within 24 hours.
87	Technical Proposal, Volume II PR-018	The Toll System Provider shall provide an IVR with features that shall assist customers during high call volumes, including a call back option where customers can leave a phone number that the System automatically calls when they are next in queue.

88	Technical Proposal, Volume II PR-019	The Toll System Provider shall implement a survey system so that survey information is offered to 100% of all incoming calls in accordance with the Joint Board's approved Business Rules.
89	Technical Proposal, Volume II PR-021	The Toll System Provider shall develop SOPs that ensure that not more than 0.4% of calls are escalated outside Toll System Provider's call center.
90	Technical Proposal, Volume II PR-022	The Toll System Provider shall provide a first call resolution rate of not less than 80%.
91	Technical Proposal, Volume II PR-023	The Toll System Provider shall ensure that all calls are recorded and stored for two years. Recordings of calls shall be provided to the Joint Board upon request. In addition, the Toll System Provide shall provide the capability to conduct live monitoring at any time at the request of the Joint Board
92	Technical Proposal, Volume II PR-033	The Toll System Provider shall provide a call system that answers on a one ring cycle then enters the IVR. Once the callers have entered the IVR, the callers shall have the option to select "self-service" or "speak with a customer representative." The Toll System Provider shall provide a report of its compliance with this requirement to the Joint Board on a monthly basis.
93	Technical Proposal, Volume II PR-036	The Toll System Provider shall provide 14 Overview/DVAS cameras as part of the TCS solution, from any combination of lanes in the DB-1R toll zone there shall always be at least 2 of the overall 14 that are not needed
94	Technical Proposal, Volume II FR-01	The Toll System Provider shall provide a BOS that provides 100% transaction reconciliation at any given point of time for any user selected time period.
95	Technical Proposal, Volume II FR-015	The Toll System Provider shall provide manual processes to associate unspecified funds (i.e. a check without payment coupon or correct account information) to the proper customer account and apply these funds to the proper account.
96	Technical Proposal, Volume II FR-028	The Toll System Provider shall provide a System that is self-balancing and is 100% reconcilable at any point in time
97	Technical Proposal, Volume II AC-001	The Toll System Provider shall provide sensors that are mounted at gantry level out of easy reach of vandals, and the sensors shall generate alarms with the MOMS if they are tampered with.
98	Technical Proposal,	The Toll System Provider shall provide a System that shall automatically log and report all entry and exit from all doors

	1371	10:0:0	
	Volume II AC-003	within the Maintenance and Online Management System (MOMS).	
99	Technical Proposal, Volume II AC-007	The Toll System Provider shall provide a System that shall enable all authorized users to replay the DVAS video stream from the DVR and to cause similarly time-stamped transaction data to be superimposed on the video at the toll zone and transmitted with the video stream for use by all authorized remote users	
100	Technical Proposal, Volume II AC-008	The Toll System Provider shall provide live feed of the CCTV roadway camera to the Walk-up Centers.	
101	Technical Proposal, Volume II AC-010	The CCTV cameras provided by Toll System Provider and used for monitoring the displayed toll rates shall be <i>Pelco IXE20DN12-EAD</i> . The CCTV cameras provided by Toll System Provider and used for monitoring access to secured equipment and locations shall be CohuHD 3920-HD24-1000 or equivalent.	
102	Technical Proposal, Volume II AC-020	The CCTV system provided by Toll System Provider shall utilize the latest applicable version of NTCIP 1205 - Object Definitions for Closed Circuit Television (CCTV) Camera Control.	
103	Technical Proposal, Volume II WF-007	The Toll System Provider shall develop and implement a quality assurance program that shall perform random samples of 5% of all accounts to ensure the accuracy of all account related details within 90 business days after the System and violation processing has matured. For purposes of this requirement, the System and process shall be considered mature 210 days after commencement of Revenue Service. The number of notices sent and the number of days allowed prior to escalation shall be configurable settings, which can be amended to accommodate the Business Rules established by the Joint Board.	
104	Technical Proposal, Volume II TP-015	The Toll System Provider shall provide an initial preliminary draft of the Business Rules to the Joint Board at NTP.	
105	Technical Proposal, Volume II TP-021	The Toll System Provider shall provide suitable network connections in place to conduct the Pre-Production Controlled Test with a network configuration that shall be configured to operate in near real-time close to the planned production environment.	
106	Technical Proposal, Volume II TP-027	The System provided by Toll System Provider shall track all MOT incidents as separate Work Orders in the MOMS	
107	Technical Proposal,	The Toll System Provider shall provide a detailed Walk-Up Center plan to the Joint Board at NTP, consisting of three	

	Volume II	proposed WUC sites for each of Kentucky and Indiana, lease
	TP-030	options, and build-out options.
108	Technical	Thirty days after commencement of Pre-Toll activities the Toll
	Proposal,	System Provider shall submit the first Monthly Operations and
	Volume II	Maintenance Report, which shall be updated on a regular basis,
	TP-031	no later than the fifth day of each month thereafter.
109	Volume 3,	The Toll System Provider will provide the reports listed in
	Technical	Appendix D, Table 1.
	Requirement	
	TO-019	

# Appendix D - Table 1

Report Name	Description	
Alarms Summary	Shows summary listing of alarms per the parameters selected	
Alarms Detail	Shows alarm detail data for the specified Alarm ID	
Alarm Notification and Response Times	Shows list of alarm notification related information	
Work Order summary	Shows listing of work orders per the specified parameter criteria	
Work order Status and Tracking	Shows detailed information about a Work order per the specified Work Order ID	
System availability	Shows current percentage of Total System Availability	
Sub-system availability	Shows current percentage of Sub-System Availability	
Equipment failure and correction	Shows information about component failure occurrences and corrective action	
MTBF	Shows MTBF for components per formula on target system	
MTTR	Shows MTTR for components per formula on target system	
Equipment repair history	Shows a log of repair actions taken on a particular component	
Equipment Inventory	Shows a master list of parts or components in the system	
Equipment Use	Shows history of usage and location of a particular part or component ID	
Equipment Detail	Detail about a part or component	
Equipment Inventory Spare	Shows a list of spare parts inventory	
Equipment Warranty	List of parts with their warranty information	
Asset depreciation	Current value of part based of depreciation formula	
Assembly Summary	Shows components of an assembly (i.e. List all components in a Toll Zone)	
Software version numbers	Shows software version information of custom and 3rd Party software	
Vendor List	Shows list of all vendors configured into the system	

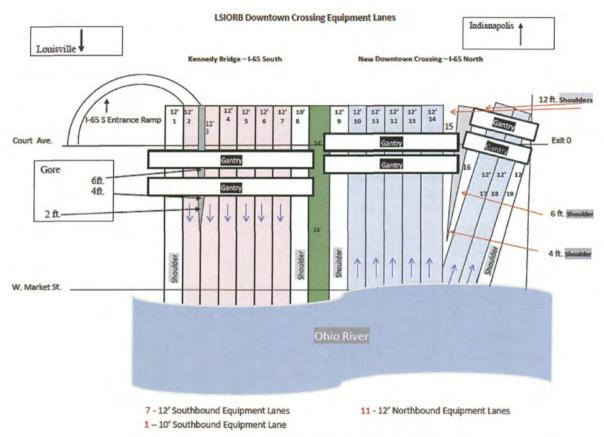
# Appendix D - Table 2

Component	UL (or Equivalent) Listing Compliance
Kapsch Reader (Supplied via ETC Co	ntract) UL 60950-1
Kapsch VR-X Camera	UL E323290
Kapsch External Illuminators	UL E323290
Toll Zone Controllers	UL Compliance from Manufacturer (Corvalent)
Laser Scanners	UL Compliance Guaranteed from Manufacturer (SICK)
Loop System	UL Compliance Guaranteed from Manufacturer (3M)
Power Supplies	UL Listed (Phoenix Contact GMBH & Co KG)

# Appendix D - Table 3

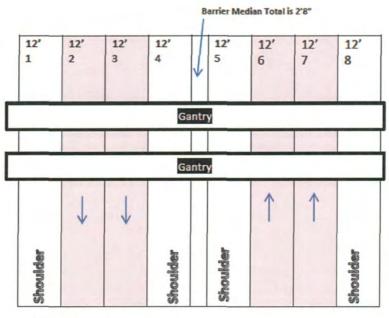
Item		
Systems functions	16	6
Allowance for two 2-Mbps remote users	4	4
Baseline rate for CSP billing plan	20	10
Eight more remote users for a total of 10 remote users	16	16
TOTAL PEAK RATE	36	26
Physical capacity of the CSP link	50	50
Excess margin against requirements	14	24

# EXHIBIT E LSIORB DOWNTOWN CROSSING EQUIPMENT LANES



This is a conceptual drawing only to identify the number of equipment lanes and is not to scale, and dimensions are approximations only.





Kentucky

I-265 South

South

- 4-12' northbound equipment lanes
- 4 12' southbound equipment lanes

This is a conceptual drawing only to identify the number of equipment lanes and is not to scale, and dimensions are approximations only.

Indiana Finance Authority/Joint Board LSIORB Toll Services Project

Exhibit E

Exhibits to Toll Services Agreement Execution Version

# **EXHIBIT F**

# FEDERAL REQUIREMENTS

Exhibit Description	No. of Pages
Attachment 1 – Federal Provisions	2
Attachment 2 – FHWA Form 1273	14
Attachment 3 – Federal Prevailing Wage Rates	66

## **ATTACHMENT 1 TO EXHIBIT F**

## FEDERAL REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION

- 1. GENERAL. The "Required Contract Provisions, Federal-Aid Construction Contracts, Form FHWA 1273," are included in this <u>Exhibit F (Federal Requirements)</u>. Whenever in said required contract provisions, and those at <u>Section 3</u> of <u>Attachment 4</u> to this <u>Exhibit F</u>, references are made to:
- (a) "contracting officer" or "authorized representative," such references shall be construed to mean IFA or its Authorized Representative;
- (b) "contractor," "prime contractor," "bidder," "proposer," "Federal-aid construction contractor," "prospective first tier participant," or "First Tier Participant," such references shall be construed to mean Toll System Provider or its authorized representative, as may be appropriate under the circumstances:
- (c) "contract" "prime contract," "Federal-aid construction contract" or "design-build contract," such references shall be construed to mean the Agreement for the Work to which this <u>Exhibit F</u> (Federal Requirements) applies;
- (d) "subcontractor," "supplier," "vendor," "prospective lower tier participant," "lower tier prospective participant," "Lower Tier participant," or "lower tier subcontractor," such references shall be construed to mean, as appropriate, Toll System Provider or its Subcontractors for the Work to which this Exhibit F (Federal Requirements) applies; and
- (e) "department," "agency," "department or agency with which this transaction originated," or "department or agency entering into this transaction," such references shall be construed to mean IFA, except where a different department or agency is specified.

PERFORMANCE OF PREVIOUS CONTRACT. — In addition to the provisions in Form 1273 required contract provisions. Developer shall cause the contractor to comply with the following:

The bidder shall execute the CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS located in the proposal. No request for subletting or assigning any portion of the contract in excess of \$10,000 will be considered under the provisions of the required contract provisions unless such request is accompanied by the CERTIFICATION referred to above, executed by the proposed subcontractor.

NON-COLLUSION PROVISION. — The provisions in this section are applicable to all contracts except contracts for Federal Aid Secondary projects. Title 23, United States Code, Section 112, requires as a condition precedent to approval by the Federal Highway Administrator of the contract for this work that each bidder file a sworn statement executed by, or on behalf of, the

person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid. A form to make the non-collusion affidavit statement required by Section 112 as a certification under penalty of perjury rather than as a sworn statement as permitted by 28 U.S.C., Sec. 1746, is included in the Proposal.

PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES IN SUBCONTRACTING. — Part 26, Title 49, Code of Federal Regulations applies to this project. Pertinent sections of said Code are incorporated within other sections of the Contract and the IFA DBE Special Provisions (Exhibit 7) adopted pursuant to 49 CFR Part 26.

## CONVICT PRODUCED MATERIALS

- a. FHWA Federal-aid projects are subject to 23 CFR § 635.417, Convict produced materials.
- b. Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal aid highway construction projects if such materials have been: (i) produced by convicts who are on parole, supervised release, or probation from a prison, or (ii) produced in a prison project in which convicts, during the 12 month period ending July 1, 1987, produced materials for use in Federal aid highway construction projects, and the cumulative annual production amount of such materials for use in Federal aid highway construction does not exceed the amount of such materials produced in such prison project for use in Federal aid highway construction during the 12 month period ending July 1, 1987.

BUY AMERICA REQUIREMENTS — FHWA Federal-aid projects are subject to 23 CFR § 635.410, Buy America requirements. The provisions of 23 CFR § 635.410 are incorporated herein by reference.

## ACCESS TO RECORDS

- a. As required by 49 CFR 18.36(i)(10), Developer and its Contractors shall allow FHWA and the Comptroller General of the United States, or their duly authorized representatives, access to all books, documents, papers, and records of Developer and Contractors which are directly pertinent to any grantee or subgrantee contract, for the purpose of making audit, examination, excerpts, and transcriptions thereof. In addition, as required by 49 CFR 18.36(i)(11), Developer and its Contractor shall retain all such books, documents, papers, and records for three years after final payment is made pursuant to any such contract and all other pending matters are closed.
- b. Developer agrees to include this section in each Contract at each tier, without modification except as appropriate to identify the Contractor who will be subject to its provisions.

## **ATTACHMENT 2 TO EXHIBIT F**

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Government-wide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

## ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

## 1.I. GENERAL

 Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal).
 The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements

and other agreements for supplies or services related to a construction contract).

- Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

## 2.II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure

Indiana Finance Authority/Joint Board LSIORB Toll Services Project

Attachment 2 to Exhibit F
Page 1

Exhibits to Toll Services Agreement Execution Version compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:
- "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."
- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of

- employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- 4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment.

Information and procedures with regard to referring such applicants will be discussed with employees.

- 5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide

reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

## 10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
- (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
- (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority,

women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on <a href="Form FHWA-1391">Form FHWA-1391</a>. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

## 3.III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

## 4.IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
  - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (ii) The classification is utilized in the area by the construction industry; and
  - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

### 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the

Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

### 3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional

Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
  - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for

inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits,

apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.